CHAPTER 4
Initial Study Checklist

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4A.	**AESTHETICS.** Would the project:				
	a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
	b. Substantially damage scenic resources, including, but not limited to trees, rock outcroppings and historic buildings, within a state scenic highway?	☐	☐	☒	☐
	c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
	d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Explanation:

a. **No Impact.** A scenic vista is considered an area that is visually or aesthetically pleasing, providing scenic quality and view access. The City of Long Beach General Plan does not provide a definition of or a listing of scenic vistas (Long Beach Planning Department (LBPD), 2003). Potential scenic vistas include views along the coastline, mountain vistas, and other scenic features of the region that are a significant visual resource for residents and businesses. The Proposed Project is located on flat terrain amidst an area containing commercial and residential development. There are no potential scenic vistas viewable from the immediate site. The Proposed Project would replace an existing middle school with a new high school, with the new facilities being of similar heights (22 feet to 41 feet in height) as the existing buildings. As there are no scenic vistas in the area and the new structures would not obstruct views off-site, no impact to a scenic vista would occur. These impacts would be the same whether or not the demolition and construction schedules proceed under Scenario 1 or Scenario 2.

b. **Less than Significant Impact.** The City of Long Beach General Plan includes a Scenic Routes Element, which identifies Lakewood Boulevard (located approximately 2.4 miles west of the project site) as a recommended scenic route (LBPD, 2003). There are no other local or state scenic roadways, adopted or designated as eligible, near the site (Caltrans, 2009). Though Lakewood Boulevard is not an adopted Scenic Route, the Proposed Project would comply with the policies of the Scenic Routes Element. The existing middle school is greater than 50 years old, but does not meet the criteria for classification as a significant historic resource (refer to Initial Study discussion item 4E). Although the Proposed Project would include removal of mature trees within the interior of the existing

campus, the Proposed Project would retain the existing trees located along E. Parkcrest Street and the mature oak tree located between Building 100 and Building 300. The trees proposed for removal are not viewable from Lakewood Boulevard. In addition, the Proposed Project would provide enhanced landscaping, which would add visual quality to the site. The Proposed Project would not result in damage to a scenic resource within a state scenic highway, and impacts would be less than significant.

c. **Less than Significant Impact.** The visual character of the project site is related to the quality of streetscape, building(s), or other man-made or natural features, that define an area. The site is currently occupied by a middle school with characteristics typical of an institutional facility. With the exception of the mature trees along East Parkcrest Street, the site contains no unique or natural qualities or other features considered a potential aesthetic resource. As the Proposed Project would result in the replacement of existing buildings with structures of similar scale and height, the new school would not conflict with the character of the site or surrounding community. The configuration of proposed one- and two-story structures would be similar to the configuration of the existing structures on-site, although set back further from E. Parkcrest Street (see Figure 2). The placement of the proposed structures would not result in new shading and shadows that would be cast on surrounding residential properties as compared to existing conditions. Potential impacts to the visual character from implementation of the Proposed Project are less than significant.

d. **Less than Significant Impact.** The Proposed Project would not adversely affect day or nighttime views in the area with the addition of significant new sources of light or glare. Sources of illumination as part of the Proposed Project would include security lighting, internal classroom lighting, vehicle luminaries, and lighting associated with the parking lot. Lighting at the project site would be installed to minimize glare for pedestrians and drivers, and to minimize spillover light. Security lighting, internal classroom lighting, and vehicle luminaries, would be similar to existing conditions. In addition, the District would apply design standards that would avoid any impacts that would adversely affect day or nighttime views, such as window shades and glare shields. In addition, lamp enclosures and poles would be painted or would have a natural color finish to reduce reflection. The exterior finish of the proposed buildings would not include any highly reflective surfaces, aside from standard glass windows. Therefore, the potential impact on daytime or nighttime views would be less than significant.

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4B.	**AGRICULTURE AND FOREST 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 the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
	a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
	b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
	c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?	☐	☐	☐	☒
	d. Result in loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
	e. Involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Explanation:

a, b. **No Impact.** The Proposed Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. The project site is located in an urbanized area and not within an area designated as prime farmland or farmland of statewide importance, as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program (CDC, 2009). Therefore, the Proposed Project would not conflict with an existing agricultural use or with a Williamson Act contract, and no impact would occur.

c, d. **No Impact.** The Proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. The Proposed Project is located in a densely developed area and no forest lands occur on-site or in the project vicinity. The trees that occur on-site and within the vicinity are not classified as forestland as defined in California Public Resources Code section 12220(g) or timberland (as defined in California Public Resources Code section 4526). No impact would occur and no mitigation is required.

e. **No Impact.** Refer to responses (a) through (d), above.

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4C.	**AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
	a. Conflict with or obstruct implementation of the applicable Air Quality Management Attainment Plan?	☐	☐	☒	☐
	b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
	c. 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 (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
	d. Create or contribute to a non-stationary source "hotspot" (primarily carbon monoxide)?	☐	☐	☒	☐
	e. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
	f. Create objectionable odors affecting a substantial number of people?	☐	☒	☐	☐

Explanation:

a. **Less than Significant Impact.** Regulations requiring evaluation of air quality impacts of planned projects and appropriate mitigation for air pollutant emissions have been adopted on a federal, state, and local level. The U.S. Environmental Protection Agency (USEPA) is responsible for implementation of the Federal Clean Air Act (CAA), which establishes National Ambient Air Quality Standards (NAAQS) for the following criteria pollutants: carbon monoxide (CO), lead, nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), and sulfur dioxide (SO_2) (USEPA, 2009). The City of Long Beach is located within the South Coast Air Basin (SCAB or the Basin), which is designated as a federal non-attainment area for O_3, PM_{10}, and $PM_{2.5}$ (CARB, 2009). The South Coast Air Quality Management District (SCAQMD) regulates air emissions in the SCAB, and pursuant to the CAA, the SCAQMD is required to reduce emissions of criteria pollutants for which the Basin is in nonattainment. Strategies to achieve these emissions reductions are developed in the Air Quality Management Plan (AQMP), prepared by SCAQMD (2007). The 2007 AQMP is designed to meet both state and federal CAA planning requirements for all areas under SCAQMD jurisdiction, and sets forth procedures for measurements, control strategies, and air quality modeling. The Southern California Association of Governments (SCAG) has established the assumptions for growth, in terms of demographic growth and associated air quality impacts, and these assumptions are utilized in SCAQMD's 2007 AQMP.

