September 2024 | Initial Study

MARK TWAIN SCHOOL EXPANSION PROJECT

Garden Grove Unified School District

Prepared for:

Garden Grove Unified School District
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Abbreviations and Acronyms

AAQS	ambient air quality standards
AB	Assembly Bill
AF	acre-foot (-feet)
AQMD	air quality management district
AQMP	air quality management plan
BMP	best management practices
CALGreen	California Green Building Standards Code
CARB	California Air Resources Board
CBC	California Building Code
CDE	California Department of Education
CEQA	California Environmental Quality Act
CH_4	methane
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
dB	decibel
DSA	Division of State Architect
EIR	environmental impact report
EPA	United States Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FHSZ	fire hazard severity zone
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GGPD	Garden Grove Police Department
GHG	greenhouse gases
GSP	groundwater sustainability plan
HVAC	heating, ventilating, and air conditioning system
IPCC	Intergovernmental Panel on Climate Change
L_{dn}	day-night noise level
L_{eq}	equivalent continuous noise level
LOS	level of service
LST	localized significance thresholds
MET	Metropolitan Water District of Southern California

Abbreviations and Acronyms

MGD	million gallons per day
MT	metric ton
MWDOC	Municipal Water District of Orange County
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NWI	National Wetlands Inventory
O_3	ozone
OCFA	Orange County Fire Authority
OCSAN	Orange County Sanitation District
OCWD	Orange County Water District
PM	particulate matter
ppm	parts per million
PPV	peak particle velocity
RCNM	Roadway Construction Noise Model
RPS	renewable portfolio standard
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCE	Southern California Edison
SEL	single event noise level
SO_2	sulfur dioxide
SO_X	sulfur oxides
SoCAB	South Coast Air Basin
SRA	source receptor area (AQ)
SRA	state responsibility area (wildfire)
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USFWS	United States Fish and Wildlife Service
UWMP	urban water management plan
VMT	vehicle miles traveled
VOC	volatile organic compound

1. Introduction

1.1 PROJECT OVERVIEW

Garden Grove Unified School District (District) is seeking to combine and house two special education programs at the Mark Twain School site (project site) and construct classrooms, office space, and play courts; expand parking; and add fencing improvements at the project site (proposed project). The two special education programs include one off-site program, the Adult Transition Program at Jordan Secondary Learning Center, and one on-site program, the Special Education Center. The proposed project is required to undergo an environmental review pursuant to the California Environmental Quality Act (CEQA). This Initial Study provides an evaluation of the potential environmental consequences associated with this proposed project.

1.2 PURPOSE OF CEQA AND THE INITIAL STUDY

CEQA (California Environmental Quality Act; Public Resources Code Section 21000 et seq.) requires that before a lead agency[1] makes a decision to approve a project that could have one or more adverse effects on the physical environment, the agency must inform itself about and consider the project's potential environmental impacts, inform members of the public about the project's potential environmental impacts and provide them an opportunity to comment on the environmental issues, and take feasible measures to avoid or reduce potential harm to the physical environment.

Garden Grove Unified School District—in its capacity as lead agency pursuant to CEQA Guidelines Section 15050—is responsible for preparing environmental documentation in accordance with CEQA to determine if approval of the discretionary actions and subsequent development associated with the proposed project would have a significant impact on the environment. As part of the project's environmental review, the District authorized preparation of this Initial Study in accordance with the provisions of CEQA Guidelines Section 15063. Pursuant to Section 15063, purposes of an Initial Study are to:

- Provide the lead agency information to use as the basis for deciding whether to prepare an environmental impact report (EIR) or negative declaration.
- Enable an applicant or lead agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a negative declaration.
- Assist in the preparation of an EIR if one is required.
- Facilitate environmental assessment early in the design of a project.

[1] Pursuant to Public Resources Code Section 21067, lead agency refers to the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect on the environment.

- Provide documentation of the factual basis for the finding in a negative declaration that a project will not have a significant effect on the environment.
- Eliminate unnecessary EIRs.
- Determine whether a previously-prepared EIR could be used with the project.

As further defined by Section 15063, an Initial Study is prepared to provide the District with information to use as the basis for determining whether an EIR, Negative Declaration, or Mitigated Negative Declaration (MND) would be appropriate for providing the necessary environmental documentation and clearance for the proposed project.

In the preparation of this Initial Study, the District determined that the Initial Study has been prepared to support the adoption of an MND. An MND is a written statement by the lead agency that briefly describes the reasons why a project that is not exempt from the requirements of CEQA will not have a significant effect on the environment and, therefore, does not require preparation of an EIR (CEQA Guidelines Section 15371). The CEQA Guidelines require preparation of an MND if the Initial Study prepared for a project identifies potentially significant effects, but: 1) revisions in the project plans or proposals made by or agreed to by the applicant before a proposed MND and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and 2) there is no substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment. (CEQA Guidelines Section 15070[b]).

The District has considered the information contained in this Initial Study in its decision-making processes. Although the Initial Study was prepared with consultant support, the analysis, conclusions, and findings made as part of its preparation fully represent the independent judgment and analysis of the District.

1.3 ENVIRONEMNTAL SETTING

1.3.1 Project Location

The approximately 9.7-acre project site encompasses the Mark Twain School property at 11802 South Loara Street in the City of Garden Grove. The project site consists of Assessor's Parcel Number (APN) 090-041-01. Garden Grove is an incorporated city in Orange County and is surrounded to the north by Anaheim, to the east by Orange, to the south by Santa Ana, and to the west by Westminster and Stanton. Figure 1, *Regional Location*, and Figure 2, *Local Vicinity*, show the project site from its regional and local contexts. Access to the project site is provided from Loara Street, via Chapman Avenue and Orangewood Avenue, both of which connect to regional Interstate 5 (I-5) approximately 2.5 miles east of the project site.

Figure 1 - Regional Location

School Boundary

County Boundary

Note: Unincorporated county areas are shown in white.

Source: Generated using ArcMap, 2023.

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Scale (Miles)

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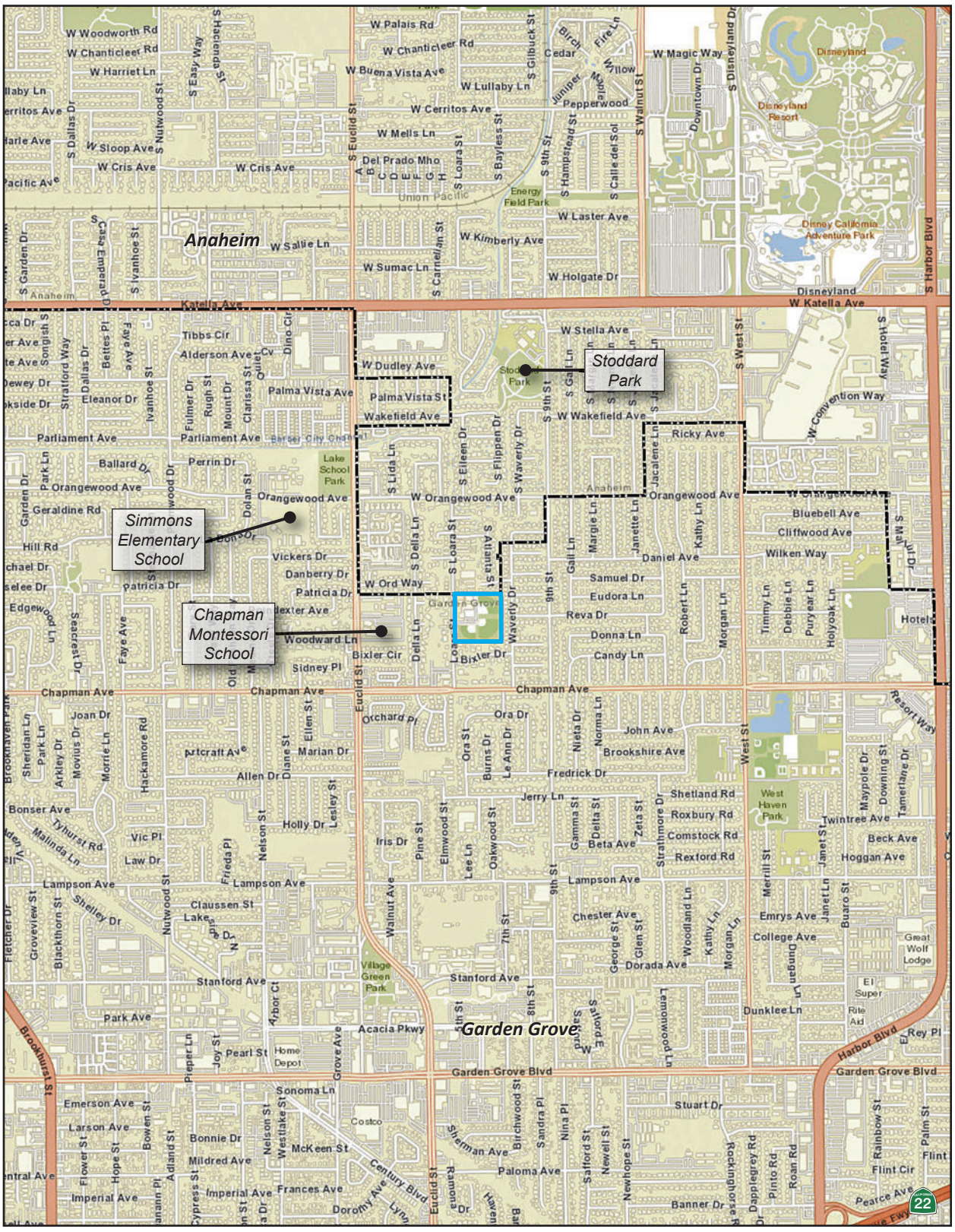
Figure 2 - Local Vicinity



Source: Generated using ArcMap, 2023.

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1.3.2 Existing Land Use

1.3.2.1 FACILITIES

The project site currently operates as a preschool through adult school focused on specialized academic instruction, with classrooms, parking lots, grass baseball and play field, administration building, and outdoor educational spaces. The buildings and surface parking lot are in the northwestern portion of the project site; an open field and pedestrian walkway that connects to Waverly Drive is located in the northeast portion of the project site; and two baseball fields are in the southern portion of the project site.

A north-south covered walkway extends between the academic buildings. The play field includes hardscaped walking paths. A baseball field on the project site was previously used by Garden Grove High School's softball program and includes a chain-link fence and wooden dug outs; however, both fields are no longer in use. Figure 3, *Aerial Photograph,* shows the existing site facilities and surroundings.

1.3.2.2 CIRCULATION

The project site features a drop-off area with a horseshoe that has entrances and exits onto Loara Street. A parking lot exists south of the existing buildings, with a capacity for 80 vehicles. Ingress and egress to the existing parking lot is provided via one driveway along South Loara Street.

1.3.2.3 EDUCATION PROGRAMS

Special Education Center at Mark Twain

The Special Education Center at Mark Twain currently operates on the project site and serves moderate to severe special education students ages 3 to 22. It is one of nearly 70 schools in the Garden Grove Unified School District and serves students from the cities of Garden Grove, Anaheim, Fountain Valley, Stanton, Westminster, and Santa Ana. The Special Education Center is a specially designed school. There are eight self-contained classrooms, with program emphasis on developing functional domains of adaptive daily living skills as well as vocational, communication, recreation and leisure, gross and fine-motor, pre-academic, social, and behavioral skills. Students have the opportunity to participate in specially designed music, physical, and recreational activities; fine arts; and various community-based experiences. Special Education Center students have opportunities to interact with age-appropriate peers during community-based outings and visits to local school sites. There are currently nine faculty members and one half-nurse (half-day).

The 2023/24 school year enrolled 89 students. Table 1, *Special Education Center at Mark Twain Enrollment History*, shows the enrollment history since 2016.

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Table 1 Special Education Center at Mark Twain Enrollment History

School Year	Enrollment
2023-2024	89
2022-2023	87
2021-2022	68
2020-2021	75
2019-2020	77
2018-2019	66
2017-2018	74
2016-2017	77
Average Enrollment:	75

Source: CDE 2023a; District 2024.

The Adult Transition Program at Jordan

The Adult Transition Program currently operates at Jordan Secondary Learning Center at 9915 Woodbury Avenue in Garden Grove and serves students who have earned a Certificate of Attendance from their high school. Students enrolled in the program attend the program from ages 18 to 22. The Garden Grove Unified School District Adult Transition Program serves students who reside in Garden Grove, Anaheim, Stanton, Cypress, Westminster, Fountain Valley, and Santa Ana. The Adult Transition Program is designed to assist special education students' transition from high school to the role of a contributing adult in the community. The local community is utilized as a means for reinforcing instruction. Community-based instruction is designed for students to generalize skills in a more natural setting, using events and situations that students will encounter throughout life as adults. Students participate in multiple domains of function, including functional academics, social skills, communication, vocational skills, daily living, and recreation and leisure. Students participate in various community-based experiences as appropriate. The Adult Transition Program at Jordan is an education program for adults to develop independence through innovative instructional opportunities on campus and in the community, focusing on vocational, communication, social skills, daily living skills, recreation and leisure, and functional academics. There are currently 10 faculty members and one half-nurse.

Figure 3 - Aerial Photograph

Source: Generated using ArcMap, 2023.

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The 2023/24 school year enrolled 105 students. Table 2, *The Adult Transition Program at Jordan Enrollment History*, shows the enrollment history since 2016.

Table 2 The Adult Transition Program at Jordan Enrollment History

School Year	Enrollment
2023-2024	105
2022-2023	106
2021-2022	103
2020-2021	99
2019-2020	93
2018-2019	87
2017-2018	74
2016-2017	91
Average Enrollment:	101

Source: CDE 2023b; District 2024.

1.3.3 Surrounding Land Use

As shown on Figure 3, the project site is bounded by Cassia Lane and residential uses to the north (within the city of Anaheim), residential uses to the east and south, and Loara Street to the west. The project site is surrounded by residential uses across the street frontages and also directly abuts residential uses. The surrounding residential uses are primarily single-family residential that are one or two stories high. Further from the project site, the area is primarily residential uses with some commercial uses along Euclid Street.

1.3.4 Existing Zoning and General Plan Land Use Designations

The City of Garden Grove General Plan designation for the project site is Parks and Open Space. The project site is zoned as an Open Space Zone (O-S). The area directly north of the project site is in the city of Anaheim and is zoned and designated as Residential. The areas to the east and west of the project site are within the city of Garden Grove's Single-Family Residential Zone (R-1-7) and have a land use designation of Low Density Residential. The area south of the project site is within the city of Garden Grove's Single-Family Residential Zone (R-1-9) and has a designation of Low Density Residential.

1.4 PROJECT DESCRIPTION

1.4.1 Proposed Project

The District plans to add classrooms, office space, and play courts; reconfigure and expand parking; and add fencing improvements at the Mark Twain School campus (project site), which would disturb 5.3 acres of the 9.7-acre project site, and plans to consolidate two of the District's special education programs at the campus (proposed project). These two programs are the Adult Transition Program, currently housed off-site at the Jordan Secondary Learning Center and the Mark Twain Special Education program, currently housed at the

project site. The off-site Adult Transition Program will be relocated to the project site and the Mark Twain Special Education program will remain on-site.

1.4.1.1 PROPOSED FACILITIES

The proposed project includes two new classroom buildings (Building F and Building G) southeast of the existing Mark Twain buildings; a new administration building (Building E) southwest of the existing Mark Twain buildings; renovation of the northern portion of the existing administration and multipurpose building (Building A); fencing around the new buildings; installation of two shade structures, two basketball courts, and walk paths for students; and the reconfiguration and expansion of the existing parking and student drop-off area. The proposed project would require demolition of hardscape and landscape and partial demolition of the existing Building A for renovation (see Figure 4, *Site Plan*).