The Proposed Project does not include residential development or large local or regional employment centers and thus, would not result in significant population or employment growth. The Proposed Project would replace the existing middle school with a thematic high school. The proposed land use is consistent with the existing land use designation of *Institution*. The Proposed Project is intended to serve existing and future students within the District, and as a result, the Proposed Project would not cause an increase in currently established SCAG population projections. The District would comply with applicable requirements established by USEPA, CARB, and SCAQMD. Consequently, implementation of the Proposed Project would be consistent with 2007 AQMP attainment forecasts. Therefore, impacts would be less than significant.

b. **Less than Significant with Mitigation Incorporated.** The Proposed Project would result in additional air emissions as a result of construction activities and operation. The methodologies provided by SCAQMD's CEQA Air Quality Handbook were considered in this analysis (SCAQMD, 1993). Construction of the Proposed Project has the potential to create air quality impacts during construction through the use of heavy-duty construction equipment, through vehicle trips generated from construction workers traveling to and from the project site, and fugitive dust from grading/excavation activities and hauling. The assessment of construction air quality impacts considers each of these potential sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions.

Regional Construction Emissions

Regional emissions resulting from construction were estimated using the URBEMIS2007 model developed by CARB (CARB, 2007). Two construction scenarios were evaluated, as described in Tables 2.1 and 2.2 of the Project Description. It is mandatory for all construction projects in the Basin to comply with SCAQMD Rule 403 for controlling fugitive dust. Incorporating Rule 403 into the Proposed Project would reduce regional PM_{10} and $PM_{2.5}$ emissions from construction activities. Specific Rule 403 control requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site, and maintaining effective cover over exposed areas. Site watering and application of soil binders would reduce the particulate matter from becoming airborne.

Maximum daily construction-related *regional* emissions for the Proposed Project are presented in **Table 4.C-1.** As shown, maximum regional emissions would not exceed the SCAQMD daily significance thresholds for Reactive Organic Compounds (ROC), NO_X, CO, PM_{10} and $PM_{2.5}$ for either scenario. Since construction emissions would not exceed the SCAQMD thresholds, the regional construction impact would be less than significant (see **Appendix A** for worksheets).

TABLE 4.C-1
ESTIMATED REGIONAL EMISSIONS FROM PROJECT CONSTRUCTION

	Estimated Emissions (lbs/day)				
Year of Construction	**ROG**	**NO_x**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Scenario 1					
2010	16	82	56	10	6
2011	10	64	44	60	5
2012	33	53	41	6	4
2013	2	14	11	1	1
Scenario 2					
2010	15	88	61	12	6
2011	5	30	25	5	2
2012	31	31	29	3	2
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**55**
Significant Impact?	**No**	**No**	**No**	**No**	**No**

Project construction emissions estimates for off-road equipment were made using URBEMIS2007, version 9.2.4

SOURCE: ESA, 2009a.

As previously mentioned, the Project would be required to comply with regional rules that assist in reducing air pollutant emissions, and calculations assume that appropriate dust control measures would be implemented during each phase of development, as required by SCAQMD Rule 403 (Fugitive Dust) (SCAQMD, 2003). To ensure regional construction emissions are below SCAQMD's thresholds, **Mitigation Measure AIR-1** is required in order to (1) implement requirements of SCAQMD Rule 403 (Fugitive Dust); (2) establish a program of air pollution control strategies designed to reduce the Proposed Project's air quality impacts to the extent feasible during construction; and (3) minimize potential impacts to sensitive receptors.

Mitigation Measure AIR-1: *Construction Emissions.*

- Implement the Rule 403 for each on-site source of dust. Prepare daily records of control actions and implementation, and maintain recordkeeping on-site for the duration of the project; these records shall be stored by the District's Facilities Development and Planning Branch for a minimum period of three years.
- Apply dust suppressants (e.g., polymer emulsion) to actively disturbed areas upon completion of clearing and grading.
- Replace ground cover in disturbed areas as quickly as possible.
- Water disturbed sites three times daily (locations where grading is to occur will be thoroughly watered prior to earth moving).
- All trucks hauling dirt, sand, soil, or other loose materials are to be tarped with a fabric cover and maintain a freeboard height of 12 inches.
- Traffic speeds on all unpaved roads shall be reduced to 15 mph or less.

- During construction, trucks and vehicles in loading and unloading queues would turn their engines off when not in use to reduce vehicle emissions; all construction vehicles shall be prohibited from idling in excess of five minutes, both on- and off-site.
- Construction emissions will be scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.
- Maintain and operate construction equipment to minimize exhaust emissions; all construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications.
- At the end of each workday, the disturbed area(s) shall either be covered with plastic sheeting or sprayed with water containing an approved chemical dust suppressant (see SCAQMD Rule 403 approved list) to prevent fugitive dust.

Significance after Mitigation Incorporated: Less than significant.

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with this measure.

Project Operations

Regional air pollutant emissions associated with Proposed Project operations would be generated by the consumption of electricity (generating remote indirect air emissions), natural gas (a stationary source) and by the operation of on-road vehicles (mobile sources). Stationary and mobile source emissions from Proposed Project operations were estimated using the URBEMIS 2007 version 9.2.4 model (CARB, 2007). As shown in **Table 4.C-2**, the air quality impacts from operation of the Proposed Project would be less than SCAQMD significance thresholds for all the criteria pollutants. Consequently, the operational air quality impact of the Proposed Project would be considered less than significant, and no mitigation measures are required (see Appendix A for worksheets).

TABLE 4.C-2
ESTIMATED REGIONAL EMISSIONS FROM PROJECT OPERATIONS

	Estimated Emissions (lbs/day)				
Phase	**ROG**	**NO_x**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Area	1	1	2	<1	<1
Operational	24	25	217	40	8
Total	24	26	219	40	8
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**55**
Significant Impact?	**No**	**No**	**No**	**No**	**No**

Project operation emissions estimates for off-road equipment were made using URBEMIS2007, version 9.2.4.

SOURCE: ESA, 2009a.

c. **Less than Significant With Mitigation Incorporated.** As discussed in 4.C(b), above, the construction and operational impacts of the Proposed Project would not exceed

SCAQMD's thresholds, and therefore are not expected to be cumulatively considerable. Even so, Mitigation Measure AIR-1 would be implemented during construction to ensure impacts remain less than significant. There might be emission increases for certain air pollutants for nearby past, present and/or foreseeable projects (either overlapping construction periods or on-going operation) that are expected to exceed the SCAQMD's emission thresholds. Pursuant to *CEQA Guidelines* Section 15064(h)(4), the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the Proposed Project's incremental effects are cumulatively considerable. Development of the Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant, and would be less than significant.

Mitigation Measure: Implement Mitigation Measure AIR-1.

Significance after Mitigation Incorporated: Less than significant.

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with this measure.

d. **Less than Significant Impact.** The Proposed Project would result in a nominal increase in traffic volumes. The Proposed Project could potentially create or contribute to a non-stationary source "hotspot." CO "hotspots" or areas of high CO concentration can occur at traffic-congested roadway intersections as a result of accumulating vehicle emissions. SCAQMD has established thresholds for concentration increases of 1.0 part per million (ppm) for one hour, and 0.45 ppm for eight hours. CO concentrations are anticipated to be reduced by 80 percent between 2003 and 2020 due to technological advances in vehicle emissions systems, as well as from normal turnover in the vehicle fleet. As a result, increases in traffic volumes are expected to be offset by increases in cleaner-running cars as a percentage of the entire vehicle fleet on the road. Furthermore, the student population would decrease, thereby decreasing the number of trips to and from the project site (LSA, 2009). While each student dropped off at the middle school produces one inbound and one outbound drip in each peak hour, each student driving to high school produces with one inbound or one outbound trip per peak hour. The ITE-surveyed trip generation rates are lower for high school (530 trips) than for middle school (522 trips). As a result, traffic volumes are forecast to improve with implementation of the Proposed Project. Therefore, the Proposed Project would not create or contribute to a non-stationary source "hotspot" and would be a less than significant impact without mitigation.

e. **Less than Significant Impact.** In addition to regional impacts from construction emissions, the localized effects from daily emissions were evaluated using SCAQMD's localized significance threshold (LST) methodology, which is designed to determine potential impacts to nearby sensitive receptors (SCAQMD, 2006). This methodology recommends the use of dispersion modeling when evaluating impacts from sites that are larger than five acres in size. Therefore, the USEPA-approved dispersion model,

AERMOD, was used to determine construction impacts on localized air quality. Meteorological data from the Long Beach monitoring station was obtained from the SCAQMD's website for use in AERMOD.

Emissions from construction equipment were modeled as a series of volume sources with a release height of five meters as suggested in the SCAQMD's LST guidance document. Fugitive dust emissions were modeled as an area source with an initial vertical dimension of one meter (SCAQMD, 2006). Daily emission rate estimates generated by URBEMIS (provided in Table 4.C-1 above) were used in this analysis. However, the emissions from worker and vendor trips were not included as part of this analysis since these emissions are made on a regional rather than local scale.

Pollutant concentrations that would be generated during construction activities associated with Scenario 1 and Scenario 2 are presented in **Table 4.C-3**. As shown in Table 4.C-3, these emissions would result in pollutant concentrations that are below all applicable thresholds. Therefore, impacts would be less than significant.

TABLE 4.C-3
LOCALIZED POLLUTANT CONCENTRATIONS FROM CONSTRUCTION EMISSIONS

Concentrations	CO 1-Hour	CO 8-Hour	NO_2 1-Hour	PM10 24-Hour	PM2.5 24-Hour
Scenario 1					
Project generated	0.08 ppm	0.03 ppm	0.05 ppm	4.6 µg/m^3	1.8 µg/m^3
Background	4.0 ppm	3.4 ppm	0.11 ppm	NA	NA
Total (project + background)	4.08 ppm	3.43 ppm	0.16 ppm	4.6 µg/m^3	1.8 µg/m^3
Localized Significance Threshold	*20.0 ppm*	*9.0 ppm*	*0.18 ppm*	*10.4* µg/m^3	*10.4* µg/m^3
Over (Under) Threshold	(15.92 ppm)	(5.57 ppm)	(0.02 ppm)	(5.8 µg/m^3)	(8.6 µg/m^3)
Exceed Threshold?	No	No	No	No	No
Scenario 2					
Project generated	0.09 ppm	0.04 ppm	0.05 ppm	4.9 µg/m^3	2.4 µg/m^3
Background	4.0 ppm	3.4 ppm	0.11 ppm	NA	NA
Total (project + background)	4.09 ppm	3.44 ppm	0.16 ppm	4.9 µg/m^3	2.4 µg/m^3
Localized Significance Threshold	*20.0 ppm*	*9.0 ppm*	*0.18 ppm*	*10.4* µg/m^3	*10.4* µg/m^3
Over (Under) Threshold	(15.91 ppm)	(5.56 ppm)	(0.02 ppm)	(5.5 µg/m^3)	(8.0 µg/m^3)
Exceed Threshold?	No	No	No	No	No

Notes: ppm = parts per million and µg/m^3 = micrograms per cubic meter.

SOURCE: ESA, September 2009a.

f. **Less than Significant Impact with Mitigation Incorporated.** The Proposed Project would not result in significant objectionable odors. According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants,

composting, refineries, landfills, dairies, and fiberglass molding. The Proposed Project would not include any uses identified by SCAQMD as being associated with odors. While the Proposed Project does include kitchen facilities, compliance with industry standard odor control practices, SCAQMD Rule 402 (Nuisance) (1976), and SCAQMD Best Available Control Technology Guidelines (2000) would limit potential objectionable odor impacts during operation of the Proposed Project to a less than significant level. Rule 402 prohibits the discharge from any source whatsoever such quantities of air contaminants or other material that may cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property.

The District would implement BMPs for waste management, such as lids on trash bins and frequent pick-up, to reduce the potential for objectionable odors during project operations and associated impacts would be less than significant. In addition, the application of SCAQMD's Rule 402 would limit odorous emissions from equipment exhaust during construction, ensuring short-term odorous emissions would not be significant. Implementation of **Mitigation Measure AIR-2** and **Mitigation Measure AIR-3** would ensure that odorous emissions and/or odors associated with construction and project operation are less than significant.