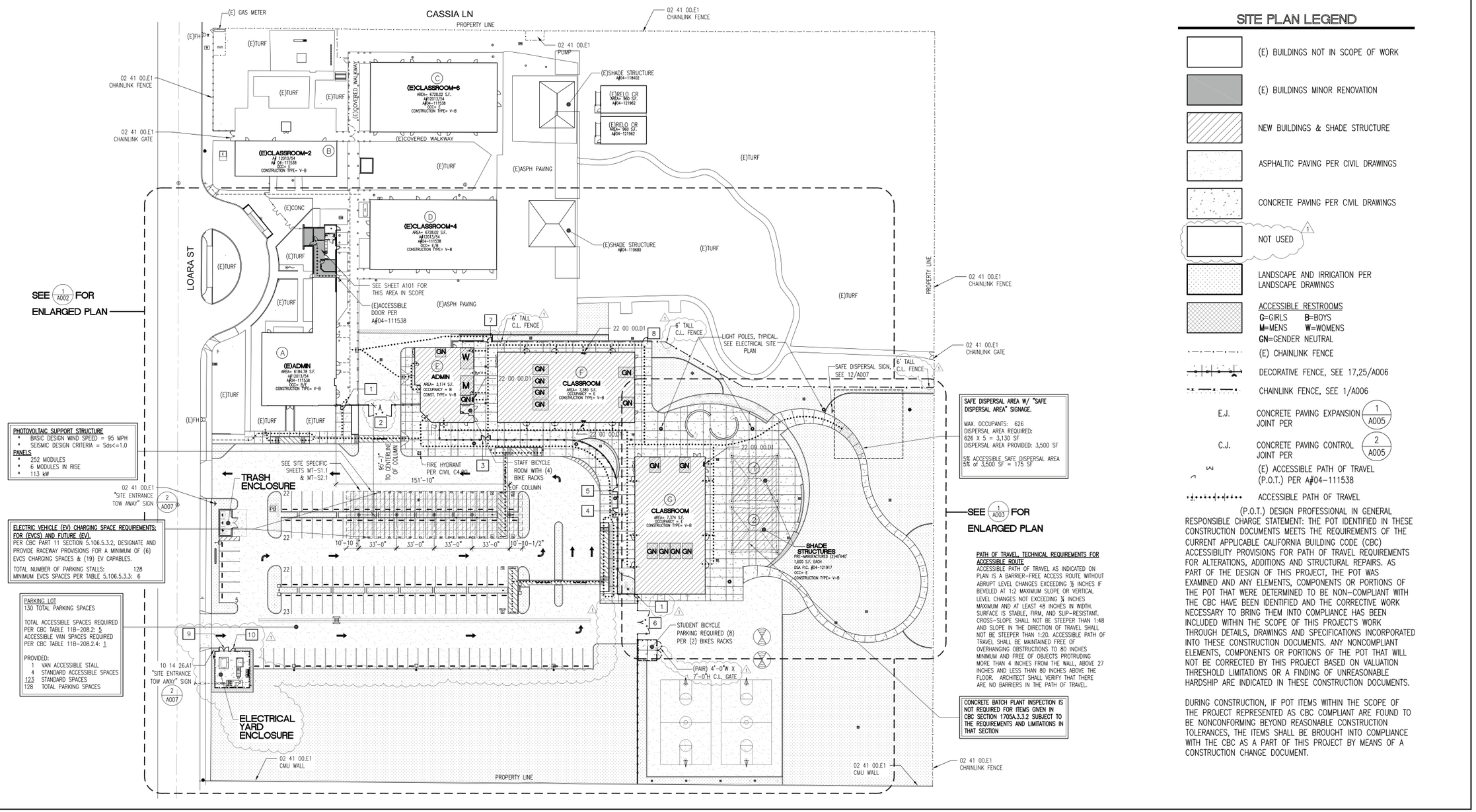
The proposed Building F (7,368 square feet) and Building G (7,374 square feet) would make up 11 classrooms with dedicated restrooms and workspace and one skills lab classroom. The proposed Building E would be 3,174 square feet and consist of dedicated space for reception, a principal's office, a nurse's office, staff lounge, and a conference room. Additionally, 1,075 square feet in the northern portion of the existing 6,610-square-foot Building A would be renovated to include two counseling offices and one conference room.

1.4.1.2 ACCESS AND CIRCULATION

The proposed project would reconfigure and expand the existing parking and student drop-off area on the southwest portion of the project site. Under existing conditions, the existing driveway to the existing parking lot provides both ingress and egress. The reconfiguration of the existing parking lot would result in the reconstruction of the existing driveway (northern most driveway) and construction of a new driveway (southernmost driveway) along Loara Street. The southernmost driveway would provide ingress and the northernmost driveway would provide egress for the one-way parking lot and two drop-off zones. Within the reconfigured parking lot, the first drop-off zone would be on the east boundary of the parking lot, and the second drop-off zone would be on the northern boundary of the parking lot, adjacent to Building A. The main entrance to the school would be through proposed Building E. The proposed project would include 130 parking stalls, staff bicycle storage with four bike racks in proposed Building E, and a student bicycle parking enclosure north of the proposed basketball courts.

Bus drop-off zones will be located directly south of proposed Building F and existing Building A and west of proposed Building G. The new fencing around the new buildings would include gates to access the campus and new buildings. Specifically, two double swing gates to provide emergency vehicle access would be provided at the north and east ends of the new parking lot area; one double swing gate would be provided south of proposed Building E and Building F; and one single swing gate and one double swing gate would be provided west of proposed Building G. The existing horseshoe driveway in the northwestern portion of the project site would remain; however, student drop-off would no longer be permitted in this area (see Figure 5, *Circulation Plans*).

Figure 4 - Site Plan



Source: Ghataode Bannon Architects, 2024.

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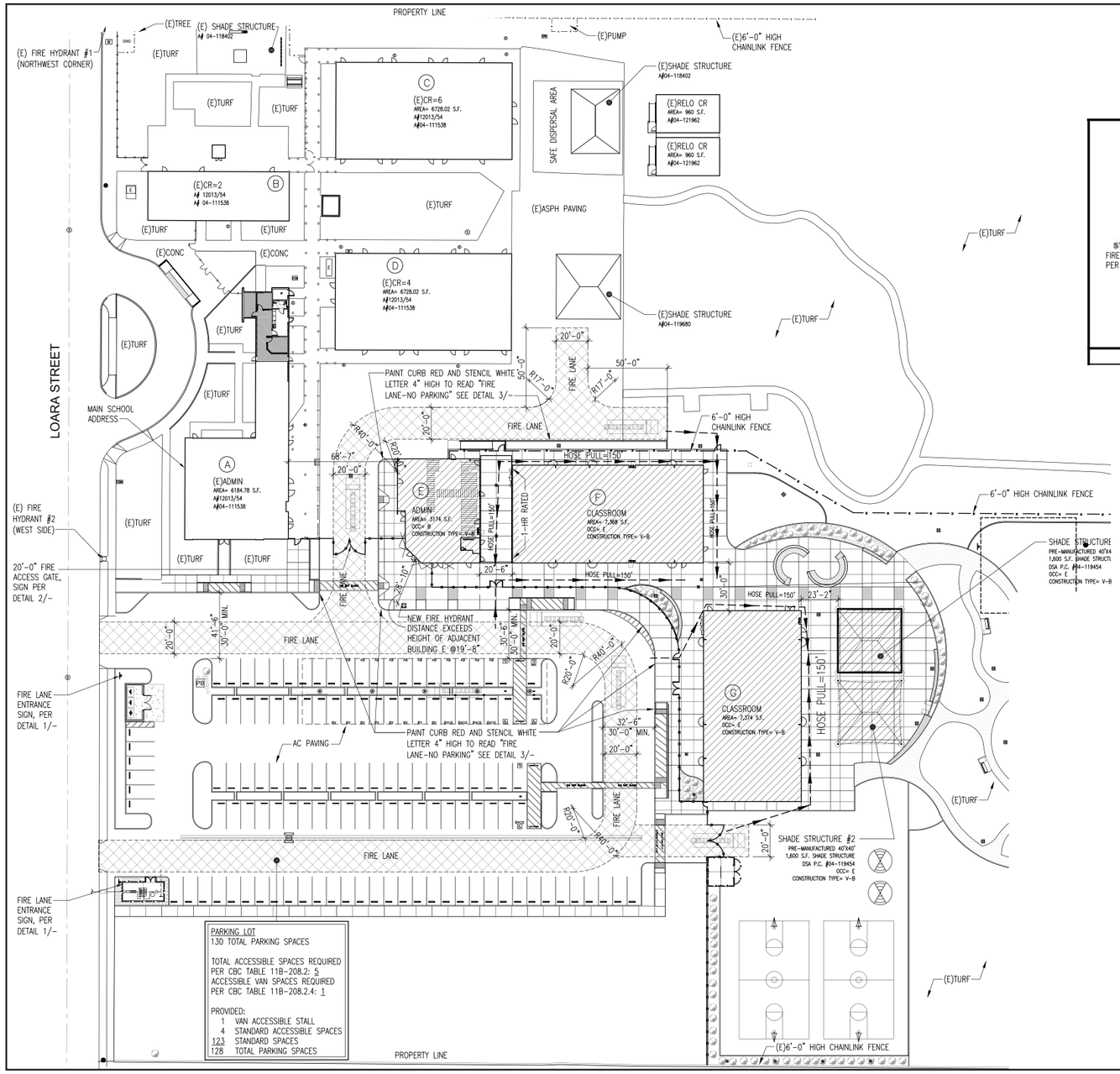
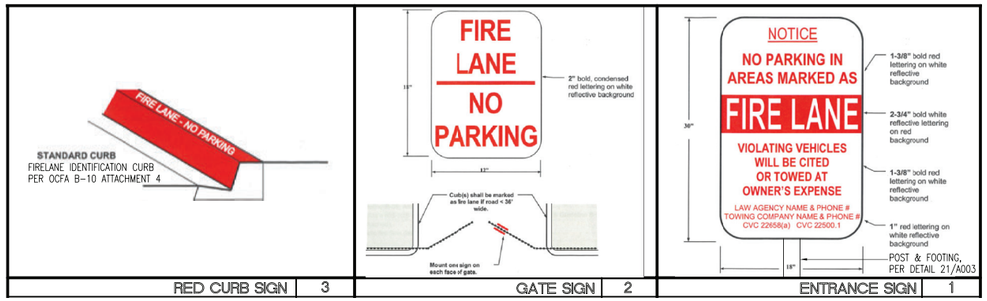
Figure 5 - Circulation Plans





SITE PLAN LEGEND

- (E) BUILDINGS NOT IN SCOPE
- (N) BUILDING ADDITIONS
- (E) FIRE LANE – 20'-0" WIDE MIN. PER A#04-116442
- EXISTING FIRE HYDRANT
- THEORETICAL 400' HYDRANT HOSE RUN PER CFC 507.5.1
- THEORETICAL 150' HYDRANT HOSE RUN PER CFC 503.1.1
- FIRE APPARATUS
- NEW FIRE HYDRANT WITH BOLLARDS

0 80
Scale (Feet)

Source: Ghataode Bannon Architects, 2024.

1. Introduction

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1.4.1.3 STUDENT ENROLLMENT

The relocation of the Adult Transition Program to the project site would result in an increase in enrollment at the project site by 105 students. The combined programs on the project site would serve 194 students and would have 22 faculty members and one nurse. Although the proposed project would result in an increase of students at the project site, these students are currently served by the District and would not represent new student enrollment within the District. The proposed project would not increase overall enrollment in the District.

1.4.1.4 PROJECT PHASING

The proposed project would occur in one phase. The proposed project is preliminarily scheduled to begin in September 2024 upon necessary approvals and proposed to be completed by August 2025.

1.5 DISCRETIONARY ACTION REQUESTED

It is anticipated that approvals required for the proposed project would include but may not be limited to the following:

- **City of Garden Grove Public Works Department.** Permit for curb, gutter, and other off-site improvements.
- **City of Garden Grove Department of Transportation.** Approval of construction-related haul route.
- **California Department of General Services, Division of State Architect (DSA).** Plan review and construction oversight, including structural safety, fire and life safety, and access compliance.
- **California Department of Education, School Facilities Planning Division (CDE).** If the District is requesting modernization funds from the State Allocation Board, CDE must review and approve the plans (Education Code Section 17070.50) prior to submitting a funding request.

1. Introduction

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2. Environmental Checklist

2.1 PROJECT INFORMATION

1. **Project Title:** Mark Twain School Expansion Project

2. **Lead Agency** Name and Address:
   Garden Grove Unified School District
   11700 Knott Avenue
   Garden Grove, California 92841

3. **Contact Person and Phone Number:**
   Kevin Heerschap, Facilities Director
   714.663.6442

4. **Project Location:**
   Mark Twain School
   11802 South Loara Street.
   Garden Grove, California 92840

5. **Project Sponsor's Name and Address:**
   Garden Grove Unified School District
   11700 Knott Avenue
   Garden Grove, California 92841

6. **General Plan Designation:** Parks and Open Space

7. **Zoning:** Open Space

8. **Description of Project:**
   The District plans to add classrooms, office space, and play courts; reconfigure and expand parking; and add fencing improvements at the Mark Twain School site, which would disturb 5.3 acres of the 9.7 acre project site, and consolidate the District's two special education programs at the project site—the Adult Transition Program, which is currently housed at the Jordan Secondary Learning Center, and the Mark Twain Special Education program currently housed at the Mark Twain School. The Adult Transition Program will relocate to the project site and the Mark Twain Special Education program will remain. The combined programs would serve approximately 194 students and would have 22 faculty members and one nurse on the project site.

9. **Surrounding Land Uses and Setting:**
   The project site is bound by Cassia Lane and residential uses to the north, residential uses to the east and south, and Loara Street to the west. The project site is surrounded by residential uses across the street frontages and also directly abuts residential uses. The surrounding residential uses are primarily single family

residential that are one to two stories high. Further from the project site, the area is primarily residential uses with some commercial uses along Euclid Street.

10. Other Public Agencies Whose Approval Is Required (e.g., permits, financing approval, or participating agreement):

- City of Garden Grove
- California Department of Education, School Facilities Planning Division (CDE)
- California Department of General Services, Division of State Architect (DSA)

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.94 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

Assembly Bill 52 (AB 52) requires consultation with California Native American tribes on potential impacts to tribal cultural resources. As part of the AB 52 consultation tribes must submit a written request to the lead agency (District) to be notified of projects within their traditionally and culturally affiliated area. The District has not received written requests from California Native American tribes per Public Resources Code Section 21080.3.1 to be notified of projects within their traditionally and culturally affiliated area. Therefore, the provisions for consultation have not been triggered.

2.2 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

2.3 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.

Signature

09/06/2024
Date

Kevin Heerschap
Print Name

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

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

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

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

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

9. The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?			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 nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				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

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			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	
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. 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 Wildlife or U.S. 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
V. CULTURAL RESOURCES. Would the project:				
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 dedicated cemeteries?			X	

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to 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	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
VIII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			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	

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 § 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 or excessive noise for people residing or working in the project area?				X
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
X. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			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:				
i) result in a 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) impede 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 or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X
XI. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be 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
XIII. NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
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
XIV. POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X
XV. PUBLIC SERVICES. Would the project:				
a) 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:				
Fire protection?			X	
Police protection?			X	
Schools?				X
Parks?			X	
Other public facilities?				X
XVI. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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
XVII. TRANSPORTATION. Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				X
b) Conflict or be inconsistent with CEQA Guidelines § 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
XVIII. TRIBAL CULTURAL RESOURCES.				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			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	

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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	
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
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 sources, 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
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

2. Environmental Checklist

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3. Environmental Analysis

Section 2.4 provided a checklist of environmental impacts. This section provides an evaluation of the impact categories and questions contained in the checklist and identifies mitigation measures, if applicable.

3.1 AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

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

Less Than Significant Impact. Vistas provide visual access or panoramic views to a large geographic area. The field of view from a vista location can be wide and extend into the distance. Panoramic views are usually associated with vantage points looking out over a section of urban or natural areas that provide a geographic orientation not commonly available. Examples of panoramic views include an urban skyline, valley, mountain range, the ocean, or other water bodies. The Garden Grove General Plan does not discuss nor specify any scenic vistas within the city. Garden Grove is within a built-out urban landscape with no significant landscape features, urban skyline, or the ocean in the vicinity. The Santa Ana Mountains are visible from the project site directly east, approximately 15 miles to the base of the mountains. Views of the Santa Ana Mountains are partially obscured by trees, campus fencing, electrical poles, and residential uses. The proposed project would be a single-story development that would obscure a portion of the view similar to the existing conditions. Impacts are less than significant.

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

No Impact. The closest designated State scenic highway is a portion of State Route 91 (SR-91) approximately 8.0 miles northeast of the project site (Caltrans 2023). Additionally, SR-57 is the closest eligible state scenic highway approximately 9.0 miles northeast of the project site. Due to the existing developed structures and distance, the proposed project would not be visible from SR-91 or SR-57. The proposed project would not result in impacts to scenic resources within a designated state scenic highway. No impacts would occur.

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

Less Than Significant Impact. The project site is in an urbanized area with the existing Mark Twain School campus on-site. Residential uses surround the project site. The proposed project would consolidate the Mark Twain and Jordan programs on the project site. The proposed project would include the construction of new structures, including two new classroom buildings, administrative building, basketball courts, and expanded

parking lot (see Figure 4, *Site Plans*). The proposed project would be consistent with the existing zoning and General Plan land use designations on-site and compatible with the surrounding residential character. The Garden Grove General Plan does not mention scenic vistas or scenic resources. As discussed in Section 3.1(a), the Santa Ana Mountains is a natural scenic resource that is partially obstructed by trees, fencing, electrical poles, and residential uses; and the proposed project would obscure a portion of the view similar to the existing conditions. The Garden Grove general plan and municipal code do not contain any regulations governing scenic quality (Garden Grove 2008; Garden Grove 2023a). Therefore, the proposed project would not conflict with the existing zoning and would not conflict with any other regulations governing scenic quality. Impacts 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. The two major causes of light pollution are glare and spill light. Spill light is caused by misdirected light that illuminates areas outside the intended area to be lit. Glare occurs when a bright object is against a dark background, such as oncoming vehicle headlights or an unshielded light bulb. Existing sources of light on the project site include parking lot light, vehicle headlights, internal and exterior building lights, and security lights.

The proposed project would construct two new classroom buildings and an administrative building, and the lighting generated from the proposed project would be similar to the existing conditions. The proposed project would not substantially increase development intensity or change uses to create a significant increase in light and glare impacts. Additionally, the proposed project does not include significant nighttime lighting. The proposed project would provide lighting sources similar to the existing uses and would not adversely affect day or nighttime views in the area. Impacts would be less than significant.

3.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

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

No Impact. The proposed project would add classrooms, office space, and play courts; reconfigure and expand parking; and add fencing improvements on the existing campus. There are no agricultural uses within Mark Twain School, and the proposed project would not convert any specially designated farmland identified on the

California Department of Conservation Farmland Mapping and Monitoring Program to a non-agricultural use. The project site and surrounding area are designated as Urban and Built-Up Land (DOC 2023). No impact regarding the conversion of any specially designated farmlands to a non-agricultural use would occur.

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

No Impact. The proposed project would add classrooms, office space, and play courts; reconfigure and expand parking; and add fencing improvements on the existing campus. The proposed project would continue to serve the existing use as a special education campus. The project site is zoned as Open Space (O-S) with a land use designation of Open Space (O-S), there are no agricultural uses on-site or in the vicinity of the project site (Garden Grove 2023b). Implementation of the proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act Contract. 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 proposed project would occur within the boundaries of the existing Mark Twain School. The campus is zoned as Open Space (O-S) and does not contain any forest land or timberland zoning designation on site or in the vicinity of the project site. Implementation of the proposed project would not conflict with existing zoning for forest land or timberland. No impact would occur.