Mitigation Measure AIR-2: The District shall implement SCAQMD Rule 402.

Mitigation Measure AIR-3: The District shall implement SCAQMD Best Available Control Guidelines (BACT) to limit potential objectionable odor impacts during the operation of the Proposed Project.

Significance after Mitigation Incorporated: Less than significant.

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with this measure.

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4D.	**BIOLOGICAL RESOURCES.** Would the project:				
	a. Adversely impact, either directly or indirectly or through habitat modifications, any endangered threatened or rare species as listed in Title 14 of the California Code of Regulations (Section 670.2 or 670.5) or in Title 50 of the Code of Federal Regulations (Section 17.11 or 17.12)?	☐	☐	☐	☒
	b. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
	c. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
	d. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
	e. 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?	☐	☐	☒	☐
	f. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance or require the removal or relocation of oak trees with a diameter of 8 inches or more measured at 4.5 feet above ground at the base of the tree?	☐	☒	☐	☐
	g. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Explanation:

a. **No Impact.** The project site is currently developed and operating as a middle school, and contains buildings, grass athletic fields and asphalt parking areas. Site reconnaissance surveys were conducted to determine if any sensitive species or habitats were visible on the project site (ESA, 2009b). The results of the survey indicated that no sensitive species currently residing on the project site and no sensitive habitats exist on the site. A search of the California Natural Diversity Database (CNDDB) was conducted to develop a preliminary list of sensitive species and biological resources that could potentially occur in the project vicinity (California Department of Fish and Game (CDFG), 2009). The CNDDB search results identified 25 wildlife and plant species listed as threatened or endangered by either the State of California or the federal government with historical records of occurrence within an approximate five-mile radius of the project site. The

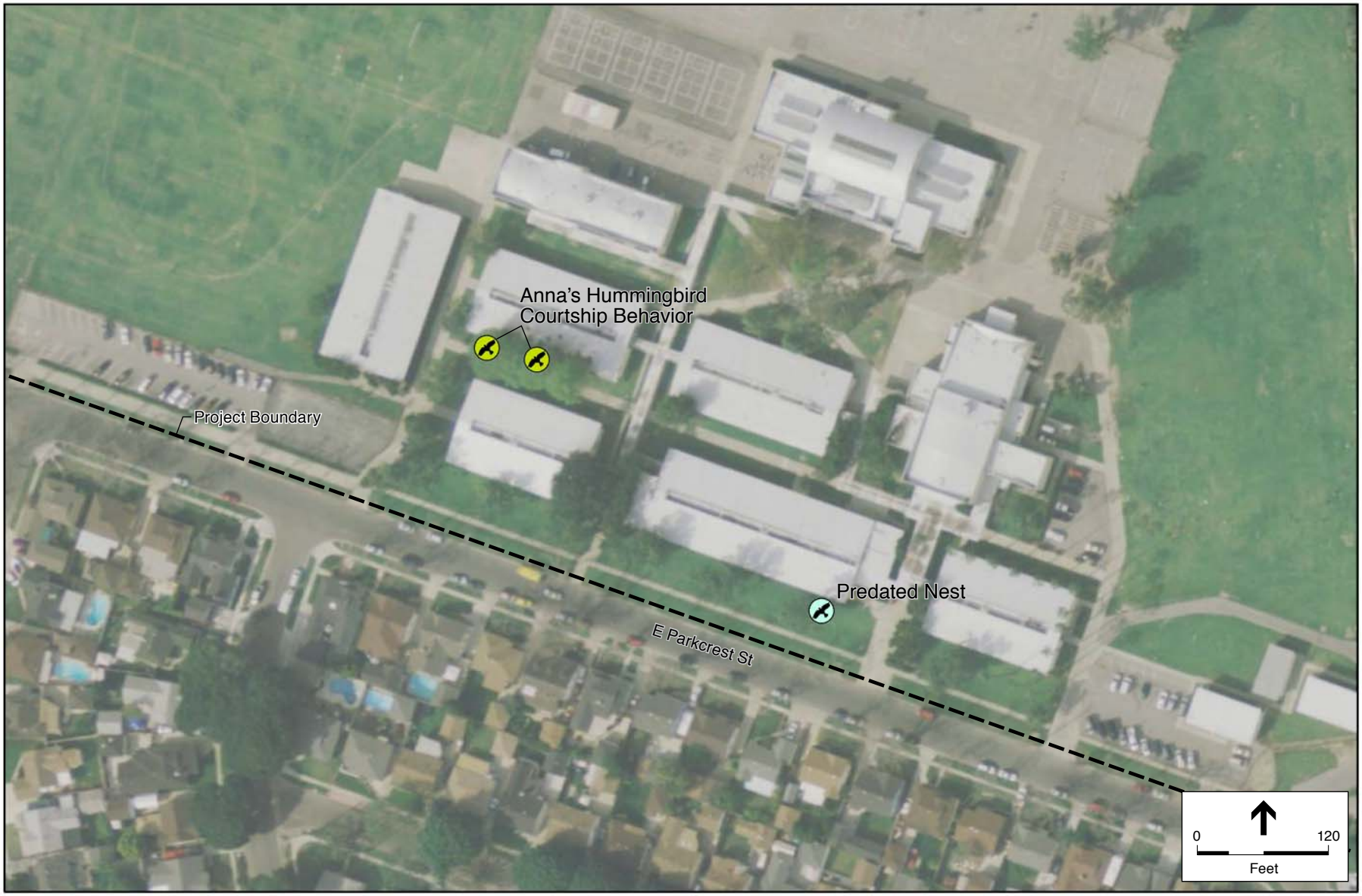
results of the CNDDB search are provided in **Appendix B**. Based on known records from the CNDDB, habitat affinities of the species, and professional judgment, none of the species listed in Appendix B would occur at the project site given the amount of disturbance and lack of suitable habitat at the site and within its vicinity. As a result, no impact to state or federally listed threatened or endangered species would occur; therefore, no mitigation is required.