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

No Impact. The proposed project would occur within the project boundaries of the existing Mark Twain School campus. No forest land exists on site or in the vicinity of the project site. The proposed project would not result in a loss of forest land, and no forest land would be converted as a result of the proposed project. 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 occur within the boundaries of the existing Mark Twain School campus. No farmland or forest land would be converted to nonagricultural use or non-forest use as a result of the proposed project. No impact would occur.

3.3 AIR QUALITY

The Air Quality section of this IS/MND addresses the impacts of the proposed project on ambient air quality and the exposure of people, especially sensitive individuals, to unhealthy pollutant concentrations. 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.

3. Environmental Analysis

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 dioxide (NO_2), and lead (Pb). Areas are classified under the federal and California Clean Air Acts as either in attainment or nonattainment for each criteria pollutant based on whether the AAQS have been achieved. The South Coast Air Basin (SoCAB), which is managed by the South Coast Air Quality Management District (South Coast AQMD), is designated nonattainment for O_3, and $PM_{2.5}$ under the California and National AAQS, nonattainment for PM_{10} under the California AAQS, and nonattainment for lead (Los Angeles County only) under the National AAQS (CARB 2023).

Furthermore, the South Coast AQMD has identified regional thresholds of significance for criteria pollutant emissions and criteria air pollutant precursors, including VOC, CO, NO_X, SO_X, PM_{10}, and $PM_{2.5}$. 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. Where available, the significance criteria established by the South Coast AQMD may be relied upon to make the following determinations. Would the project:

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

Less Than Significant Impact. The South Coast AQMD adopted the 2022 Air Quality Management Plan (AQMP) on December 2, 2022. Regional growth projections are used by South Coast AQMD to forecast future emission levels in the SoCAB. For southern California, these regional growth projections are provided by the Southern California Association of Governments (SCAG) and are partially based on land use designations included in city/county general plans. Typically, only large, regionally significant projects have the potential to affect regional growth projections. In addition, the consistency analysis is generally only required in connection with the adoption of General Plans, specific plans, and significant projects.

Changes in population, housing, or employment growth projections have the potential to affect SCAG's demographic projections and therefore the assumptions in South Coast AQMD's AQMP. The proposed project involves the consolidation of two special education programs and the construction of two new classroom buildings (Building F and Building G) and a new administration building (Building E) and the renovation of a portion of the existing administration building (Building A), which would result in an increase of enrollment at the project site by 105 students. However, the additional students are currently served by the Jordan Secondary Learning Center approximately 2.19 miles southwest of the Mark Twain School campus and would therefore not contribute to an increase in population within the District. Thus, the proposed project would not substantially affect housing, employment, or population projections within the region. Due to the nature of the proposed project, it would not result in new long-term employment. Construction activities associated with the proposed project would result in short-term employment only and would end upon project completion.

Additionally, as demonstrated below in Section 3.3(b), the regional emissions that would be generated by the operational phase of the proposed project would be less than the South Coast AQMD emissions thresholds and would therefore not be considered by South Coast AQMD to be a substantial source of air pollutant emissions that would have the potential to affect the attainment designations in the SoCAB. Therefore, the

proposed project would not affect the regional emissions inventory or conflict with strategies in the AQMP. Impacts would be less than significant.

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

Less Than Significant Impact. The following describes project-related impacts from regional short-term construction activities and regional long-term operation of the proposed project.

Regional Short-Term Construction Impacts

Construction activities would result in the generation of air pollutants. These emissions would primarily be from 1) exhaust from off-road diesel-powered construction equipment; 2) dust generated by construction activities; 3) exhaust from on-road vehicles; and 4) off-gassing of VOCs from paints and asphalt.

Construction activities associated with the development of the proposed project's buildings and improvements are anticipated to disturb 5.3 acres of the 9.7-acre campus. Project construction would involve site preparation, grading, building construction, paving, architectural coating, and finishing and landscaping. When this analysis was prepared, construction was anticipated to start in September 2024 and finish in August 2025. Should the construction schedule move into future years, the construction emission estimated contained in this analysis are considered a conservative representation of potential project impacts during construction because equipment and vehicle emission controls are assumed to improve in future years. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2022.1, and are based on the preliminary construction duration provided by the District. Construction emissions for the proposed project are shown in Table 3, *Maximum Daily Regional Construction Emissions*, which shows that maximum daily emissions for VOC, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$ from construction-related activities would be less than their respective South Coast AQMD regional significance threshold values. Therefore, air quality impacts from project-related construction activities would be less than significant.

Table 3 Maximum Daily Regional Construction Emissions

Construction Phase	Pollutants (lb/day)[1, 2]					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Year 2024						
Site Preparation	4	37	34	<1	10	6
Grading	2	19	20	<1	4	2
Building Construction (2024)	1	11	14	<1	1	1
Year 2025				<1		
Building Construction (2025)	1	11	14	<1	1	<1
Building Construction, Paving, and Architectural Coating	17	18	25	<1	1	1
Maximum Daily Construction Emissions						
Maximum Daily Emissions	17	37	34	<1	10	6
South Coast AQMD Regional Construction Threshold	75	100	550	150	150	55

3. Environmental Analysis

Table 3 Maximum Daily Regional Construction Emissions

Construction Phase	Pollutants (lb/day)[1, 2]					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Significant?	No	No	No	No	No	No

Source: CalEEMod Version 2022.1.
Note: The adult education school uses of the proposed project were modeled based on the CalEEMod defaults for high school buildings as the closest available approximation of the proposed uses.
1 Based on the preliminary 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 South Coast AQMD of construction equipment.
2 Includes implementation of fugitive dust control measures required by South Coast AQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 25 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186–compliant sweepers.

Long-Term Operation-Related Air Quality Impact

Typical long-term air pollutant emissions are generated by area sources (e.g., landscape fuel use, aerosols, architectural coatings, and asphalt pavement), energy use (natural gas), and mobile sources (i.e., on-road vehicles). Implementation of the proposed project would add additional buildings to the existing Mark Twain campus. As identified in the *Traffic/Transportation Impact Analysis for the Proposed Mark Twain School Expansion for the Adult Transition Program* provided by Garland Associates (2024) (see Appendix C), the proposed project would generate an estimated 380 new weekday vehicle trips. As shown in Table 4, *Maximum Daily Regional Operation Emissions*, it is anticipated that operation of the proposed project would result in emissions that would not exceed the South Coast AQMD regional operation-phase significance thresholds.

Table 4 Maximum Daily Regional Operation Emissions

Source	Maximum Daily Emissions (lbs/day)					
	VOC	NOX	CO	SO2	PM10	PM2.
Emissions[1]						
Mobile[2]	1	1	11	<1	2	1
Area	1	<1	2	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Total	2	1	12	<1	2	4
South Coast AQMD Regional Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod Version 2022.1; South Coast AQMD 2023.
Notes: lbs: Pounds. Highest winter or summer emissions report.
1 Operational emissions modeling does not include the existing 6,185-square-foot administrative/multipurpose building that would be renovated as part of the proposed project because energy- and area-source emissions associated with the existing building are part of the existing emissions on-site.
2 Based on trip generation data provided by Garland Associates (see Appendix C). Mobile-source emissions reflect the net new 380 daily weekday vehicle trips associated with the proposed project.

The proposed project would not generate emissions that exceed the South Coast AQMD regional significance thresholds. Projects that do not exceed the South Coast AQMD regional significance thresholds would not result in a cumulatively considerable increase in criteria air pollutants for which the SoCAB is designated non-attainment. In addition, emissions from building energy use for the existing administrative/multipurpose building (Building A) that would be partially renovated would be minimized compared to existing conditions

because the renovated portion of the building would be compliant with the current California Building and Energy Efficiency Standards and would be more energy efficient than the building is now. Therefore, impacts to the regional air quality associated with operation of the project would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The proposed project could expose sensitive receptors to elevated pollutant concentrations if it causes or significantly contributes to elevated pollutant concentration levels. Unlike regional emissions, localized emissions are typically evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects.

Construction LSTs

Localized significance thresholds (LSTs) are based on the California AAQS, which are the most stringent AAQS to provide a margin of safety in the protection of public health and welfare. They are designated to protect sensitive receptors most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and people engaged in strenuous work or exercise. The screening-level construction LSTs are based on the size daily site disturbance, distance to the nearest sensitive receptor, and Source Receptor Area (SRA). The nearest off-site sensitive receptors are the single-family residences along Cassia Lane and West Ord Way to the north, Waverly Drive to the east, Bixler Circle to the south, and Loara Street to the west of the project site.

Air pollutant emissions generated by construction activities would cause temporary increases in air pollutant concentrations. Table 5, *Localized Construction Emissions*, shows the maximum daily construction emissions (pounds per day) generated during on-site construction activities compared with the South Coast AQMD's screening-level LSTs, for sensitive receptors within 82 feet (25 meters). As shown in Table 5, construction of the proposed project would not generate construction-related on-site emissions that would exceed the screening-level LSTs. Therefore, impacts are less than significant.

Table 5 Localized Construction Emissions

	Pollutants(lbs/day)[1]			
Construction Activity	NO_X	CO	PM_{10}[2]	$PM_{2.5}$[2]
South Coast AQMD 3.5 Acre LST	149	984	10	6
Site Preparation	36	33	9.27	5.41
Exceeds LST?	No	No	No	No
South Coast AQMD 2.5-Acre LST	126	805	7	5
Grading	60	19	3.60	2.11
Exceeds LST?	No	No	No	No
South Coast AQMD 1.31-Acre LST	92	557	5	3
Building Construction (2024)	11	13	0.50	0.46
Building Construction (2025)	10	13	0.43	0.40
Exceeds LST?	No	No	No	No
South Coast AQMD 2.81-Acre LST	133	861	8	5

3. Environmental Analysis

Table 5 Localized Construction Emissions

Construction Activity	Pollutants(lbs/day)[1]			
	NO_X	CO	PM_{10}[2]	$PM_{2.5}$[2]
Building Construction, Paving, Architectural Coating	18	23	0.75	0.69
Exceeds LST?	No	No	No	No

Source: CalEEMod Version 2022.1; South Coast AQMD 2008, 2011.
Notes: In accordance with South Coast AQMD methodology, only on-site stationary sources and mobile equipment are included in the analysis. Screening level LSTs are based on an 82-foot distance to the receptor in SRA 17.
[1] Where specific information for project-related construction activities or processes was not available modeling was based on CalEEMod defaults. These defaults are based on construction surveys conducted by the South Coast AQMD.
[2] Includes fugitive dust control measures required by South Coast AQMD under Rule 403, such as watering disturbed areas a minimum of two times per day, reducing speed limit to 25 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186–compliant sweepers.

Construction Health Risk

Emissions from construction equipment primarily consist of diesel particulate matter. In 2015, the Office of Environmental Health Hazards Assessment adopted guidance for preparation of health risk assessments, which included the development of a cancer risk factor and noncancer chronic reference exposure level for diesel particulate matter over a 30-year time frame (OEHHA 2015). Currently, South Coast AQMD does not require the evaluation of long-term excess cancer risk or chronic health impacts for a short-term project. The proposed project is anticipated to be completed in approximately 11 months, which would limit the exposure of on-site and off-site receptors. Furthermore, construction activities would not generate on-site exhaust emissions that would exceed the screening-level construction LSTs. Thus, impacts would be less than significant.

Operation LSTs

Operation of the proposed project would not generate substantial emissions from on-site stationary sources. Land uses that have the potential to generate substantial stationary sources of emissions include industrial land uses, such as chemical processing and warehousing operations where truck idling would occur on-site and would require a permit from South Coast AQMD. The proposed project does not fall within these categories of uses. While operation of the new buildings would use standard on-site mechanical equipment such as heating, ventilation, and air conditioning, air pollutant emissions would be nominal. Localized air quality impacts related to operation-related emissions would be less than significant.

Carbon Monoxide Hotspots

Vehicle congestion has the potential to create pockets of carbon monoxide (CO) called hotspots. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles are backed up and idle for longer periods and are subject to reduced speeds. These pockets could exceed the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations.

The SoCAB has been designated attainment under both the national and California AAQS for CO. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection

to more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact (BAAQMD 2017). The proposed project would result in an increase of 380 trips, which include 106 new AM peak hour trips. As provided in the Traffic Impact Analysis for the proposed project (see Appendix C), Loara Street is projected to experience up to 2,210 daily vehicle trips south of the campus in 2025 with implementation of the proposed project. Considering daily vehicle trip volumes on Loara Street would not exceed the recommended hourly screening criteria, the proposed project would not introduce new vehicle trips which may result in a CO hotspot when combined with existing traffic volumes, and impacts would be less than significant.

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

Less Than Significant Impact. The proposed project would not result in objectionable odors. The threshold for odor is if a project creates an odor nuisance pursuant to South Coast AQMD Rule 402, Nuisance, which states:

> A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

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 involves the addition of new school buildings to an existing campus and would not fall within the objectionable odors land uses or generate odors different than what is already generated on-site. Emissions from construction equipment, such as diesel exhaust and volatile organic compounds from architectural coatings and paving activities may generate odors. However, these odors would be low in concentration, temporary, and would not affect a substantial number of people. Odor impacts would be less than significant.

3.4 BIOLOGICAL RESOURCES

Would the project:

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

Less Than Significant Impact. The project site is currently developed with the existing Mark Twain School, which includes school classrooms and buildings, paved surfaces (parking lots and walkways), and athletic fields (open fields and baseball/softball fields). Vegetation at the project site consists of ornamental trees and plants

and grass fields. There is no native habitat and no suitable habitat for threatened, endangered, or rare species on or near the site due to the frequent disturbances on-site. The likelihood of species dispersal, whether plants or wildlife, from surrounding areas to the campus is very low. Impacts would be less than significant.

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 Wildlife or U.S. Fish and Wildlife Service?

No Impact. The project site is currently developed with the existing Mark Twain School, which includes school classrooms and buildings, paved surfaces (parking lots and walkways, and athletic fields (open fields and baseball/softball fields). The U.S. Fish and Wildlife Service (USFWS) manages the National Wetlands Inventory (NWI), a digital wetlands mapper with current information on wetlands and riparian. The NWI indicates there are no riparian habitats that exist on or in the vicinity of the project site (USFWS 2023a). Additionally, neither the project site nor the city is in a critical habitat area (USFWS 2023b). Thus, the proposed project would not affect any riparian habitats or other sensitive natural communities. 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. According to the USFWS's NWI, there are no federally protected wetlands, including but not limited to marsh, vernal pool, and coastal areas, within the Mark Twain campus (USFWS 2023a). The project site is developed and there are no waterways or underdeveloped land capable of supporting federally protected wetlands. Implementation of the proposed project would not have a substantial adverse effect on any protected wetlands. 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 currently developed with the existing Mark Twain School and is surrounded by residential development. The proposed project would require minimal ground disturbance activities; however, due to the existing campus and past ground disturbance activities in the surrounding area, the project site is not suitable to function as a corridor for migratory wildlife. Additionally, the project site does not contain any surface water and therefore is not suitable for the movement or migration of fish.

There are a total of five ornamental trees and numerous shrubs and structures on campus that may provide a nesting habitat for native birds protected under the Migratory Bird Treaty Act (MBTA) (US Code Title 16, Sections 703–712), and California Fish and Game Code Sections 3503 et seq.

Compliance with the MBTA requires:

- Avoiding grading activities during the nesting season, February 15 to August 15.
- Or, if grading activities are to be undertaken during the nesting season, a site survey for nesting birds by a qualified biologist before commencement of grading activities. If nesting birds are found, the applicant would consult with the USFWS regarding means to avoid or minimize impacts to nesting birds.

Impacts would be less than significant with compliance with the MBTA.

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

Less Than Significant Impact. The City of Garden Grove Municipal Code 11.32.040, Protection for Trees on Public Property, protects trees and shrubs on City property or in City recreational areas from being damaged, cut, or removed (Garden Grove 2023a). The proposed project would occur within the project site boundaries, which is District-owned and -operated. Additionally, the proposed project would not damage, cut, or remove any City-owned tree or shrubs. Therefore, the proposed project would not impact the goals and objectives of the local policies protecting biological resources. 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 currently developed with the Mark Twain School campus within an urban and developed area. The project site is not within a Natural Community Conservation Plan or Conservation Plan Area. The project site does not contain any sensitive biological resources. The proposed project would not affect the Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plans. No impact would occur.

3.5 CULTURAL RESOURCES

Would the project:

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

No Impact. Section 15064.5 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.

The proposed project would add classrooms, office space, and play courts; expand parking; and add fencing improvements at the Mark Twain School site, then consolidate the District's two special education programs at the existing Mark Twain campus. The existing Mark Twain campus was completed and first opened on July 1, 1980; other small structures on campus were developed and/or installed after 1980 (CDE 2023c). The campus is not listed as a historical resource in the National Register of Historic Places (National Parks Service 2023). Additionally, Mark Twain School is not listed in the California Historical Landmarks and Points of Historical Interest, or State Historic Structures, and the proposed project would not demolish any structures that can potentially meet any of the criteria listed above (California State Parks 2023). Therefore, there are no resources on the campuses that would be considered historically significant pursuant to Section 15064.5. No impact 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. Implementation of the proposed project would result in limited ground disturbance to develop classroom buildings, administration building, and basketball courts; reconfigure and expand parking; and add fencing improvements. Earthwork associated with the proposed project would include grading, drilling holes for installation of fencing, and utility trenching. The proposed project would not disturb subterranean levels of soil and would not require extensive excavation. The proposed project would occur within the boundaries of an existing Mark Twain School campus that has already been developed with associated structures and facilities—classroom buildings, administration buildings, and athletic facilities (baseball fields and open fields)—therefore, the potential discovery of archaeological resources would be minimal. However, ground-disturbing activities from the proposed project may have the potential to uncover unknown archaeological resources and therefore could result in a potentially significant impact. Implementation of Mitigation Measure CUL-1 would ensure that in the event archaeological resources are discovered during ground-disturbing activities, archaeological resources would be recovered in accordance with State and federal requirements. If archaeological resources are discovered during ground disturbing activities all ground distributing activities shall halt and a qualified archeologist would be retained to assess such findings. Implementation of Mitigation Measure CUL-1 would reduce impacts to archaeological resources to less than significant.

Mitigation Measures

CUL-1 Prior to issuance of grading permits, a qualified archaeological monitor shall be identified to be on call during ground-disturbing activities. If archeological resources are discovered during excavation and/or construction activities, construction shall stop within 25 feet of the find, and the qualified archaeologist shall be consulted to determine whether the resource requires further study. The archaeologist shall make recommendations to the District to protect the discovered resources. Archaeological resources recovered shall be offered to a repository with

a retrievable collection system and an educational and research interest in the materials, such as the John D. Cooper Center or California State University, Fullerton, or a responsible public or private institution with a suitable repository willing to and capable of accepting and housing the resource.

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

Less Than Significant Impact. There are no cemeteries or known human remains at the campus, which has been previously disturbed during construction of the existing school; however, limited ground disturbance activities (i.e., grading, utility trenching and drill holes) would have the potential to result in discovery of human remains. In the unlikely event human remains are discovered, the District would be responsible for compliance with Health and Safety Code section 7050.5 and CEQA Guidelines section 15064.5. California Health and Safety Code section 7050.5 states that no further disturbance shall occur until the county coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Orange County coroner determines the remains to be Native American, the Native American Heritage Commission (NAHC) shall be contacted within 24 hours. Subsequently, the NAHC shall identify the most likely descendant. The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains, as provided in Public Resources Code section 5097.98. Adherence to existing legal requirements associated with human remains would reduce impacts associated with the disturbance of human remains. Impacts would be less than significant.

3.6 ENERGY

Would the project:

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

Less Than Significant Impact. The following discusses the potential energy demands from construction activities associated with the construction and operation of the new school buildings and partially renovated existing school building.

Short-Term Construction Impacts

Electrical Energy

The majority of construction equipment would be gas- or diesel-powered, and electricity would not be used to power most of the construction equipment. Electricity use during construction would vary during different phases of construction. Later construction phases could result in the use of electricity-powered equipment for interior construction and architectural coatings, including the renovation of the administrative/multipurpose building. It is anticipated that the majority of electric-powered construction equipment would be hand tools (e.g., power drills, table saws) and lighting, which would result in minimal electricity usage during construction activities. Electrical energy would be available for use during construction from existing connections, precluding

the need for less efficient generators. Therefore, project-related construction activities would not result in wasteful or unnecessary electricity demands, and construction electricity impacts would be less than significant.

Natural Gas Energy

It is not anticipated that construction equipment used for the proposed project would be powered by natural gas, and no natural gas demand is anticipated during construction. Therefore, no impact would occur with respect to construction natural gas usage.

Transportation Energy

Transportation energy use during construction of the proposed project would come from delivery vehicles, haul trucks, and construction employee vehicles. In addition, transportation energy demand would come from use of off-road construction equipment. It is anticipated that the majority of off-road construction equipment, such as those used during demolition and grading, would be gas or diesel powered.

The use of energy resources by vehicles and equipment would fluctuate according to the phase of construction and would be temporary. In addition, all construction equipment would cease operating upon completion of project construction. Thus, impacts related to transportation energy use during construction would be temporary and would not require expanded energy supplies or the construction of new infrastructure. Furthermore, to limit wasteful and unnecessary energy consumption, the construction contractors are anticipated to minimize nonessential idling of construction equipment during construction, in accordance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9. Construction trips would also not result in unnecessary use of energy since the project site is centrally located and is served by numerous regional freeway systems (e.g., I-5 and SR-22) that provide the most direct routes from various areas of the region. Thus, energy use during construction of the proposed project would not be considered inefficient, wasteful, or unnecessary. Impacts would be less than significant.

Long-Term Impacts During Operation

Operation of the proposed project would generate new demand for electricity, natural gas, and transportation energy on the project site. Operational use of energy would include heating, cooling, and ventilation of buildings; water heating; operation of electrical systems, use of on-site equipment and appliances; and indoor, outdoor, and perimeter lighting.

Electrical Energy

The proposed net increase in electricity consumption from the proposed project is shown in Table 6, *Operation-Related Electricity Consumption.*

Table 6 Operation-Related Electricity Consumption

Land Use	Electricity (kWh/year)[1]
School Buildings	112,053
Parking Lot	57,466
Total Electricity Consumption	169,518

Source: CalEEMod Version 2022.1 (see Appendix A).
Note: kWh=kilowatt-hour

Electrical service to the campus would continue to be provided by Southern California Edison (SCE) through connections to existing on-site electrical lines as needed. The proposed project would add approximately 17,916[2] square feet of new building area to the campus. As shown in Table 6, the new electricity demand from these new school buildings would total 169,518 kilowatt-hours per year.[3] While the proposed project would generate additional energy demand at the project site, the new buildings would be required to comply with the applicable Building Energy Efficiency Standards and CALGreen (California Green Building Code) requirements, thereby improving the overall building energy-efficiency performance across the campus. In addition, SCE is required to meet the renewable energy production goals of the California Renewable Portfolio Strategy (RPS). The RPS is a phased requirement for load serving entities, like SCE, to increase the proportion of in-state sales of electricity being procured from eligible renewable and carbon-free sources until 2045 when the goal is to achieve 100 percent of in-state sales be procured from carbon-free sources. These features would support the goals outlined in Appendix F of the CEQA Guidelines of promoting the use of renewable energy and decreasing reliance on fossil fuels. Because the proposed project and SCE would comply with these regulations, it would not result in wasteful, inefficient, or unnecessary electricity demands. Therefore, operation of the proposed project would result in a less than significant impact related to electricity.

Natural Gas Energy

The new natural gas demand for the new buildings would total 375,876 kilo-British thermal units per year following buildout of the proposed project. Development associated with the proposed project would be built to meet the Building Energy Efficiency Standards. These measures would comply with the goals outlined in Appendix F of the CEQA Guidelines, as the proposed project would decrease reliance on fossil fuels to meet the natural gas demands of the campus. It would not result in wasteful, inefficient, or unnecessary natural gas demands. Therefore, operation of the proposed project would result in less than significant impacts with respect to natural gas usage.

Transportation Energy

The proposed project would result in the consumption of transportation energy during operation from the use of motor vehicles. The efficiency of the motor vehicles in use (average miles per gallon) is unknown and highly variable, and project-related vehicle trips would come from students and staff traveling to and from the campus.

[2] 3,174 s.f. (Building E) + 7,368 s.f. (Building F) + 7,374 s.f. (Building G) = 17,916 s.f.

[3] Note that the energy use of the existing administrative/multipurpose building to be renovated is not included in the proposed project's energy consumption estimates because that energy consumption is part of the existing energy demand on the campus.

However, because these trips would be from students and staff at the existing Adult Transition Program at the Jordan Secondary Learning Center, implementation of the proposed project would not result in additional trips within the District and would not result in additional reliance on fossil fuel consumption. In addition, the proposed project would include electric vehicle charging stations compliant with applicable CALGreen requirements, which would contribute to reducing reliance on fossil fuels and supporting an increased reliance on renewable energy sources. Therefore, there would be less than significant impacts with respect to operation-related fuel usage.

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

Less Than Significant Impact. The State's electricity grid is transitioning to renewable energy under California's RPS Program. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The RPS goals have been updated since adoption of SB 1078 in 2002. In general, California has RPS requirements of 33 percent renewable energy by 2020 (SB X1-2), 44 percent by 2024, 50 percent by 2026, 52 percent by 2027, 60 percent by 2030, 90 percent by 2035, 95 percent by 2040, and 100 percent by 2045. The statewide RPS requirements do not directly apply to individual development projects, but to utilities and energy providers such as SCE, whose compliance with RPS requirements would contribute to the State objective of transitioning to renewable energy. The land uses accommodated by the proposed project would not change (school use) and would comply with the current or future iterations of the Building Energy Efficiency Standards and CALGreen. In addition, because the proposed project would be required to comply with the applicable Building Energy Efficiency Standards and CALGreen requirements, the new buildings to be constructed would be more energy efficient than the existing school buildings to be replaced. Therefore, implementation of the proposed project would not conflict with or obstruct implementation of California's RPS Program, and this impact would be less than significant.

3.7 GEOLOGY AND SOILS

Would the project:

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

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. The Alquist-Priolo Earthquake Fault Zoning Act requires the delineation of zones along active faults in California. The purpose of the Alquist-Priolo Act is to regulate development and prohibit construction on or near active fault traces to reduce hazards associated with fault rupture. The Alquist-Priolo Earthquake Fault Zones are the regulatory zones that include surface traces of active faults. Wherever an active fault exists, if it has the potential for surface rupture, a structure for human occupancy cannot be placed over the fault and must be a minimum distance from the fault (generally 50 feet). An

active fault, for the purposes of the Alquist-Priolo Act, is one that has ruptured in the last 11,000 years (DOC 2023b).

Garden Grove is surrounded by earthquake faults—the Newport-Inglewood Fault and Whitter Fault are two major fault lines in the region (DOC 2023c). The nearest fault is the Los Alamitos Fault approximately 6.0 miles west of the project site. However, the project site is not within an earthquake fault zone nor is the immediate surrounding area in an Alquist-Priolo Earthquake special study zone (DOC 2023c). Provided the proposed buildings are constructed in accordance with the applicable California Building Code (CBC) and Division of the State Architect (DSA) criteria for seismic safety, less than significant impacts from these major faults are anticipated.

ii) Strong seismic ground shaking?

Less Than Significant Impact. Southern California is a seismically active region. Ground shaking from earthquakes along active faults many miles away in the region could cause injury to people and damage to property at the project site. The closest significant regional active faults that could produce earthquakes that affect the project site include the Newport-Inglewood-Rose Canyon fault zone approximately 10 miles west, the Whittier Fault approximately 13 miles northeast, and the Elsinore fault zone approximately 18 miles northeast of the project site. As stated in Section 3.7.a.i, above, the project site is not within an earthquake fault zone nor is the immediate surrounding area located within an Alquist-Priolo Earthquake special study zone (DOC 2023c).

Development of the proposed project would be required to comply with the CBC, including seismic design parameters. In addition, since the proposed project is a school site, the California Geological Survey and DSA will ensure that the buildings are sufficiently designed to withstand ground shaking. Impacts are less than significant.

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. Liquefaction potential varies based on three main contributing factors: 1) cohesionless, granular soils having relatively low densities (usually of Holocene age); 2) shallow groundwater (generally less than 50 feet); and 3) moderate to high seismic ground shaking.

According to the California Geological Survey, the majority of the city, including the project site, is within a liquefaction zone. Therefore, the potential for liquefaction at the Mark Twain School site exists. However, the proposed project would be designed in compliance with seismic requirements of the CBC and the DSA criteria for seismic safety, including from liquefaction impacts. Compliance with established standards would reduce the risk of liquefaction hazards to a less than significant level.

iv) Landslides?

Less Than Significant Impact. Landslides are a type of erosion in which masses of earth and rock move downslope as a single unit. Susceptibility of slopes to landslides and lurching (earth movement at right

angles to a cliff or steep slope during ground shaking) depend on several factors that are usually present in combination—steep slopes, condition of rock and soil materials, presence of water, formational contacts, geologic shear zones, and seismic activity. The Mark Twain School campus and adjacent properties are flat and exhibit no unusual geographic features or slopes. Additionally, the Department of Conservation does not map the campus within a landslide zone nor show any landslide activity in the vicinity of Garden Grove. The proposed project would be designed in compliance with seismic requirements of the CBC and the DSA criteria for seismic safety, and the proposed project would not result in significant safety impacts due to landslides. Impacts 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 material are loosened, worn away, decomposed, or dissolved and removed from one place and transported to another. The project site is an existing school site with paved and impervious surfaces (parking lot, buildings) as well as pervious surfaces (open green field, baseball area). The construction of the proposed project includes softscape and hardscape demolition for improved circulation, construction of a parking lot and new buildings, and utility trenching. The project site is flat, and the proposed project does not contain subterranean levels. Therefore, the proposed project would not require extensive excavation, which would mean soils would not be exposed to substantial erosion impacts.

The construction contractor would be required to take all measures deemed necessary during grading to provide erosion control devices in order to protect exposed soil and adjacent properties from storm damage and flood hazard originating on the proposed project. The proposed project would be required to comply with National Pollutant Discharge Elimination System (NPDES) permit requirements to control pollutants from being discharged into the water. Under the NPDES permit, which applies to grading activities of more than one acre and is administered under the Regional Water Quality Control Board (RWQCB), the District would be required to prepare and implement a Storm Water Pollution Prevention Program (SWPPP), including a best management practices (BMP) program to address construction-related discharges. Implementation of BMPs specified in the SWPPP would ensure that the proposed project does not result in substantial soil erosion or the loss of topsoil during construction. During operation, all project surfaces would be covered in vegetation, athletic field, building surfaces walkways, parking lots, and driveways, and there would be no soils susceptible to soil erosion or the loss of topsoil. Impacts would be less than significant.

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

Less Than Significant Impact. As discussed in Section 3.7.a.iii and 3.7.a.iv, impacts from liquefaction and landslides would be less than significant since the proposed project would be in compliance with applicable seismic requirements of the CBC and DSA.

Lateral spreading is a phenomenon where large blocks of intact, nonliquefied soil move downslope on a large, liquefied substratum. The mass moves toward an unconfined area, such as a descending slope or stream-cut bluff, and has been known to move on slope gradients as little as one degree. The topography of the project

site is flat, and therefore impacts from lateral spreading would be less than significant. Subsidence and collapse are generally due to substantial overdraft of groundwater or underground petroleum reserves. Collapsible soils may appear strong and stable in their natural (dry) state, but they rapidly consolidate under wetting, generating large and often unexpected settlements. Seismically induced settlement consists of dynamic settlement of unsaturated soil (above groundwater) and liquefaction-induced settlement (below groundwater). These settlements occur primarily in low-density sandy soil due to the reduction in volume during and shortly after an earthquake. The City of Garden Grove and the Mark Twain School campus are in areas of recorded subsidence due to groundwater pumping (USGS 2023). However, the proposed project would not require the withdrawal of groundwater from the project site. Additionally, compliance with applicable CBC and DSA requirements would ensure adequate design and construction of building foundations to resist unstable soil. Impacts 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. Highly expansive soils swell when they absorb and shrink as they dry and can cause structural damage to building foundations. Therefore, they are less suitable for development than nonexpansive soils. The soils on campus consist of San Emigdio sine sandy loam, Metz loamy sand, and Hueneme fine sandy loam. These are drained sandy soils with low to very low runoff class rates and low shrink-swell or expansion characteristics (USDA 2023). Additionally, the proposed project would be consistent with CBC and DSA requirements, thus reducing any potential impacts to substance and collapsible soils. Impacts would be less than significant.

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

No Impact. The proposed project is located within an urbanized area. No septic tanks or alternative wastewater disposal system are proposed. The proposed project would connect to existing sewer lines in the vicinity of the project site. No impacts would occur.

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

Less Than Significant Impact With Mitigation Incorporated. The proposed project is within the urbanized and built out city of Garden Grove. The project site is currently developed with Mark Twain School campus, which had previous earth work on-site. The project site is underlain by Young Alluvial Fan Deposits (Qyf) from Holocene to Late Pleistocene (DOC 2023d). These young quaternary deposits typically do not contain significant fossils. The proposed project would require light ground-disturbing activities and are unlikely to unearth paleontological resources. While fossils are not expected to be discovered during project construction, it is possible paleontological resources could be discovered during ground-disturbing activities.

Implementation of Mitigation Measure GEO-1 would ensure that if resources are discovered during ground disturbing activities, paleontological resources would be recovered in accordance with state and federal requirements. Implementation of Mitigation Measure GEO-1 would reduce impacts to paleontological resources to a less than significant level.

Mitigation Measures

GEO-1 A qualified paleontologist shall be on call in the event that paleontological resources are found during ground-disturbing activities. The paleontologist shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossils. The paleontologist shall be empowered to temporarily halt or divert equipment to allow for the removal of abundant or large specimens in a timely manner.

3.8 GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as greenhouse gases (GHGs), into the atmosphere. The primary source of anthropogenic GHG emissions is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, carbon dioxide (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons.[4]

Information on the manufacturing 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.[5] Black carbon emissions are not included in the GHG analysis because the California Air Resources Board (CARB) does not include this pollutant in the state's Senate Bill 32 (SB 32) inventory and treats this short-lived climate pollutant separately.[6] A background discussion on the GHG regulatory setting and GHG modeling can be found in Appendix A to this Initial Study.

Would the project:

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

[4] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

[5] 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 (CNRA 2018). 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).

[6] Particulate matter emissions, which include black carbon, are analyzed in Section 3.3, Air Quality. Black carbon emissions have sharply declined due to efforts to reduce on-road and off-road vehicle emissions, especially diesel particulate matter. The state's existing air quality policies will virtually eliminate black carbon emissions from on-road diesel engines within 10 years (CARB 2017.).

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.

Project-related construction and operation-phase GHG emissions are shown in Table 7, *Project-Related Construction and Operational GHG Emissions*. Implementation of the proposed project would result in the addition of new school buildings on the project site. Construction of the proposed project would generate GHG emissions. The annual average construction emissions were amortized over 30 years and included in the emissions inventory to account for one-time GHG emissions from the construction phase of the project. Water demand, wastewater generation, solid waste generation, and energy demand for the project site would incrementally increase due to the introduction of the new buildings on the campus. The new trips added by the proposed project would also generate a small increase in mobile source emissions. Overall, construction and operation of the proposed project would not generate annual emissions that exceed the South Coast AQMD bright-line threshold of 3,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year (South Coast AQMD 2010). Therefore, the proposed project's cumulative contribution to GHG emissions would be less than significant.