b. **Less than Significant with Mitigation Incorporated.** As discussed in (a) above, a search of the CNDDB was conducted to develop a preliminary list of sensitive species and biological resources that could occur in the project vicinity. The CNDDB search results (Appendix B) identified 14 plant species on the CNPS lists 1B or 2, and 21 animal species listed by CDFG as either species of special concern or endangered species with historical records in the project vicinity. The Proposed Project would not have an effect, either directly or indirectly, or through habitat modification, on any species identified as a candidate, sensitive, or special status species identified in local or regional plans, policies, or regulations, or by CDFG or the US Fish and Wildlife Service (USFWS).[1]

Mature trees located on and adjacent to the project site have the potential to support nesting birds. The federal Migratory Bird Treaty Act (16 USC, Section 703, Supp. I, 1989) prohibits killing, possessing, or trading migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. Migratory birds protected under this law include almost all native birds, with the exception of a few old world species, such as wrentit (*Chamaea fasciata*), European starling (*Sturnus vulgaris*), rock dove (*Columba livia*), house sparrow (*Passer domesticus*) and certain game birds (e.g., turkeys and pheasants). Migratory birds are also protected by the State of California, under Section 3513 of the California Fish and Game Code (the Code). The Code also protects all breeding birds under Section 3503, and raptors (eagles, hawks, and owls) under Section 3503.5. Any disturbance that causes nest abandonment and/or loss of reproductive effort is considered to be a "taking" by CDFG, and would constitute a significant impact.

On August 5, 2009, Environmental Science Associate's (ESA's) senior biologist, Greg Ainsworth, conducted a bird nest survey to determine if any active or predated bird nests exist within the trees located at or immediately adjacent to the project site (**Appendix C**). During the survey, no active bird nests were observed; however, breeding behavior was observed within a mature tree located on the project site by an Anna's hummingbird (*Calypte anna)*, and two predated song bird nests were observed within a mature tree located on the site (see **Figure 5**). No raptor nests were observed at, or adjacent to, the

1 Special status species are defined as listed plant and animal species that receive specific protection defined in federal or state legislation (Endangered Species Act), and are formally designated as endangered, threatened or rare under state or federal legislation. Also included in this definition are species that have no formal listing status as threatened or endangered, but are regarded as locally "rare," "sensitive," or "species of concern" on the basis of adopted policies and expertise of federal, state or local resource agencies, or local organizations with acknowledged expertise, such as the California Native Plant Society. Species that meet the criteria of Section 15380 of the California Environmental Quality Act or the California Native Plant Protection Act are defined as special status species. In general, plants constituting CNPS List 1A, 1B or 2 meet the definitions of California Department Fish and Game Code Section 1901 (Native Plant Protection Act) and/or Sections 2062 and 2067 (California Endangered Species Act), and are protected as such.



SOURCE: GlobeXplorer; ESA, 2009

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Figure 5
Cecil DeMille Middle School
Bird Nest Survey

project site. During the active nesting season, it is expected that several of the tall, mature trees located on and adjacent to the site could provide nesting opportunities for native song birds. It would be considered a significant impact if breeding birds or an active bird nest is impacted by the demolition of the existing middle school or development of the Proposed Project. However, implementation of **Mitigation Measure BIO-1** would reduce impacts to a level of less than significant.

Mitigation Measure BIO-1: *Nesting Birds and Raptors.*

1. Conduct brush removal, tree trimming/removal, building demolition, or grading activities outside of the nesting season. The California Department of Fish and Game has defined the nesting season as February 1 through August 15. If other timing restrictions make it impossible to avoid the nesting season, the construction areas should be surveyed for nesting birds and active nests should be avoided.

2. To avoid impacts to native nesting birds protected by the Migratory Bird Treaty Act (MBTA) or the California Fish and Game Code, the applicant and/or its contractors shall retain a qualified biologist to conduct nest surveys in potential nesting habitat within the project site prior to construction or site preparation activities. Specifically, within 30 days of ground disturbance activities associated with construction or grading, a qualified biologist shall conduct two breeding bird surveys with the last survey being conducted no more than five days prior to initiation of clearance or construction work. Surveys shall include all areas within the construction zone and within 250 feet, where access is available. If ground disturbance activities are delayed, additional pre-construction surveys will be conducted such that no more than five days will have elapsed between the last survey and the commencement of ground disturbance activities.

3. If active nests are found, a 300-foot buffer for breeding song birds and a 500-foot buffer for breeding raptors or an active raptor nest shall be established around the tree, and all demolition, site clearance and construction activities within these buffers shall be postponed or halted until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting during the same year.

4. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts to these nests will occur.

Significance after Mitigation: Less than significant.

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with this measure.

c. **No Impact.** Riparian habitat is typically characterized as lowland habitat associated with the bed and banks of a river, stream, or wash. The project site has been previously disturbed by existing development and does not contain any riparian habitat or other natural habitat as designated by CDFG or USFWS (ESA, 2008a and 2009b). Therefore, the Proposed Project would not have an effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFG or USFWS. Thus, no impacts to riparian or other natural habitats would occur.

d. **No Impact.** The project site is not located within an area that possesses the proper vegetation (i.e., a preponderance of hydrophytes or "water-loving" plants), soils (i.e., hydric or waterlogged soils), or hydrologic conditions (i.e., inundated either permanently or periodically or saturated during the growing season of the prevalent vegetation) to be defined a wetland according to the U.S. Army Corps of Engineers' (USACE) *Wetlands Delineation Manual* (1984). The project site has been previously disturbed by existing development and does not contain any wetlands. Based on USFWS National Wetlands Inventory data (USFWS, 2009) and field observations on the project site (ESA, 2009b), redevelopment of the site would have no impact on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Therefore, the Proposed Project would have no impacts to habitats protected under Section 404 of the Clean Water Act.

e. **Less than Significant Impact.** Implementation of the Proposed Project would not interfere 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. The project site is currently developed and located in an urban environment surrounded by, residential, institutional, and mixed-use development. Wildlife corridors are generally defined as avenues along which wide-ranging animals can travel, plants can propagate, genetic interchange can occur, populations can move in response to environmental changes and natural disasters, and threatened species can be replenished from other areas. The project site does not contain any such wildlife corridors. Therefore, the Proposed Project would have a less than significant impact and no additional mitigation is required.

f. **Less than Significant with Mitigation Incorporated.** There are several mature trees, as well as natural and ornamental vegetation, located throughout the project site. Demolition activities associated with the Proposed Project would include the removal of on-site vegetation; including mature trees located in the interior of the project site. As shown in Figure 5, there is one mature oak tree that occurs on the project site, a canyon live oak (*Quercus chrysolepis*). As a part of the Proposed Project, this tree would be left in place. However, demolition and construction activities associated with the Proposed Project would have the potential to encroach and inadvertently damage this oak tree. Implementation of **Mitigation Measure BIO-2** would reduce potential impacts to the oak tree to a level of less than significant. All trees located along E. Parkcrest Street would also be left in place. There are trees along the northern perimeter of the site that

appear to be on the project site, but are part of the Campfire USA park. None of these trees would be disturbed.