Table 7 Project-Related Construction and Operational GHG Emissions

Source	GHG ($MTCO_2e$/Year)
Mobile	331
Area	1
Energy	61
Water	3
Solid Waste	7
Refrigerants	<0.05
Amortized Construction Emissions[1]	11
Total	415
South Coast AQMD Bright-Line Threshold	3,000 $MTCO_2e$/Yr
Exceeds Bright-Line Threshold?	No

Source: CalEEMod, version 2022.1.
Notes: MTons = metric tons; $MTCO_2e$ = metric ton of carbon dioxide equivalent
[1] Total construction emission are amortized over 30 years per South Coast AQMD methodology.

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

No Impact. Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan, and SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). A consistency analysis with these plans is presented below.

3. Environmental Analysis

CARB 2022 Scoping Plan

CARB's latest Climate Change Scoping Plan (2022) outlines the State's strategies to reduce GHG emissions in accordance with the targets established under AB 32, SB 32, and AB 1279. The 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 that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

Statewide strategies to reduce GHG emissions in the 2022 Climate Change Scoping Plan include: implementing SB 100, which expands the RPS to 60 percent by 2030; expanding the Low Carbon Fuel Standards to 18 percent by 2030; implementing the Mobile Source Strategy to deploy zero-emissions electric vehicle buses and trucks; implementing the Sustainable Freight Action Plan; implementing the Short-Lived Climate Pollutant Reduction Strategy, which reduces methane and hydrofluorocarbons to 40 percent below 2013 levels by 2030 and black carbon emissions to 50 percent below 2013 levels by 2030; continuing to implement SB 375; creating a post-2020 Cap-and-Trade Program; and developing an Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

New developments are required to comply with the current Building Energy Efficiency Standards and CALGreen. The proposed project would comply with these GHG emissions reduction measures since they are statewide strategies. The proposed project's GHG emissions would be reduced from compliance with statewide measures that have been adopted since AB 32, SB 32, and AB 1279 were adopted. Therefore, impacts would be less than significant.

SCAG's Regional Transportation Plan / Sustainable Communities Strategy

SCAG adopted the 2024-2050 RTP/SCS (Connect SoCal) in April 2024. Connect SoCal is a long-term plan for Southern California region that details the development, integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area (SCAG 2024). This plan outlines a forecast development pattern that demonstrates how the region can sustainably accommodate needed housing and job centers with multimodal mobility options. The overarching vision is to expand alternatives to driving, advance the transition to clean-transportation technologies, promote integrated and safe transit networks, and foster transit-oriented development in compact and mixed-use developments (SCAG 2024).

In addition, Connect SoCal is supported by a combination of transportation and land use strategies that outline how the region can achieve California's GHG-emission-reduction goals and federal Clean Air Act requirements. The projected regional development, when integrated with the proposed regional transportation network in Connect SoCal, would reduce per-capita GHG emissions related to vehicular travel and achieve the GHG reduction per capita targets for the SCAG region.

The Connect SoCal Plan does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency to governments and developers. Nevertheless, the proposed project would construct new buildings at the existing Mark Twain School campus to accommodate the District's Adult Transition Program that is currently housed at the Jordan Secondary Learning Center. The proposed

project would continue to serve the local student population within the surrounding communities. Since the addition of these school buildings to the existing campus would continue to be a local-serving land use and the trips of the proposed project are trips that would be redirected from the Jordan Secondary Learning Center, the proposed project would not generate an increase in VMT. Therefore, the proposed project would not interfere with SCAG's ability to implement the regional strategies in Connect SoCal, and impacts would be less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

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

Less Than Significant Impact. Construction of the proposed project would require small amounts of hazardous materials; associated with construction equipment which include vehicle fuels, lubricants, grease, and transmission fluids; as well as paints and coatings. The handling, use, transport, and disposal of hazardous materials by the construction phase of the project would comply with existing regulations of several agencies—the US Environmental Protection Agency, California Division of Occupational Safety and Health, US Occupational Safety and Health Administration, and US Department of Transportation.

Operation of the proposed project would transport, use, store and dispose of small amounts of hazardous materials typical of school facilities such as cleaning and maintenance supplies (cleaners, gasoline, paint, and pesticides). These materials would be used in relatively small quantities, clearly labeled, and stored in compliance with State and federal requirements. However, the project site is already developed and operating as a school campus, and the proposed project would not change the existing use as a school campus. No manufacturing, industrial, or other uses utilizing large amounts of hazardous materials would occur within the campus. Compliance with applicable federal and state laws and regulations governing the use, storage, transport, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts to occur. Therefore, the proposed project would not create substantial hazards to the public or the environment. Impacts would be less than significant.

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 currently developed with the existing Mark Twain School campus. Five environmental lists were searched for hazardous materials site on the project site:

- GeoTracker: State Water Resources Control Board (SWRCB 2023)
- EnviroStor: Department of Toxic Substances Control (DTSC 2023)
- EJScreen: US Environmental Protection Agency (EPA 2012a)

- EnviroMapper: US Environmental Protection Agency (EPA 2023b)
- Solid Waste Information System (SWIS): California Department of Resources, Recycling and Recovery (CalRecycle) (CalRecycle 2021)

Based on the five databases, there is no evidence that a hazardous materials release or threatened release have occurred on the project site or within a 1,500-foot radius. The project site is surrounded by residential uses. No significant hazards from hazardous materials are expected at the project site. As discussed in Section 3.9(a), construction activities would require small amounts of hazardous materials that include vehicle fuels, lubricants, grease and transmission fluids, and paints and coatings. The use, transportation, and disposal of hazardous materials would be in accordance with regulatory standards and manufacturers' specifications. Hazardous materials would be used in small quantities and stores, so they do not pose significant safety hazards. Operation of the proposed project would transport, use, store, and dispose of small amounts of hazardous materials typical of school facilities such as cleaning and maintenance supplies (cleaners, gasoline, paint, and pesticides). Operation of the proposed project would use cleaners and other chemicals in relatively small quantities, which are not typically considered hazardous materials that could result in a significant hazard to the public or the environment. Compliance with applicable federal and State laws and regulations governing the use, storage, transport, and disposal of hazardous materials would ensure impacts would be less than significant.

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

Less Than Significant Impact. The proposed project would add classrooms, office space, and play courts; expand parking; and add fencing improvements at the Mark Twain School campus, consolidating the Mark Twain and Jordan special education programs at the existing Mark Twain campus. The project site currently operates as the Mark Twain campus and would continue to operate as a special education program.

The Chapman Montessori School at 11832 Euclid Street is approximately 0.20 mile west of the project site, and no other school campuses are within 0.25 mile of the project site. As discussed in Section 3.9(a), construction and operation of the proposed project would handle small amounts of hazardous materials typical of construction activities and used in the operation of school facilities. The use, transportation, and storage of hazardous materials would be required to comply to all applicable State and federal regulations that would ensure the proper handling of such materials. As discussed in Section 3.9(b), no evidence that a hazardous materials release or threatened release have occurred on the project site or within a 1,500-foot radius. The proposed project would not emit or handle significant hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Impacts would be less than significant.

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

No Impact. A significant impact would occur if the project site were included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would create a significant hazard to the public or the environment. Five environmental databases were searched for hazardous material sites on or within 0.25 mile of the project site:

- GeoTracker: State Water Resources Control Board (SWRCB 2023)
- EnviroStor: Department of Toxic Substances and Controls (DTSC 2023)
- EJScreen: US Environmental Protection Agency (EPA 2023a)
- EnviroMapper: US Environmental Protection Agency (EPA 2023b)
- Solid Waste Information System (SWIS): CalRecycle (CalRecycle 2023)

There were no hazardous waste sites located on or within 0.25 mile of the project site (SWRCB 2023, DTSC 2023; EPA 2023a; EPA 2023b; CalRecycle 2023). The proposed project would not create a hazard to the public or the environment because of a hazardous materials site pursuant to Government Code Section 65962.5. No impact would occur.

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 closest public airports to the project site is the Joint Forces Training Base Los Alamitos (approximately six miles west), the Fullerton Municipal Airport (approximately six miles northwest) and the John Wayne Airport (approximately nine miles southeast). The project site is not within an airport land use plan nor within any airport influence area (AELUP 2008). The project site is not within two miles of a public airport or public use airport. 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 reconfigure the existing internal circulation, site access and trip distribution. The project site's surrounding roadways would continue to provide emergency access through the project area and to surrounding properties during the project's construction.

The City of Garden Grove Local Hazard Mitigation Plan does not identify the project site as an emergency operations center (EOC). The City's primary EOC is located at City Hall. Fire stations may serve as alternate EOC sites if City Hall is damaged. (Garden Grove 2020) The proposed project would not conflict with adopted emergency response or evacuation plans. The surrounding roadways would continue to provide emergency access to the project site and surrounding properties during construction and post-construction. The proposed project would not interfere with emergency vehicle access to the Mark Twain campus. In addition to the existing access features, the proposed project would result in a new driveway, expanded parking lot, and new drop-off/pick-up areas that would provide additional access to the school grounds, the buildings, and all other areas of the project site, including the playfields and hard courts. Additionally, both the City Fire Marshal and DSA would be required to approve fire access at the site. As part of the DSA process, a Fire and Life Safety Review would be conducted, and the DSA would review building construction and how occupants can safely exit the buildings in case of a fire. The proposed project would not result in inadequate emergency access. Impacts would be less than significant.

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

No Impact. As discussed in Section 3.20, *Wildfire*, of this IS/MND, the project site is not within a very high fire hazard severity zone (FHSZ) nor does the project site abut a very high FHSZ. The closest area designated a very high FHSZ in a local responsibility area is seven miles northeast of the project site (CAL FIRE 2023). Development of the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildfires, and no impact would occur.

3.10 HYDROLOGY AND WATER QUALITY

Would the project:

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

Less Than Significant Impact. A significant impact would occur if the project discharges water that does not meet the quality standards of agencies that regulate surface water quality and discharges it into the stormwater drainage system. During construction, water quality impacts could occur from discharge of soil through erosion, sediments, and other pollutants. The State Water Resources Control Board's (SWRCB) National Pollutants Discharge Elimination System program regulates industrial pollutant discharges, including construction activities for sites larger than one acre. The proposed project would disturb 5.3 acres of the 9.7-acre project site.

New construction projects can result in two types of water quality impacts: (1) short-term impacts from discharge of soil through erosion, sediments, and other pollutants during construction and (2) long-term impacts from impervious surfaces (buildings, roads, parking lots, and walkways) that prevent water from being absorbed into the ground, thereby increasing the pollutants in stormwater runoff. Impervious surfaces can increase the concentration of pollutants in stormwater runoff, such as oil, fertilizers, pesticides, trash, soil, and animal waste. Runoff from short-term construction and long-term operation can flow directly into lakes, local streams, channels, and storm drains and eventually be released untreated into the ocean.

Construction

Clearing, grading, excavation, and construction activities associated with the proposed project may impact water quality through soil erosion and increasing the amount of silt and debris carried in runoff. Additionally, the use of construction materials such as fuels, solvents, and paints may present a risk to surface water quality. Finally, the refueling and parking of construction vehicles and other equipment on-site during construction may result in oil, grease, or related pollutant leaks and spills that may discharge into the storm drain system.

As part of Section 402 of the Clean Water Act, the EPA has established regulations under the NPDES program to control direct stormwater discharges. The NPDES program regulates industrial pollutant discharges, which include construction activities. In California, the SWRCB administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. Requirements for waste discharges potentially

affecting stormwater from construction sites of one acre or more are set forth in the SWRCB's Construction General Permit Order No. 2022-0057-DWQ, which became effective September 1, 2023. The site is larger than one acre and would be subject to the requirements of the Construction General Permit. Projects obtain coverage under the Construction General Permit by filing a Notice of Intent with the SWRCB prior to grading activities and preparing and implementing a SWPPP during construction. The primary objective of the SWPPP is to identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the project site, and to contain hazardous materials. BMP categories include, but are not limited to, erosion control, wind erosion control, sediment control, tracking control, non-storm water management controls, and waste management controls. Implementation of BMPs and monitoring required under the SWPPP would reduce, minimize, reduce and or treat pollutants and prevent short-term intermittent impacts to water quality from construction activities to less than significant levels.

Operation

The primary constituents of concern during the proposed project's operational phase would be solids, oils, fuels, and greases from parking/storage areas and driveways that could be carried offsite. The proposed project would exhibit runoff similar to existing conditions on campus.

In general, projects must control pollutants, pollutant loads, and runoff volume from the project site by controlling runoff through infiltration or bioretention. Additionally, the proposed project would implement BMPs to control the amount and quality of the stormwater leaving the project site, and the proposed project would not violate any water quality standards. Thus, impacts would be less than significant.

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 within the Coastal Plain of Orange County Groundwater Basin. The Water Services Division of the City of Garden Grove provides water to the project site. Garden Grove's water supplies are derived from 23 active wells and imported water from Metropolitan Water District of Southern California (MET). The local groundwater has been a reliable source of water supply for the city; in 2019-2020 approximately 50 percent of the city's water supply was from the Orange County Groundwater Basin (Garden Grove 2021). The Orange County Groundwater Basin general surface water sources include the Santa Ana River, Anaheim Lake, Irvine Lake, and San Antonio Creek. The Garden Grove Urban Water Management Plan identified that the City may utilize local groundwater or can purchase more MET water through the Municipal Water District of Orange County (MWDOC), and can meet the full-service demands through 2045.

The proposed project would minimally increase impervious coverage and would not substantially impact the Water Services Division of Garden Grove or MET's ability to supply water for replenishment. The proposed project would not increase the District's student enrollment and would result in a negligible impact on water demand on-site. Impacts would be less than significant.

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

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

Less Than Significant Impact. As discussed in Section 3.10(a), the proposed project would be required to comply with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ) issued by the SWRCB. Compliance with the required regulation and implementation of BMPs recommended in the SWPPP would ensure that the proposed project does not result in substantial erosion or siltation on- or offsite. Once the construction phase is completed, no untreated or exposed soils that are susceptible to erosion or siltation would remain. Impacts during would be less than significant.

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

Less Than Significant Impact. The proposed project would add classrooms, office space, and play courts; expand parking; and add fencing improvements on the existing developed campus. the proposed project would not involve the alteration of any natural drainage or watercourse. The proposed project would protect existing stormwater drainage and connect to existing building storm drains. The proposed project would result in an increase of impervious surfaces. Compliance with SWRCB policies and implementation BMPs will ensure the District-owned parcel would not substantially increase the rate or amount of surface runoff. 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 partially developed with a school campus and includes impervious and pervious surfaces. The proposed project would not involve the alteration of any natural drainage or watercourse. The proposed project would only result in an increase of impervious surfaces on the project site, and the majority of the project site would remain in its current state.

Therefore, the proposed project would generate stormwater similar to existing conditions. Stormwater that does not percolate into the ground would be directed to existing storm drains and to surrounding storm drains in the public right-of-way. As discussed in Section 5.10(a), the proposed project would be required to implement BMPs that would control the amount of stormwater leaving the project site. Specifically, the project site would be graded to allow for drainage and BMPs, which would ensure runoff would leave the project site at a rate similar to existing conditions. The small quantities of hazardous materials used on-site would be properly handled, stored, and used. The proposed project would not exceed the capacity of existing stormwater drainage systems and would not create substantial additional sources of polluted runoff. Therefore, impacts would be less than significant.

iv) Impede or redirect flood flows?

No Impact. The campus is within Federal Emergency Management Act (FEMA) Flood Zone Designation X (Zone X) (FEMA 2009). Zone X is an area of minimal flood hazard, usually depicted on Flood Insurance Rate Maps as above the 500-year flood level. Additionally, the project site is not within a dam inundation area and there are no nearby aboveground water storage tanks that could cause flooding in the unlikely event of a tank failure (DWR 2023). The campus is not within a flood hazard area, and implementation of the proposed project would not place new structures within a flood hazard area or redirect flood flows. No impact would occur.

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

No Impact. As noted in Section 3.10(c)(iv), above, the project site is within Flood Zone X; therefore, there is no possible risk of pollutant release due to flooding.

A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. The Peters Canyon Dam is approximately 10 miles east of the project site. According to the California Department of Water Resources' Dam Breach Inundation Map, the project site is not within the dam's inundation area, nor within any other inundation area (DWR 2023). Therefore, there is no risk of pollutant release due to inundation from a seiche.

A tsunami is a series of ocean waves caused by a sudden displacement of the ocean floor, most often due to earthquakes. The project site is approximately nine miles inland from the Pacific Ocean, at an elevation of approximately 103 feet above sea mean sea level, outside of the tsunami hazard zone identified by the Orange County Tsunami Hazard Area map (DOC 2023e). Therefore, the proposed project would not risk release of pollutants due to tsunamis. No impact would occur.

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

No Impact. The Santa Ana River Basin Water Quality Control Plan (Basin Plan) establishes the water quality standards for ground and surface waters within the Santa Ana River Basin and is the basis for the Santa Ana RWQCB's regulatory programs. Chapter 5, Implementation, of the Basin Plan, discusses an outline of implementation actions and monitoring plans that are necessary to achieve the Basin Plan's water quality objectives for bodies of water. The following implementing actions and monitoring plans include, but are not limited to NPDES permits, compliance schedules, waste discharge requirements, and water discharge prohibitions. The proposed project's construction and operation would not obstruct implementation of the Basin Plan.

The 2014 Sustainable Groundwater Management Act requires local public agencies and groundwater sustainability in high- and medium-priority basins to develop and implement groundwater sustainability plans (GSP) or prepare an alternative to a GSP. The City is within the Coastal Plain of Orange County groundwater

basin, which is designated as a medium-priority basin and regulated by the Orange County Water District (OCWD). OCWD, in conjunction with the City of La Habra and Irvine Ranch Water District, prepared the Basin 8-1 Alternative, which is functionally equivalent to a GSP and sets forth basin management goals and objectives and describes how the basin is managed, including a description of basin hydrogeology, water supply monitoring programs, management and operation of recharge facilities, water quality protection and management, and natural resource and collaborative watershed programs.

Specifically, Garden Grove is within the OCWD Management Area of the Coastal Plan of Orange County groundwater basin. According to the Basin 8-1 Alternative, the Sustainability Goal for the OCWD Management Area is to continue to sustainably manage the groundwater basin to prevent conditions that would lead to significant and unreasonable (1) lowering of groundwater levels, (2) reduction in storage, (3) water quality degradation, (4) seawater intrusion, (5) inelastic land subsidence, and (6) adverse impacts on hydrologically connected surface water. As indicated in Response 4.10(b), the proposed project would not substantially deplete groundwater supplies or interfere with groundwater recharge. Further, the proposed project would not result in a reduction in storage because the project site is mostly paved and developed with the Mark Twain campus. Last, as stated in Response 4.10(a), the proposed project would be subject to existing water-quality-related requirements of the NPDES permit, which would reduce potential impacts to water quality to less than significant levels. For these reasons, the proposed project is not anticipated to conflict with or obstruct the sustainability goal for the OCWD Management Area. Therefore, the proposed project would not involve any activities that could adversely affect any water quality control plans or sustainable groundwater management plans. No impact would occur.

3.11 LAND USE AND PLANNING

Would the project:

a) Physically divide an established community?

No Impact. The project site is developed with a school campus. The proposed project would add classrooms, office space, and basketball courts; reconfigure and expand parking lot; and add fencing improvements on the existing developed campus. The proposed project would occur entirely within the project site boundaries and would not create any new land use barriers and would not divide or disrupt the physical arrangement of any surrounding community. No impact would occur.

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

No Impact. The project site is developed with a school campus. The proposed project would add classrooms, office space, and play courts; expand parking; and add fencing improvements on the existing developed campus. The proposed development would be compatible with the existing development onsite. The proposed project has a land use designation and a zoning designation of Open Space (O-S) (Garden Grove 2023b). The proposed project would not alter or modify the site's current land use and zoning designations. Development of the proposed project would not conflict with any applicable land use plans, policies, or regulations. No impact would occur.

3.12 MINERAL RESOURCES

Would the project:

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. In 1975, the State legislature adopted the Surface Mining and Reclamation Act. This designated Mineral Resources Zones (MRZ) that were of statewide or regional importance. The classifications used to define MRZs are:

- **MRZ-1.** A Mineral Resource Zone where adequate information indicates that no significant mineral deposits are present or likely to be present.
- **MRZ-2.** A Mineral Resource Zone where adequate information indicates that significant mineral deposits are present, or a likelihood of their presence and development should be controlled.
- **MRZ-3.** A Mineral Resource Zone where the significance of mineral deposits cannot be determined from the available data.
- **MRZ-4.** A Mineral Resource Zone where there is insufficient data to assign any other MRZ designation.

The Division of Geological Survey produces Mineral Land Classification studies that identify areas with potentially important mineral resources. The Generalized Mineral Land Classification of Orange County shows Mark Twain School (and the project site) is mapped within MRZ-1 (DOC 1994). The project site and surrounding areas is in an area where there is adequate information that indicates that no significant mineral deposits are present or likely to be present. Additionally, the project site is an existing school campus that has had previous earthwork, and no mineral resources are being extracted. The proposed project would not result in the loss of availability of a known mineral resource valuable to the region and the state. 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. As previously mentioned in Section 3.12(a), the project site is in MRZ-1, an area where adequate information indicates that no significant mineral deposits are present or likely to be present. The Garden Grove General Plan does not mention or indicate there are any mines in the city (Garden Grove 2008). The project site is surrounded by urban development and is not a locally important mineral resource site. Implementation of the proposed project would not result in the loss of availability of a known mineral resource. No impact would occur.

3.13 NOISE

This section is based in part on the following technical studies:

- *Noise Modeling,* PlaceWorks, August 2024 (Appendix B)

Environmental Setting

Noise is defined as unwanted sound. It is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal government, State of California, and City of Garden Grove have established criteria to protect public health and safety and to prevent disruption of certain human activities. Noise modeling was prepared by PlaceWorks in August 2024 which is summarized herein and included as Appendix B. Additional information on noise and vibration fundamentals and applicable regulations are in Appendix B.

Sensitive Receptors

Certain land uses are particularly sensitive to noise and vibration. These uses include residences, schools, hospital facilities, houses of worship, and open space/recreation areas where quiet environments are necessary for the enjoyment, public health, and safety of the community. Sensitive receptors surrounding the project site are adjacent single-family residences to the north, south, and east of Mark Twain School as well as residences to the west across Loara Street.

Existing Conditions

The project site is in a predominantly residential area with a noise environment influenced primarily by transportation noise from local roadways and major roadways near the project site, such as Loara Street and Chapman Avenue. Noise from nearby residential uses (e.g., property maintenance people talking and children playing) also contributes to the total noise environment intermittently in the project vicinity.

The City of Garden Grove General Plan Noise Element includes future noise contours to assess the noise and land use compatibility of a project site. According to the 2030 future noise contour (Figure N-2B) in the Garden Grove General Plan, the project site is outside the 60 A-weighted decibel (dBA) community noise equivalent level (CNEL) noise contour for roadway noise from Chapman Avenue. Therefore, noise levels within the project site would be within the range of 55 to 60 dBA CNEL, which is considered "normally acceptable" per the City's community noise and land use standards for schools (Garden Grove 2008).

Applicable Standards

City of Garden Grove Municipal Code

Exterior Noise Standards

Section 8.47.040, Ambient Base Noise Levels, of the Garden Grove Municipal Code identifies the ambient base noise levels shown in Table 8, *City of Garden Grove Existing Exterior Noise Standards Allowable Increase*. The thresholds shall be utilized as the basis for determining noise levels in excess of those allowed by the municipal

code unless the actual measured ambient noise level exceeds the ambient base noise level in Table 8 at the time as the project noise is being investigated. When the actual measured ambient noise level exceeds the ambient base noise level, the actual measured ambient noise level shall be utilized as the basis for determining whether or not the subject noise exceeds the level allowed by this section. In situations where two adjoining properties exist within two different use designations, the most restrictive ambient base noise level will apply. This section of the municipal code permits any noise level that does not exceed either the ambient base noise level or the actual measured ambient noise level by 5 dBA, as measured at the property line of the noise-generating property.

Table 8 City of Garden Grove Existing Exterior Noise Standards Allowable Increase

Land Use Designation		Ambient Base Noise Level	Time of Day
Sensitive Land Uses	Residential Land Use	55	7:00 AM to 10:00 PM
		50	10:00 PM to 7:00 AM
Conditionally Sensitive Uses	Institutional Use	65 dBA	Any Time
	Office-Professional Use	65 dBA	Any Time
	Hotels and Motels	65 dBA	Any Time
Non-Sensitive Uses	Commercial se	70 dBA	Any Time
	Commercial/Industrial Uses within 150 feet of Residential Uses	65 dBA	7:00 – 10:000 PM
		50 dBA	10:000 PM – 7:00 AM
	Industrial Uses	70 dBA	Any Time

Source: Garden Grove Municipal Code, Section 8.47.040, Ambient Base Noise Levels.

Section 8.147.050(C) identifies the criteria that shall be utilized in determining whether a violation of the provisions of this section exists, including but not be limited to:

1. The level of the noise.
2. The frequency of occurrence of the noise.
3. Whether the nature of the noise is usual or unusual.
4. The level and intensity of the background noise, if any.
5. The proximity of the noise to residential sleeping facilities.
6. The nature and zoning of the area within which the noise emanates.
7. The density of the inhabitation of the area within which the noise is received.
8. The time of day or night the noise occurs.
9. The duration of the noise.

Section 8.147.050(C) sets the following duration criteria for impacts whenever the noise levels exceed:

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1. The noise standard for a cumulative period of more than 30 minutes in any hour.
2. The noise standard plus 5 dB(A) for a cumulative period of more than 15 minutes in any hour.
3. The noise standard plus 10 dB(A) for a cumulative period of more than five minutes in any hour.
4. The noise standard plus 15 dB(A) for a cumulative period of more than one minute in any hour.
5. The noise standard plus 20 dB(A) for any period of time.

Section 8.147.050(D) of the municipal code states that in the event the ambient noise level exceeds any of the first four noise limit categories above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

Section 8.47.060(C) Machinery, equipment, fans, and air conditioning, of the municipal code states that it shall be unlawful for any person to operate any machinery, equipment, pump, fan, air conditioning apparatus, or similar mechanical device in any manner so as to create any noise that would cause the noise level at the property line of any property to exceed either the ambient base noise level or the actual measured ambient noise level by more than five decibels.

Section 8.47.060(D), Construction of buildings and projects, of the municipal code states that it shall be unlawful for any person within a residential area, or within a radius of 500 feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects, or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device between the hours of 10:00 p.m. of one day and 7:00 a.m. of the next day in such a manner that a person of normal sensitiveness, as determined utilizing the criteria established in Section 8.47.050(B), is caused discomfort or annoyance unless such operations are of an emergency nature.

Would the project result in:

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

Less Than Significant Impact.

Construction Noise

Noise generated by on-site construction equipment is based on the type of equipment used, its location relative to sensitive receptors, and the timing and duration of noise-generating activities. Each phase of construction involves different types of equipment and has distinct noise characteristics. Noise levels from construction

activities are typically dominated by the loudest three pieces of equipment. The dominant equipment noise source is typically the engine, although work-piece noise (such as dropping of materials) can also be noticeable.

The noise produced at each construction phase is determined by combining the equivalent continuous sound pressure level (L_{eq}) contributions from the top-three loudest pieces of equipment used at a given time, while accounting for the ongoing time-variations of noise emissions (commonly referred to as the usage factor). Heavy equipment, such as a dozer or a loader, can have maximum, short-duration noise levels of up to 85 dBA at 50 feet. However, overall noise emissions vary considerably, depending on what specific activity is being performed at any given moment.

Noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks at each construction phase would result in different noise levels from construction activities at a given receptor. Since noise from construction equipment is intermittent and diminishes at a rate of at least 6 dBA per doubling of distance (conservatively disregarding other attenuation effects from air absorption, ground effects, and shielding effects provided by intervening structures or existing solid walls), the average noise levels at noise-sensitive receptors could vary considerably, because mobile construction equipment would move around the site (site of each development phase) with different equipment mixes, loads, and power requirements.

The expected construction equipment mix was estimated and categorized by construction activity using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM). Construction equipment is modeled at spatially averaged distances (i.e., from the acoustical center of the general construction site to the property line of the nearest receptors) because the area around the center of construction activities best represents the potential average construction-related noise levels at the various sensitive receptors for mobile equipment. Results are summarized in Table 9, *Project Related Construction Noise Levels (dBA),* at the nearest receptors.

Table 9 Project-Related Construction Noise, dBA Leq

Construction Activity Phase	RCNM Reference Noise Level	Receptor to North	Receptor to East	Receptor to South	Receptor to West
Distance in feet	50	375	225	175	200
Demolition	85	67	72	74	73
Site Preparation	85	67	72	74	73
Grading	85	67	72	74	73
Distance in feet	50	300	235	175	250
Building Construction	80	64	67	69	66
Architectural Coating	74	58	61	63	60
Distance in feet	50	355	165	150	125
Paving	80	63	72	70	72
Maximum dBA L_{eq}		67	70	74	73
Exceed 80 L_{eq} dBA Threshold?		No	No	No	No

Notes: Calculations performed with the FHWA RCNM software are included in Appendix B.

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Assuming the nearest sensitive receptor to the center of construction activities, construction-related noise levels would be up to 74 dBA L_{eq} at the closest residential receptors to the north, south, east, and west of the site. Construction noise levels at receptors further away are estimated to be even less. The table shows the maximum noise level of 74 dBA L_{eq} during demolition at the residences to the south along Bixler Circle. Construction noise levels would not exceed the FHWA threshold of 80 dBA L_{eq} for residential uses, and project construction noise would not create a substantial increase in ambient noise levels in the vicinity of the project site. Additionally, construction of the proposed project would occur during the exempt hours per municipal code Section 8.47.060(D). Therefore, construction noise impacts would be less than significant.

On-Site Receptors

Construction is anticipated to occur for 11 months from September of 2024 to August of 2025, during school sessions for the spring and fall months. Construction activities could occur within 90 feet of existing classroom buildings. As shown in Table 9, construction noise levels would range between 81 and 85 dBA L_{eq} at 50 feet per the RCNM Reference Noise Level. Construction noise levels would attenuate to between 69 and 80 dBA L_{eq} at a distance of 90 feet. Typical exterior-to-interior noise attenuation with windows and doors closed is 25 dBA. This would result in interior construction noise levels ranging between 44 dBA to 50 dBA L_{eq}. Speech interference is considered intolerable when background noise levels exceed 60 dBA. Therefore, average construction noise levels are not expected to exceed 60 dBA L_{eq} within adjacent classrooms based on typical exterior-to-interior noise attenuation. Construction would occur throughout the project site and thereby would be further than 100 feet at times, which would reduce interior noise levels. In addition, to avoiding classroom disruption, some work would be done during instructional breaks when students are off campus. Additionally, construction of the proposed project would occur during the exempt hours per City's municipal code Section 8.47.060(D). Therefore, on-campus construction noise impacts would be less than significant.

Operational Noise

The proposed project's primary onsite operational noise sources would include rooftop heating, ventilation, and air conditioning (HVAC) units, parking lot activity, and the new basketball court. The proposed project could include rooftop HVAC units consisting of four-ton units. The reconfigured parking lot would have a total of 130 parking stalls. The new basketball court would be located along the southern project site boundary and consist of two courts. The proposed project is not anticipated to host any programming or large-scale events that could potentially disrupt nearby residential areas.

Rooftop Heating, Ventilation, And Air Conditioning

The proposed two new classroom buildings (Buildings F and G) and new administration building (Building E) would have four-ton rooftop HVAC units. Building F would have eight, Building G would have six, and Building E would have four rooftop HVAC units. Rooftop HVAC units would generate noise levels of up to 74 dBA (York 2006). Building F HVAC units (eight total) operating continuously would result in a combined noise level of 43 dBA L_{eq} at the nearest noise sensitive receptors (residences to the west and north). Building G HVAC units (six total) operating continuously would result in a combined noise level of 44 dBA L_{eq} at the nearest noise sensitive receptors (residences to the south and east). Building E HVAC units (four total) operating

continuously would result in a combined noise level of 40 dBA L_{eq} at the nearest noise sensitive receptor (residence to the north).

The combined HVAC noise level of Buildings E, F, and G would be 47 dBA L_{eq} at the nearest noise sensitive residential receptor to the south and east. The proposed new school buildings do include rooftop parapets, similar to existing school buildings, that would break line of sight from source to receiver and reduce HVAC noise levels at nearby receptors below 45 dBA L_{eq}. Operational noise from the HVAC equipment would not exceed daytime and nighttime noise standards of 55 dBA and 50 dBA Leq, respectively (per Section 8.47.040, Ambient Base Noise Levels, of the Garden Grove Municipal Code). Furthermore, operational noise from HVAC equipment would not substantially increase ambient noise levels at nearby residences. Thus, noise impacts from mechanical equipment would be less than significant.

Parking Lot Activity

The proposed project would result in a net increase of 50 new parking spaces within the reconfigured parking lot (total of 130 parking spaces). The reconfigured parking lot would be located south of the existing campus buildings adjacent Loara Street. Parking lot noise would consist of vehicles idling and maneuvering, doors opening and closing, and voices in the parking lot areas and driveways. Based upon previous noise measurements conducted, the single event noise level (SEL) associated with a parking event is typically 71 dB SEL at 50 feet. When quantifying the associated noise level for the parking lot activity, a conservative approach to the number of parking events to occur within a peak hour has been assumed. Assuming that each parking stall were to fill and empty (380 parking events) during the peak hour, the noise level is predicted to be 42 dB L_{eq} at receptors to the east, 48 dBA L_{eq} at receptors the west across Loara Street, and 45 dBA L_{eq} at receptors to the south when measuring the distance from the center of the parking stalls. Parking lot noise would not exceed daytime and nighttime noise standards of 55 dBA and 50 dBA Leq, respectively, per section 8.47.040 of the Garden Grove Municipal Code. Furthermore, parking lot noise would not result in a substantial increase (+5 dBA) over ambient conditions. Thus, noise impacts from parking lot activities would be less than significant.

Basketball Courts

The two proposed basketball courts will be added at the southern project property line. Project noise estimates are based on noise levels of basketball court activity measured by BKL (2022). This analysis assumes both ends of the court were in use, with a half-court game of 3 on 3 (six players total) on one end of the court and an individual training session at the other end. General noise consisted of dribbling and bouncing the basketball and impacts with the hoop and backboard. Average noise levels measure 61 dBA L_{eq} at 3 feet from the court edge. Accounting for distances from the basketball courts, noise levels would be 53 dBA L_{eq} at the nearest residential property line (20 feet to the south). There is an existing masonry wall along the residential property line that would conservatively reduce basketball noise by 3 dBA, resulting in a basketball court noise level of 50 dBA L_{eq} at adjacent residential uses to the proposed basketball courts. Therefore, proposed basketball court noise would not exceed the daytime threshold of 55 dBA L_{eq} per section 8.47.040 of the Garden Grove Municipal Code. Furthermore, proposed basketball court noise would not result in a substantial increase (+5 dBA) over ambient conditions. Thus, noise impacts from the basketball courts would be less than significant.