Mitigation Measure BIO-2:

1. A plan shall be developed for protecting the oak tree located on the project site during and after demolition and, construction activities, and operation of the Proposed Project. This plan shall be approved by a qualified biologist.

2. Prior to construction activities, temporary protective chain link fencing shall be placed to demarcate the protected zone of the oak tree located on the project site. The protective zone is defined as the area located within 15 feet from the trunk of the oak tree or 5 feet from the tree's canopy, whichever distance is greater. A certified arborist shall verify that fencing is installed prior to initiation of construction activities.

3. To avoid damaging the oak tree's roots, a certified arborist shall be present during all excavation, grading or trenching that would occur within the protected zone of the oak tree. Trenching within the protected zone shall be achieved with hand tools only. No roots greater than two inches in diameter shall be cut. Any major roots encountered shall be conserved and treated as recommended by a certified arborist.

4. Care must be taken to limit grade changes near the oak tree. Grade changes can lead to plant stress from oxygen deprivation or oak root fungus at the root collar of oaks. Minor grade changes further from the trunk are not as critical, but can negatively affect the health of the tree if not carefully monitored by a certified arborist. The grade shall not be lowered or raised within the protected zone of the oak tree.

5. No storage of equipment, supplies, vehicles or debris shall be permitted within the protected zone of the oak tree.

6. No dumping of construction wastewater, paint, stucco, concrete, or any other clean-up waste shall occur within the protected zone of the oak tree.

7. No temporary structures shall be placed within the protected zone of the oak tree.

8. Pruning of the oak tree may include the removal of dead wood, stubs, and medium pruning of branches two inches in diameter or less, and shall be in accordance with the guidelines published by the National Arborist Association. In no case shall more than 20 percent of the tree canopy of the oak tree be removed. Cuts over two inches in diameter shall be verified and monitored by a certified arborist.

9. Irrigation water shall not reach within the protected zone of the oak tree.

10. Grass or ground covers shall not be planted within the protected zone of the oak tree.

Significance after Mitigation: Less than significant.

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with this measure.

g. **No Impact.** Los Angeles County has designated specific areas as Significant Ecological Areas (SEA). The SEA designations are based on scientifically grounded concepts regarding the size and type of linkage systems necessary to sustain the biologically diverse plant and animal species that are found within the County. The project site is not located within or proximate to any SEA or any other sensitive habitats; therefore, no impacts would occur and no mitigation is required.

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4E.	**CULTURAL RESOURCES.** Would the project:				
	a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
	b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
	c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
	d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Explanation:

a. **No Impact.** Section 15064.5(a)(3) of the *CEQA Guidelines* generally defines historical resources as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals. A project would have a significant effect if it would cause a substantial adverse change in the significance of a historical resource, which is either listed or eligible for listing on the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), or a local register of historic resources. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Similarly, to be eligible for the CRHR, a historical-period property must be considered a significant resource at the local, state, and/or federal level. Unless the property possesses exceptional significance, it must be at least 50 years old to be eligible for NRHP listing.

The existing middle school is proposed for demolition, and is greater than 50 years old. As a result, a survey was performed to determine historical significance (see **Appendix D**). As provided in the Historical Survey Report, the Proposed Project would not cause a change in the significance of such resources (ESA, 2009c).

A project-specific cultural resources literature and records search was conducted at the California Historic Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC) on November 24, 2008. This records search included an

examination of previous cultural resources survey coverage and reports, and known cultural resources within a half-mile radius of the project site. Other sources that were reviewed included the California Points of Historical Interest (PHI), the California Historical Landmarks (CHL), the California Register of Historic Places (California Register), the National Register of Historic Places (National Register), the California State Historic Resources Inventory (HRI), and historic maps. The results of this search indicated that there are no properties listed on the California Points of Historical Interest, California Historical Landmarks, the California Register of Historic places, or the National Register of Historic Places within a 0.5-mile radius of the project site.[2]

Cecil B. DeMille Middle School was built in 1956 by local architect Kenneth S. Wing. Although Cecil B. DeMille Middle School is of sufficient age and retains sufficient physical integrity, it does not appear to qualify as an historical resource as defined by federal or state evaluation criteria A/1 through D/4 or the City of Long Beach Historical Landmark Designation criterion F.

Cecil B. DeMille Middle School it is not considered an historic resource for the purposes of CEQA as it: (1) has not been listed in the City's local register; (2) has not been included in any historic resource survey completed pursuant to Public Resources Code section 5024.1(g); (3) is only one of numerous works designed by Mr. Wing within the City; and (4) does not exhibit any special or unique characteristics of Mr. Wing's work (see Appendix D for a more detailed evaluation). Thus, impacts associated with the Proposed Project to the Cecil B. DeMille Middle School are not considered significant for purposes of CEQA.

b. **Less than Significant with Mitigation Incorporated.** The Proposed Project would not cause a change in the significance of an archaeological resource. The project site is located in an urban area within the County of Los Angeles and has previously been developed. An SCCIC records search for the project site did not identify any archaeological resources within 0.5-mile radius of the project site.[3] A Sacred Lands Search for the project site and its vicinity was requested from the Native American Heritage Commission (NAHC). A response was received on December 2, 2008 (see Appendix D). Sacred Lands Search results prepared by the NAHC indicates the potential lack of presence of Native American cultural resources in the immediate project area NAHC, 2008). The NAHC results also noted, however, that the absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area.

Follow-up correspondence was conducted with all Native American individuals and groups indicated by the NAHC as having affiliation with the project area (see Appendix D). Follow-up correspondence consisted of a letter sent via certified mail describing the

2 A database search of the South Central Coastal Information Center, *California Historical Resources Information System: Records Search for ECATS Project*, was performed on November 24, 2008. This information is confidential to protect such resources from disturbance and are not included with this Initial Study.