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Operational Off-Site Traffic Noise

A project will normally have a significant effect on the environment related to traffic noise if it substantially increases the ambient noise levels for adjoining areas. Most people can detect changes in sound levels of approximately 3 dBA under normal, quiet conditions, and changes of 1 to 3 dBA under quiet, controlled conditions. Changes of less than 1 dBA are usually indiscernible. A change of 5 dBA is readily discernible to most people in an outdoor environment. Noise levels above 65 dBA CNEL are normally unacceptable at sensitive receptor locations such as residences, and noise environments in these areas would be considered degraded. Based on this, a significant impact would occur if the following traffic noise increases occur relative to the existing noise environment:

- 1.5 dBA in ambient noise environments of 65 dBA CNEL and higher
- 3 dBA in ambient noise environments of 60 to 64 dBA CNEL
- 5 dBA in ambient noise environments of less than 60 dBA CNEL

For this analysis, a significant traffic noise impact occurs when the thresholds above are exceeded under cumulative conditions (with project) and the contribution of the project to future traffic is calculated to be greater than 5 dBA CNEL (Loara Street) based on existing modeled traffic noise levels.

Traffic volume data for the new trips associated with the project are provided by Garland (Appendix C). The proposed project is expected to generate a net daily increase of up to 80 passenger vehicle and 12 bus trips to existing average daily trips. The data provided by the traffic engineer presents the street and locations with scenarios for existing, existing with project conditions, future with no project, and future with project conditions. Table 10, *Project-Related Increases in Traffic Noise, dBA CNEL at 50 Feet*, shows that the addition of passenger vehicle and bus trips due to the project would result in an increase of 2 dBA or less over existing conditions. Therefore, the project would not result in a 5 dBA increase along Loara Street, and impacts would be less than significant.

Table 10 Project-Related Increases in Traffic Noise, dBA CNEL at 50 Feet

	Segment		Traffic Noise Increase					
Roadway	From	To	Existing No Project	Existing with Proposed Project	Existing Increase	Future No Project	Future With Project	Cumulative Increase
Loara Street	School Site	to the North	54	54	<1	54	55	<1
Main St	School Site	to the South	56	58	2	57	58	2

Source: Traffic data provided by Garland 2024. See Appendix C.
Note: See Appendix B for traffic noise calculation inputs and results.

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

Less Than Significant Impact. Potential vibration impacts associated with development projects are usually related to the use of heavy construction equipment during the demolition phase of construction. Construction can generate varying degrees of ground vibration depending on the construction procedures and equipment.

Construction equipment generates vibration that spreads through the ground and diminishes 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.

Architectural Damage

For reference, a peak particle velocity (PPV) of 0.20 in/sec is used as the limit for nonengineered timber and masonry buildings (which would apply to the off-site surrounding residential structures) (FTA 2018). Table 11, *Vibration Impact Levels for Typical Construction Equipment*, shows typical construction equipment vibration levels and reference vibration levels at a distance of 25 feet. Available site plans show where the proposed trenches and light poles would be installed. The nearest construction activity associated with basketball court installation would occur closest to the residences south of the project site along Bixler Circle. The closest proposed construction vibration-inducing activity would be approximately 45 feet north of the residential building during construction of the basketball courts. At 45 feet, as shown in Table 11, construction vibration levels would be 0.087 in/sec PPV or less.

Table 11 Vibration Impact Levels for Typical Construction Equipment

	in/sec PPV				
Equipment	Reference Levels at 25 Feet	Receptor 300 Feet North	Receptor 60 Feet East	Receptor 45 Feet South	Receptor 85 Feet West
Vibratory Roller	0.21	0.005	0.056	0.087	0.033
Static Roller	0.05	0.001	0.013	0.021	0.008
Large Bulldozer	0.089	0.002	0.024	0.037	0.014
Loaded Trucks	0.076	0.002	0.020	0.031	0.012
Jackhammer	0.035	0.001	0.009	0.014	0.006
Small Bulldozer	0.003	0.000	0.001	0.001	0.000

Source: FTA 2018.
Notes: See Appendix B for vibration calculations.
Distances measured from the edge of construction site using Google Earth Pro.

The City of Garden Grove does not have an established threshold for assessing construction vibration impacts. The FTA maximum acceptable vibration standard of 0.2 in/sec PPV for nonengineered timber and masonry buildings is applied for assessing vibration impacts from project construction-related activities. The nearest structure to the site's construction activities, the on-campus building to the west, is approximately 45 feet away from the proposed construction. At this distance, construction vibration from a vibratory roller would attenuate to 0.087 in/sec PPV or less. Proposed construction activities would not exceed the FTA vibration standard of 0.2 in/sec PPV at the building façade. Therefore, impacts from construction vibration would be less than significant.

Operational Vibration

The operation of the proposed project would not include any substantial long-term vibration sources. Thus, no significant vibration effects from operations sources would occur.

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

No Impact. The project site is approximately 5.85 miles east of the Joint Forces Training Base Los Alamitos, and approximately 6.0 miles southeast of Fullerton Municipal Airport. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels, and no impact would occur.

3.14 POPULATION AND HOUSING

Would the project:

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

No Impact. The campus is located within a built-out, urbanized community, and no new roads or extensions of existing roads are proposed. The proposed project does not include the construction of any new homes or businesses or changes to the existing land uses on-site. The proposed project would add classrooms, office space, and play courts; expand parking; and add fencing improvements within the boundaries of the existing campus. The proposed project would serve the existing needs of the on-site Mark Twain Special Education Program and the Adult Transition Program, which is currently housed at the Jordan Secondary Learning Center. The Adult Transition Program would increase enrollment at the project site, yet the additional students are currently served by the District and therefore would not increase overall District enrollment. The proposed project would not create new employment opportunities that could result in a greater demand for local housing. Additionally, the proposed project would continue to utilize the existing roads and infrastructure; no new roads, expanded utilities or housing would occur. Therefore, the proposed project's development would not induce unplanned population growth in the area, either directly or indirectly. No impact would occur.

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

No Impact. The proposed project is in the existing Mark Twain School campus, and improvements would occur within the boundaries of the campus. There are no residential structures within the boundaries of the project site. The proposed project would not involve the removal or relocation of any housing and would therefore not displace any people or necessitate the construction of any replacement housing. No existing residences would be displaced or removed as a result of the proposed project. No impact would occur.

3.15 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:

a) Fire protection?

Less Than Significant Impact. Fire protection services are provided to the project site by the Orange County Fire Authority (OCFA). Mark Twain School campus is served by OCFA Fire Station 86 (12232 West Street) and Fire Station 81 (11261 Acacia Parkway), approximately one mile southeast and one mile south of the project site, respectively. Fire Station 86 contains traditional fire-fighting company with daily staffing of a fire captain, a fire apparatus engineer, and two firefighters with a paramedic fire engine 86 and fire engine 186 (OCFA 2024). Fire Station 81 contains daily staffing of the division chief, the battalion chief, a fire captain, a fire apparatus engineer, and two firefighters with a medic truck that is operated by Battalion 11 within Division 1 of the OCFA service area (OCFA 2024). The proposed project would increase the student enrollment at the project site; however, the additional students are being served by the District and therefore would not increase overall District enrollment. The Mark Twain Special Education Program and the Adult Transition Program at Jordan are both served by Operations Division 1, which serves Garden Grove, Los Alamitos, Seal Beach, and Westminster. Because the proposed project would not introduce new students to the District, the overall fire protection services demand in Division 1 would be less than significant.

Furthermore, upgrades to the existing building and construction of new buildings would be subject to current fire code and OCFA requirements. Compliance with fire code standards would be ensured through the plan check process and would minimize hazards to life and property in the event of a fire. Circulation improvements would also ensure fire access to the proposed classroom and admin buildings and existing Mark Twain structures. The proposed project would be subject to DSA review to ensure that plans, specifications, and construction comply with access, fire, and life safety design standards established by DSA and California's building codes (Title 24 of the California Code of Regulations). DSA would review fire department and emergency access roadways and school drop-off and pick-up areas to ensure adequate emergency access is maintained. The proposed project would not require the provision of new or physically altered fire protection facilities to maintain acceptable service ratios, response times or other performance objectives. Impacts would be less than significant.

b) Police protection?

Less Than Significant Impact. Police protection services ae provided to the project site by the Garden Grove Police Department (GGPD). The GGPD operates from one station located at 11301 Acacia Parkway approximately 1.0-mile south of the project site. The campus is within Beat 2-1, which is a patrol area bounded by Trask Avenue and Garden Grove Boulevard to the south, Katella Avenue to the north, Brookhurst Street to the west, and Newhope Street and West Street to the east (GGPD 2022). According to the most recent and available GGPD Biennial Report for 2020 to 2021, the GGPD patrol division contains a total of 88 sworn

officers that responded to 66,190 incidents in 2021 (GGPD 2022). The proposed project would increase student enrollment at the project site; however, the additional students are being served by the District and therefore would not increase overall district enrollment. The Mark Twain Special Education Program and the Adult Transition Program at Jordan are both currently served by GGPD. Because the proposed project would not introduce new students to the District, the overall demand for police protection services would be less than significant. The proposed project would not require the provision of new or physically alter police protection facilities to maintain acceptable service ratios, response times or other performance objectives. Impacts would be less than significant.

c) Schools?

No Impact. The project site is developed with a school campus. The proposed project would add two classroom buildings, an admin building, and play courts; expand parking; and add fencing improvements at the Mark Twain School site, then consolidate the District's two special education programs at the site. The proposed project does not include a use that would generate a new student population. The proposed project would relocate the Jordan educational program within the project site. The two programs would serve approximately 194 students. This would increase the enrollment at the project site. However, the additional students are currently served by the District and therefore would not increase overall District enrollment. Once constructed, the new school facilities would continue to serve the existing Mark Twain and Adult Transitional educational programs and students in the District attendance area. The proposed project would not generate additional demand for schools within the District boundaries. No impact would occur.

d) Parks?

Less Than Significant Impact. The proposed project does not include a use that would generate a new student population that would generate a demand for park space. Park space demand is typically caused by uses that generate population and/or employment growth. The proposed project would add two classroom buildings, an administration building, and basketball courts; reconfigure and expand parking; and add fencing improvements at the Mark Twain School site, and consolidate the District's two special education programs at the project site. The proposed project would add additional basketball courts and a walking path due to the increase in student enrollment. However, the additional students served by the proposed project have been served by the District and the Community Services Parks and Recreation division, and therefore would not increase the overall demand for parks. Impacts would be less than significant.

e) Other public facilities?

No Impact. The proposed project does not include development of residential or commercial uses and would not contribute to population growth in Garden Grove. Therefore, the proposed project would not increase the demand for public facilities, such as library's services or other administrative services in Garden Grove. The proposed project would not induce population growth. No impact would occur.

3.16 RECREATION

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

Less Than Significant Impact. Demand for parks is typically created by the development of new housing and/or actions that generate additional population. The proposed project is not a population-increasing or growth-inducing project. There are 15 city parks, 4 District-owned and city-maintained, and 2 county-operated parks in Garden Grove (Garden Grove 2023c). The closest park is Stoddard Park at 1901 9th Street (Anaheim) approximately 0.50 mile northeast of the project site, and Faylane Park at 11700 Seacrest which is 1.0 mile west of the project site. The proposed project would serve the existing student population and staff within the District. The proposed project would not generate a new student population demanding local and regional recreational facilities. The consolidation of the Jordan Secondary Learning Center's Adult Transition Program and the Mark Twain Special Education Program is not anticipated to increase the demand for off-site recreational resources, parks, and other facilities within the city because these programs would continue to serve the existing student population within the District. Therefore, the proposed project would not result in the need for construction of new recreational facilities. Impacts would be less than significant.

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?

No Impact. As discussed in Section 3.16.a, the proposed project would not require construction of offsite recreational facilities. The proposed project would consolidate the special education programs from Mark Twain and Jordan on the project site and would not induce a population generation. No construction of new recreational facilities would be required; therefore no impact would occur.

3.17 TRANSPORTATION

This section is based in part on the following technical studies:

- *Traffic/Transportation Impact Analysis,* Garland Associates, August 2024 (Appendix C) (Traffic Report)

Would the project:

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

No Impact. The circulation element of the Garden Grove General Plan includes various goals and policies that govern the system of roadways, intersections, bicycle paths, pedestrian ways, and other components of the circulation system, which collectively provide for the movement of people and goods throughout the city (Garden Grove 2008). The proposed school expansion project would not conflict with any objectives, policies, or programs of the general plan and it would not adversely affect the performance of any roadway, transit, or nonmotorized (pedestrian and bicycle) transportation facilities. Table 12, *Consistency with the Circulation Element's*

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Goals, illustrates how the project is consistent with the goals related to roadway, transit, or nonmotorized transportation facilities in the general plan's circulation element.

Table 12 Consistency with the Circulation Element's Goals

Goal	Consistency Discussion
Goal CIR-1: A transportation system that maximize freedom of movement and maintains a balance between mobility, safety, cost efficiency of maintenance, and the quality of the City's environment.	*Consistent.* The proposed project would not interfere with this objective because the project is not proposing to change the existing transportation and circulation system.
Goal CIR-2: Improved traffic flows along the Garden Grove Freeway, as well as improved access along the Freeway, within the City of Garden Grove.	*Consistent.* The proposed project would not interfere with this goal because the project site is 2.0 miles north of the Garden Grove Freeway and is not anticipated to impact flows and/or access to this freeway.
Goal CIR-3: Minimized intrusion of commuter traffic on local streets through residential neighborhoods.	*Consistent.* The responsibility of this objective would be with the City of Garden Grove, and the project would not interfere with this objective.
Goal CIR-4: A reduction in vehicle miles traveled in order to create a more efficient urban form.	*Consistent.* The project does not represent new traffic on the roadway network since the District is combining two existing school programs. Additional, under the Garden Grove "Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment", schools are exempt from VMT analysis.
Goal CIR-5: Increased awareness and use of alternate forms of transportation generated in, and traveling through, the City of Garden Grove.	*Consistent.* The responsibility of this objective would be with the City of Garden Grove, and the project would not interfere with this objective.
Goal CIR-6: A safe, appealing, and comprehensive bicycle network provides additional recreational opportunities for Garden Grove residents and employees.	*Consistent.* The proposed project would maintain the existing bicycle facilities. The project would reconfigure and expand the existing parking lot but would not impact bicycle facilities
Goal CIR-7: Adequate access to appropriate parking areas within the City.	*Consistent.* The proposed project would reconfigure and expand the existing parking lot to accommodate for the increase of student enrollment and additional faculty.
Goal CIR-8: Minimized impacts associated with truck traffic through the City, as well as the parking locations of these vehicles.	*Consistent.* The proposed project would not interfere with this objective because the project is not proposing any changes regarding trucks.
Goal CIR-9: Improved aesthetic quality and maintenance of arterial highways and local roadways.	*Consistent.* The proposed project would not interfere with this objective because the project is not proposing any changes to arterial highways and local roadways.
Goal CIR-10: Participation in regional transportation planning efforts to address interjurisdictional issues, and maintain competitive advantage in capital improvement funding programs, as appropriate.	*Consistent.* The proposed project would not interfere with this objective because the project is not proposing to change the existing circulation system within the city.
Goal CIR-11: Continued compliance with regional congestion management, transportation demand, traffic improvement, air quality management, and growth management programs.	*Consistent.* The proposed project would not interfere with existing bicycle and pedestrian facilities or existing bus facilities. The proposed project will implement EV charging stations and EV-capable parking spaces in the proposed expanded parking lot, which would help improve local air quality.
Goal CIR-12: A Citywide development phasing and monitoring program, as required by Measure M.	*Consistent.* The proposed project would not interfere with this objective because the project is not proposing to change the existing circulation system within the city.
Goal CIR-13: Use the Orange County Transit Authority (OCTA) right-of-way for alternative systems.	*Consistent.* The proposed project would not interfere with the OCTA right-of way as the project site is currently operating as Mark Twain School.

Source: Garden Grove 2008.

Based on the Traffic Report, Appendix C, the discussion of nonmotorized transportation and transit, and a review of the circulation element of the city's general plan, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. No impact would occur.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Less Than Significant Impact. Vehicle delays and levels of service (LOS) have historically been used as the basis for determining the significance of traffic impacts as standard practice in CEQA documents. On September 27, 2013, SB 743 was signed into law, starting a process that fundamentally changed transportation impact analyses as part of CEQA compliance. SB 743 eliminated auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as the sole basis for determining significant impacts under CEQA. As part of the current CEQA Guidelines, the criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099(b)(1)). Pursuant to SB 743, the California Natural Resources Agency adopted revisions to the CEQA Guidelines on December 28, 2018, to implement SB 743. CEQA Guidelines Section 15064.3 describes how transportation impacts are to be analyzed after SB 743. Under the Guidelines, metrics related to "vehicle miles traveled" (VMT) were required beginning July 1, 2020, to evaluate the significance of transportation impacts under CEQA for development projects, land use plans, and transportation infrastructure projects. State courts ruled that under the Public Resources Code Section 21099, subdivision (b)(2), "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment" under CEQA, except for roadway capacity projects.

The City of Garden Grove "Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment" (May 2020) lists the land use types that are considered local serving and are exempt from VMT analysis. It states that uses in the local-serving category would have a less than significant transportation impact and can be screened from requiring a detailed VMT analysis. Because schools are included in the list of local-serving land uses, this school expansion project would have a less than significant transportation impact.