3 *Ibid.*

Proposed Project and a map indicating the project area. Recipients were requested to reply with any information they are able to share about Native American resources that might be affected by the Proposed Project. No responses have been received to date. No archaeological resources are known to exist in or near the project site and its vicinity, and the area has been previously disturbed by the construction of the school. However, the project area's location near major water sources, particularly the San Gabriel River, would have made it an ideal place for prehistoric settlement, and since the Proposed Project would involve ground-disturbing activities that could extend into undisturbed soil, it is possible that such actions could unearth, expose, or disturb subsurface archaeological, historical, or Native American resources that were not observable on the surface. Therefore, **Mitigation Measure CUL-1** is recommended in order to avoid significant impacts:

Mitigation Measure CUL-1: *Cultural Resources.* Any accidental discovery of cultural resources during construction shall be evaluated by a qualified archaeologist. If the find is determined to be potentially significant, the archaeologist, in consultation with the District's Facilities Development and Planning Branch and appropriate Native American group(s), shall develop a treatment plan. All work in the immediate vicinity of the unanticipated discovery shall cease until the qualified archaeologist has evaluated the discovery, or the treatment plan has been implemented.

Significance after Mitigation: Less than significant.

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with this measure.

c. **Less Than Significant with Mitigation Incorporated.** The Proposed Project would not have the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. The project area is underlain by younger (Quaternary) alluvium, which is generally too young to be fossil bearing (Saucedo, 2003). Shallow excavation in this formation is unlikely to uncover significant fossils. However, it is possible, although unlikely, that excavations may extend into the more paleontological sensitive older Quaternary deposits and inadvertently uncover paleontological resources. With implementation of **Mitigation Measure CUL-2**, the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature would be reduced to a less than significant impact:

Mitigation Measure CUL-2: *Paleontological Resources.* If paleontological resources are encountered during the course of construction and monitoring, the District's Facilities Development and Planning Branch shall halt or divert work and notify a qualified paleontologist who shall document the discovery as needed, evaluate the potential resource, assess the significance of the find, and develop an appropriate treatment plan in consultation with the District's Development and Planning Branch.

Significance after Mitigation: Less than significant.

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with this measure.

d. **Less than Significant with Mitigation Incorporated.** The Proposed Project would not disturb any human remains. The land use of the project site is not designated for cemetery uses and no known human remains exist on the project site. No ancient burial sites are known to exist near the project area (NAHC, 2008). However, even though the potential for human remains occurring on-site is considered unlikely, it is possible that construction activity could unearth previously unknown human remains. As such, implementation of **Mitigation Measure CUL-3** would reduce potential impacts to a less-than-significant level:

Mitigation Measure CUL-3: If human remains are encountered unexpectedly during construction excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission. The NAHC will then identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who will then help determine what course of action should be taken in dealing with the remains.

Significance after Mitigation: Less than significant.

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with this measure.

Issues (and Supporting Information Sources):	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
4F. GEOLOGY AND SOILS. Would the project:				
a. Expose people or structures to 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?	☐	☐	☒	☐
(ii) Strong seismic ground shaking?	☐	☒	☐	☐
(iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
(iv) Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4F.	**GEOLOGY AND SOILS.** Would the project:				
	c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
	d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☒	☐	☐
	e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Explanation:

a.(i) **Less than Significant Impact.** Long Beach, similar to the majority of Southern California, is located within a seismically active region due to its location between the North American and Pacific tectonic plates (ASE, 2009). The project site is located on the Los Alamitos Quadrangle of the State of California Seismic Hazard Zones Mapping program, and near the Southwestern boundary of the Central Block of the Los Angeles Basin (ASE, 2009). The Los Angeles Basin is a large, northwest-trending synclinal depression at the southern end of the Traverse Ranges Geomorphic Province of California. The Central Block, atop which the project site lies, is bounded by the active Newport – Inglewood Fault zone and the active Whittier-Elsinore Fault zone. In general, the principal sources of seismic activity in this area result from movement along the area's northwest – trending regional faults, which include the San Andreas Fault, the San Jacinto Fault, the Newport – Inglewood Fault, and the Whittier-Elsinore Fault.

As stated in the *Report of Final Geotechnical Investigation* for the Proposed Project, the site is not located within an Alquist-Priolo Fault-Rupture Hazard Zone, as designated by the Alquist-Priolo Earthquake Fault Zoning Act (see **Appendix E**) (ASE, 2009). Furthermore, no active or potentially active faults are known to pass though the immediate vicinity of the project area, and no evidence of active or potentially active faulting was observed during site reconnaissance (ASE, 2009). The closest known fault located within proximity of the project site is the Newport-Inglewood Fault, which is located approximately 4.1 miles southwest of the site. In addition, the Whittier – Elsinore Fault is located approximately 7.3 miles northeast of the site (ASE, 2009). Other nearby active faults include the Puente Hills Blind Thrust Fault and the Palos Verdes Fault, located approximately 8.1 miles and 11.4 miles away, respectively. As such, the Proposed Project would not expose people or structure to rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. Impacts are considered less that significant for the Proposed Project, and no mitigation is required.

a.(ii) **Less than Significant Impact with Mitigation.** The potential severity of groundshaking depends on many factors, including the distance from the originating fault, the earthquake magnitude, and the nature of the earth materials beneath a given project site. As mentioned above, the project site is located in a seismically active region of Southern California, though not within an Alquist-Priolo Earthquake Fault zone (ASE, 2009). Nonetheless, although the potential for fault surface rupture at the project site is considered remote, the project site could be expected to experience strong seismic ground shaking over the life of the Proposed Project (ASE, 2009).