Also, the proposed project does not represent new traffic on the roadway network because the students that would attend Mark Twain School as a result of the project would have attended the Jordan School if the project were not implemented. So there would be little or no net increase in VMT associated with the project. The proposed project would, therefore, have a less than significant impact on VMT according to the guidelines

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

Less Than Significant Impact. The proposed project would not provide any on- or off-site access or circulation features that would create or increase any design hazards or incompatible uses. Access to the school site would be provided by the existing driveways as well as a new driveway on the east side of Loara Street. All street improvements in the public right-of-way would be designed and constructed consistent with the City of Garden Grove standards and all improvements within the project site would be consistent with the criteria of the DSA.

The increased levels of traffic, the increased number of pedestrians, and the increased number of vehicular turning movements that would occur at the driveways and at the nearby intersections would result in an increased number of traffic conflicts and a corresponding increase in the probability of an accident occurring. These impacts would not be significant, however, because the streets, intersections, and driveways are designed to accommodate the anticipated levels of vehicular and pedestrian activity. These streets and intersections have historically been accommodating school-related traffic on a daily basis for the existing school. The proposed project would add more vehicles to the streets in the immediate vicinity of the school, but the additional vehicles would be compatible with the design and use of the affected streets. The proposed project would not result in any major safety or operational issues relative to access and circulation.

As the existing street network could readily accommodate the anticipated increase in vehicular, pedestrian, and bicycle activity, the proposed project would not substantially increase hazards due to a geometric design feature or incompatible uses. Impacts would be less than significant.

d) Result in inadequate emergency access?

No Impact. The existing and proposed access and circulation features at the school, including the driveways, on-site roadways, parking lots, and fire lanes, would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. In addition to the existing access features, a new driveway, an expanded parking lot, and new drop-off/pick-up areas would be provided at the campus. These facilities would provide access to the school grounds, the buildings, and all other areas of the project site, including the playfields and hard courts. The design and any modifications to the access features are subject to and must satisfy the District's requirements and would be subject to approval by OCFA and the DSA. The proposed project would not result in inadequate emergency access. No impact would occur.

3.18 TRIBAL CULTURAL RESOURCES

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

No Impact. The project site is not currently listed in the California Register of Historical Resource or in a local register of historical resources (NPS 2020; OHP 2021). Public Resources Code Section 5020.1(k) defines local register of historical resources as a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution. There is no local ordinance or resolution that identifies the project site as a historical resource. The proposed project would not result in potential impacts to sensitive tribal resources. 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. Assembly Bill 52 requires meaningful consultation with California Native American tribes on potential impacts to tribal cultural resources, as defined in Public Resources Code Section 21074. Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources. As part of the AB 52 process, Native American tribes must submit a written request to the District (lead agency) to be notified of projects within their traditionally and culturally affiliated area. The District must then provide written, formal notification to those tribes, and the tribe must respond to the lead agency within 30 days of receiving this notification if they want to engage in consultation on the project. When these steps are completed, the District must begin the consultation process within 30 days of receiving the tribe's request. Consultation concludes when either 1): the parties agree to mitigation measures to avoid a significant effect on a tribal cultural resource; 2) a party, acting in good faith and after reasonable effort, concludes mutual agreement cannot be reached; or 3) a tribe does not engage in the consultation process or provide comments.

The District has not been contacted per AB 52, and the consultation process has not been triggered. Public Resources Code Section 5024.1(c) indicates that a resource may be listed as a historical resource in the California Register if it meets any of the four National Register of Historic Places criteria. This discussion is also provided in Section 3.5, *Cultural Resources*, of this IS/MND. The project site is fully developed with no visible native ground surface exposed; the open field and baseball field are considered developed land. The proposed project would disturb 5.3 acres of the 9.7 acre project site. Because the project site has been developed, the utilities trenching for the proposed project would not occur in native soils that may contain tribal cultural resources. Although the likelihood of discovering tribal cultural resources is minimal, the potential for discovering previously unidentified subsurface tribal cultural resources exists. Therefore, mitigation has been incorporated to reduce impacts on tribal cultural resources to a less than significant level.

Mitigation Measures

TCR-1 Prior to any ground disturbing construction activities, the Garden Grove Unified School District (District) shall retain a Native American monitor. The tribal monitor shall only be present on-site during the construction phases that involve ground-disturbing activities. Ground-disturbing activities are defined as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching within the project area. The tribal monitor will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the grading and excavation activities are completed or when the

tribal representatives and monitor have indicated that the project site has a low potential for affecting tribal cultural resources.

Upon discovery of any tribal cultural resources, construction activities shall cease in the immediate vicinity of the find until the tribal monitor can assess the find. The evaluation of all tribal cultural resources unearthed by project construction activities shall be evaluated by a qualified archaeologist and/or tribal monitor. If the resources are Native American in origin, the tribal monitor shall coordinate with the District regarding treatment and curation of these resources as well as notifying local tribes of the find. Typically, the tribe(s) will request reburial or preservation for educational purposes. The District may continue work on other parts of the project site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]). If the tribal monitor determines a resource to constitute a "historical resource" or "unique archaeological resource," time and funding sufficient to allow for implementation of avoidance measures or appropriate mitigation must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Section 21083.2(b) for unique archaeological resources. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. The District shall be responsible for ensuring that a public, nonprofit institution with a research interest in the materials, such as the Natural Museum of Los Angeles County or the Fowler Museum, curate any historic archaeological material that is not Native American in origin if such an institution agrees to accept the material. If no institution accepts the archaeological material, the District shall offer it to a local historical society for educational purposes or retain the material and use it for educational purposes.

3.19 UTILITIES AND SERVICE SYSTEMS

Would the project:

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

Less Than Significant Impact.

Water Services

The project site is currently operating as the Mark Twain School and is served by adequate existing water facilities. The Water Services Division of the City of Garden Grove provides water to the project site, as a member of the MWDOC (MWDOC 2023). Water provided by the City of Garden Grove is imported from Metropolitan Water District of Southern California and local groundwater (Garden Grove 2023d). The proposed project would connect to the existing water system to serve the additional classroom buildings, administration office and outdoor and would comply with the California Green Building Standards Code (Title

24, Part 11). CALGreen standards include mandatory water-conserving measures for plumbing fixtures to reduce water usage and would comply with the municipal code requirements. The proposed project would not increase student population within Garden Grove or the District because the proposed project would consolidate the Mark Twain and Jordan programs on the project site. However, the proposed project would increase student enrollment to approximately 194 students, which represents an increase of 105 student at the project site. The 105 additional students are currently being served by the Water Services Division of Garden Grove and the District and the Community Services, so any increases in service would be negligible. The proposed project would relocate existing students to the Mark Twain School campus and would not introduce a new student population. The proposed project would not require the construction of new or expanded water facilities that could cause significant effects. Impacts would be less than significant.

Wastewater Treatment

The Garden Grove Sanitary District provides wastewater collection and conveyance services to the project site. Wastewater generated by the campus is conveyed to the Orange County Sanitation District (OCSAN). According to OCSAN 2021 Strategic Plan, OCSAN operates two wastewater treatment plans each with the capacity to treat 320 million gallons per day (MGD) of wet weather follow, yet on average only 185 MGD is treated (OCSAN 2021). The proposed project is not expected to substantially increase wastewater generated within the District as enrollment would not increase. The proposed project would result in an increase of approximately 105 students at the project site; however, the increase wastewater generated onsite would be negligible. Wastewater generated at the new buildings will be conveyed to the existing sanitary sewer main. Therefore, the proposed project's development would not require the construction of new or expanded wastewater facilities that could cause significant environmental effects. Impacts would be less than significant.

Stormwater Drainage

Development of the expanded parking lot and circulation, two classroom buildings, administration building, two shade structures and a play area would increase impervious surfaces at the existing campus. Although the proposed project would result in an increase in impervious surfaces on the project site, the project site's drainage pattern would be similar as compared to existing conditions. Runoff discharging from the project site under proposed project conditions would continue to flow to the existing City storm drains along Loara Street and Chapman Avenue. The proposed project would not result in the relocation of stormwater drainage. Impacts would be less than significant.

Electric Power

Electricity to the project site is provided by Southern California Edison. The project site is currently developed with the existing Mark Twain School. Trenching for power lines would be necessary to connect the new proposed building to existing electrical facilities within the campus. Although the proposed project would result in a higher electricity demand than existing conditions, the increase would be negligible to a regional provider like SCE. Development of the new classroom and administrative buildings would be required to comply with energy efficiency standards set forth by California Administrative Code (Title 24, Part 6) and CALGreen standards (Title 24, Part 11) as well as CALGreen Tier 2 EV charging space requirements for the parking lot.

3. Environmental Analysis

Implementation of the proposed project would not result in major construction related to electrical power facilities that could cause significant environmental impacts. Impacts would be less than significant.

Natural Gas

Natural gas service is provided by the Southern California Gas Company. The project site is currently developed with the existing Mark Twain School. Trenching for natural gas lines would be necessary to connect the new proposed buildings to the existing natural gas facilities within the campus. Although the proposed project would result in a higher natural gas demand than existing conditions, the increase would be negligible to a regional provider like Southern California Gas Company. Development associated with the proposed project would be built to meet the Building Energy Efficiency Standards. The proposed project would not require the construction of new or expanded facilities. Impacts would be less than significant.

Telecommunications

Various private service providers, including Spectrum, AT&T, T-Mobile, Cox, and Frontier communications, provide telecommunication services to the City, including Mark Twain campus. There are also various landline and wireless telecommunication companies that service the project site. The proposed project, if necessary, may connect to the existing telecommunications on site. Facilities and infrastructure from the various telecommunication providers are adequate to serve the needs of the proposed project. The proposed project would not require construction of new or expanded telecommunication facilities. Impacts would be less than significant.

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

Less Than Significant Impact. The City of Garden Grove prepared a 2020 Urban Water Management Plan (UWMP) found that the water resources available to Garden Grove are reliable to meet existing and projected demand over the next 25 years (Garden Grove 2021). The Water Services Division of the City of Garden Grove provides water to the project site, which depends on water supplies from the MET and MWDOC. The City relies on approximately 50 percent groundwater and 50 percent imported water by 2045, the water supply will shift to 85 percent groundwater and 15 percent imported water. The City of Garden Grove's water use is relatively stable and has been declining (with an annual average of 23,717 acre feet (AF)) and is expected to remain stable. The projected portable water use for 2045 is 22,792 AF. The City may utilize local groundwater or can purchase more MET water through MWDOC should the need arise. MET's and MWDOC's 2020 UWMPs conclude that they can meet full-service demands of their member agencies through 2045 during normal years, single-dry years, and multiple-dry years (Garden Grove 2021).

The proposed project's operation would require water use and installation of utility improvements necessary to serve the new buildings. The increase in demand for water services would be negligible; and captured by the projected demand of the Garden Grove UWMP. Development of the proposed project would be required to comply with the provisions of CALGreen, specifically Division 5.3, Water Efficiency and Conservation, including those of Sections 5.303, Indoor Water Use, and 5.304, Outdoor Water Use. Based on the Garden

Grove UWMP, the City contains adequate water supplies to meet the water demands of the proposed project during normal, dry, and multiple dry years. Impacts would be less than significant.

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?

Less Than Significant Impact. As previously discussed in Section 3.19(a) the wastewater treatment provider OCSAN operates two wastewater treatment plans, each with the capacity to treat 320 MGD of wet weather effluent, yet on average only 185 MGD are treated (OCSAN 2021). Therefore, OCSAN has the capacity to treat approximately an additional 355 MGD. The proposed project would consolidate the Mark Twain and Jordan programs on the project site, which would result in an increase in wastewater service at the project site yet would not increase overall wastewater treatment. Any increase in wastewater treatment would be negligible. OCSAN has adequate capacity to serve the proposed project in addition to the existing commitments. 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, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. The proposed project would add two classroom buildings, an admin building, and play courts; expand parking; and add fencing improvements at the Mark Twain School site, then consolidate the District's two special education programs at the site. During construction, the proposed project may generate some demolition debris from clearance and waste debris. Construction solid waste generation would be minimal as no buildings on the project site would be disturbed by the proposed project. In accordance with 18.60.060, Security Deposit and Waste Reduction and Recycling Plan Required (A), of the Garden Grove municipal code, applicants applying for a building permit shall submit a waste reduction and recycling plan (Garden Grove 2023a). Solid waste from all District schools is transported and disposed by the Garden Grove Sanitary District to regional landfills, contracted to Republic Waste Services of Southern California. Solid waste generated in the City of Garden Grove may be deposited to four solid waste landfills within Orange County, which include the Olinda Alpha Landfill and the Frank R. Bowerman Sanitary Landfill (CalRecycle 2023). The Olinda Alpha Landfill contains a remaining capacity of 17,500,000 tons, and the Frank R. Bowerman Landfill has a remaining capacity of 205,000,000 tons. Both landfill facilities did not surpass their maximum day tonnage of solid waste. CALGreen Section 5.4081.1 requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. The proposed project would increase the enrollment at the project site. Solid waste generated by the proposed project's operational activities would increase the amount of solid waste generated by the existing campus. The increase in waste generation would be negligible and continue serviced by Republic Waste Services of Southern California and regional landfills. Although the proposed project would result in an increase in enrollment at the project site, the proposed project would not increase the overall enrollment within the District as the additional students to Mark Twain are currently served at the Jordan Secondary Learning Center. The proposed project would not adversely impact landfill capacity or impair attainment of solid waste reduction goals. Impacts 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 proposed project shall comply with State requirements to reduce the volume of solid waste through recycling and organic waste diversion. The District currently complies with federal, State, and local statutes and regulations related to solid waste, such as the California Integrated Waste Management Act and local recycling and waste programs. The District and its construction contractor would comply with all applicable laws and regulations and make every effort to reuse and/or recycle the construction debris that would otherwise be taken to a landfill. CALGreen section 5.408, Construction Waster Reduction, Disposal, and Recycling, requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. Proposed project development would comply with all applicable federal, State, and local statutes and regulations related to solid waste disposal. Solid waste demand from the proposed new school buildings would be minimal and would not impact the City's ability to comply with Assemble Bill 939. Impacts would be less than significant.

3.20 WILDFIRE

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

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

No Impact. The Mark Twain School campus is located within a local responsibility area and is not designated a very high FHSZ (CAL FIRE 2023). The campus is not in or near a state responsibility area or lands classified as very high FHSZ. The nearest very high FHSZ to the campus is approximately 7.0 miles northeast. The proposed project would not impair an adopted emergency evacuation or response plan within the area. No impact would occur.

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

No Impact. The Mark Twain School campus is not located in or near an SRA or lands classified as a very high FHSZ (CAL FIRE 2023). The project site is flat with no significant topography, and there are no steep slopes where high winds can exacerbate wildfire risk. The campus is developed with an existing school in an urban, built-out area. Construction of the proposed project would not result in increased exposure to pollution concentration from a wildfire or uncontrolled spread of wildfire. No impacts would occur.

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

No Impact. The Mark Twain School campus is not in nor abuts a very high FHSZ or an SRA (CAL FIRE 2023). The project would continue to utilize the existing roads and infrastructure; no new roads, fuel breaks,

emergency water sources, power lines or other utilities are necessary. Construction of the proposed project would not exacerbate wildfire risk or result in temporary or ongoing impacts to the environment. No impacts would occur.

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

No Impact. The Mark Twain School campus is surrounded by development with flat topography. The campus is not located in or near an SRA or lands classified as very high FHSZ (CAL FIRE 2023). Therefore, the proposed project would not result in runoff, post-fire slope instability, or drainage changes. No impact would occur.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact With Mitigation Incorporated. As discussed in Section 5.4, *Biological Resources*, there are structures on campus along with ornamental trees and shrubs, that may provide a nesting habitat for native birds protected under the MBTA. The proposed project comply with MBTA to ensure that grading activities and construction are avoided during nesting seasons or a survey be conducted for nesting birds if grading activity should occur during nesting season. Compliance with MBTA would ensure impacts would be less than significant. No mitigation measures were identified and therefore, all other thresholds resulted in no impact.

As discussed in Section 3.5, *Cultural Resources*, Section 3.7, *Geology and Soils*, and Section 3.18, *Tribal Cultural Resources*, it is unlikely that archaeological resources, paleontological, and tribal cultural resources would be found during construction of the proposed project. Nevertheless, ground-disturbing activities from the proposed project may have the potential to uncover unknown archaeological, paleontological resources, and tribal cultural resources. Implementation of Mitigation Measure CUL-1 would ensure that any archaeological resources discovered would be recovered in accordance with State and federal requirements. Implementation of Mitigation Measure GEO-1 would ensure that if resources are discovered during ground-disturbing activities, paleontological resources would be recovered in accordance with State and federal requirements. Implementation of Mitigation Measure TCR-1 would ensure that a tribal monitor is present on-site during the construction phases that involve ground-disturbing activities. Implementation of Mitigation Measures CUL-1, TCR-1, and GEO-1 would reduce impacts to archaeological, tribal cultural and paleontological resources to a less than significant level.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable

when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less Than Significant Impact. The issues relevant to the proposed project development are confined to the immediate project site and surrounding area. Additionally, the project site is in an urbanized area of Garden Grove where a current campus operates. As substantiated in this Initial Study, the project site is currently operating as the Mark Twain Special Education Center, and development of new infrastructures would use existing utility services that currently serve the campus. The proposed project would consolidate the District's two special education programs at the site and therefore would not contribute to cumulative impacts.

Furthermore, impacts related to other topical areas such as air quality, GHG, hydrology and water quality, and traffic would not be cumulatively considerable with development of the proposed project in conjunction with other cumulative projects.

In consideration of the preceding factors, the proposed project's contribution to cumulative impacts would be rendered less than significant; therefore, the proposed project impacts would not be cumulatively considerable.

c) 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 project would comply with applicable local, State, and federal laws governing general welfare and environmental protection. The implementation of required mitigation measures specified in this Initial Study would reduce impacts to less than significant for cultural resources, geology and soils, and tribal cultural resources. Project impacts on human beings, either directly or indirectly, would be less than significant.

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