The Proposed Project's structures would be constructed in accordance with the seismic requirements found in Chapters 16 and 18 of the 2007 California Building Code (CDC, 2007), as well as in accordance with the seismic design parameters intended for structures located in Seismic Zone 4 (ASE, 2009). Furthermore, the Proposed Project would also implement Mitigation Measure GEO-1 to ensure compliance with the project-specific geologic and seismic recommendation made in the *Report of Final Geotechnical Investigation* for the ECATS (see Appendix E).[4] Compliance with the established seismic standards for development within California, as well as with the recommendations found in the project-specific geotechnical investigation and provided as **Mitigation Measure GEO-1**, would reduce the risk of structural loss, injury, or death due to strong seismic ground shaking to a less than significant level. According to the Final Geotechnical Investigation, the major geotechnical considerations affecting the design and construction of the Proposed Project include: (1) soil disturbances as a result of site demolition and clearing operations; (2) presence of loose, low density soils within the areas of foundation bearing stratum; (3) the presence of very moist to wet soils within the recommended zone of remedial grading; (4) the existence of medium expansive soils at shallow depth that may heave unevenly upon saturation; and (5) the potential for soil liquefaction when subject to significant seismic events.

Mitigation Measure GEO-1: The Proposed Project shall comply with geologic and seismic design parameters as found in the *Report of Final Geotechnical Investigation* for the Proposed Project, completed by ASE, Inc., August 10, 2009. These parameters include but are not limited to:

- Requirements for site preparation;
- Requirements for site grading;
- Foundation design; and
- Expansive soils.

Significance after Mitigation: Less than significant.

[4] The Geotechnical Investigation was developed in a manner to comply with the *California Geological Survey, Checklist for the Review of Geological/Seismic Reports for California Public Schools, Hospitals, and Essential Services Buildings* (2007).

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with this measure.

a.(iii) **Less than Significant Impact with Mitigation.** The term "liquefaction" describes a phenomenon in which a saturated, cohesion-less soil loses strength and acquires a degree of mobility (i.e., liquidity) that results from strong seismic ground shaking during an earthquake. Several factors are known to influence the liquefaction potential of a Project site, which include: (1) soil type and depth; (2) grain size; (3) relative density; (4) depth to groundwater; (5) degree of saturation; and, (6) both the intensity and duration of seismic groundshaking (ASE, 2009). Although the damage to structures can vary, typical damage due to liquefaction consists of settlement, uplift of structures, and an increase in lateral pressure on buried structures. According to the State of California Seismic Hazards Map of the Los Alamitos Quadrangle, the project site, as well as the surrounding area, is located in an area identified as having the potential for liquefaction when subject to a seismic event resembling the "maximum probable earthquake." An earthquake of this magnitude carries a ten percent probability of occurring in 50 years (ASE, 2009).

In order to determine the full extent of liquefaction hazards associated with the Proposed Project, on-site soils were explored by means of 12 exploratory borings, which ranged in depth of from five feet to 51.5 feet (ASE, 2009). The soil material encountered during subsurface explorations generally consisted of Holocene-aged younger alluvium up to a maximum depth of 51.5 feet. These alluvial soils consisted predominantly of stratified clayey silts, clayey silts with sand, silts, silts with clay or sand, sandy silts, sandy silts with clay, silty clays, silty clays with sand, sandy clays, clays, silty sands, silty sands with clay, sands with silt, and clean sands. The soils to the maximum explored depth of 51.5 feet generally consisted of loose to dense granular soils, and firm to hard fine-grained soils (ASE, 2009).

At the time of site reconnaissance, the shallowest groundwater at the project site was encountered at an approximate depth of 18.25 feet, with the deepest groundwater encountered at an approximate depth of 40 feet (ASE, 2009). According to the California Geologic Survey (CGS), historic high groundwater within the vicinity of the project site in 1998 was approximately 20 feet below grade, while information from the Los Angeles County Public Works Department (DWP) indicated that historic groundwater in 1971 was approximately 40.9 feet below grade. As such, for the purposes of this analysis, high groundwater levels of 18.25 feet and 20 feet have been utilized.

Based on the depth to liquefaction-susceptible soil strata at the project site, as well at the project site's depth to groundwater, it is likely that surface manifestation phenomenon such as liquefaction, loss in bearing for foundation and slabs, subsidence with uneven settlement, and/or small scale lateral spreading in localized areas, may be experienced at the project site (ASE, 2009). Total liquefaction-induced settlement at the site is estimated to range from a minimum of 1.11 inches (in) to a maximum of 1.70 in (ASE, 2009). This scale of liquefaction-induced settlement is anticipated to impose moderate impacts to the Proposed Project's structures. However, as mentioned above, the Proposed Project's

structures would be constructed in accordance with the seismic requirements found in Chapters 16 and 18 of the 2007 CBC, as well as in accordance with the seismic design parameters intended for structures located in Seismic Zone 4 (ASE, 2009). In addition, the Proposed Project would also implement Mitigation Measure GEO-1, in order to ensure compliance with the project-specific geologic and seismic recommendation made in the *Report of Final Geotechnical Investigation* for the Proposed Project. Compliance with the established seismic standards for development within California, as well as with the recommendations found in the project-specific geotechnical investigation, would reduce the risk of structural loss, injury, or death resulting from liquefaction to a less than significant level. Therefore, with implementation of Mitigation Measure GEO-1, impacts for the Proposed Project are considered less than significant.

Mitigation Measure: Implement Mitigation Measure GEO-1.

Significance after Mitigation: Less than significant.

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with this measure.

a.(iv) **Less than Significant Impact.** An earthquake can cause a slope to become unstable by the inertial loading it imposes or by causing a loss of strength in the materials that comprise the slope itself. The topography of the project site and surrounding area is relatively flat, and the project site contains no areas of significant relief. In addition, according to the CGS, the project site is not located within an area identified as having a potential for earthquake-induced landslides (ASE, 2009). Further, there is no indication that recent landslides or unstable slope conditions exist on or adjacent to the project site that would otherwise result in a landslide hazards. As such, due to the lack of significant relief on or adjacent to the project site, the potential for earthquake-induced landslides is considered low. Therefore, the Proposed Project would not expose people or structures to potential substantial adverse effects related to earthquake-induced landslides. Impacts are considered less than significant for the Proposed Project, and no mitigation is required.

b. **Less than Significant Impact.** The project site is currently paved and contains 12 structures associated with the existing middle school. As mentioned above, the topography of the project site is relatively flat and contains no areas of significant relief. Construction of the Proposed Project would require some ground disruption activities including site grading, excavation for building foundations, demolition of existing buildings, and trenching for utility relocation.

Construction activities associated with the Proposed Project could induce the potential for on-site soil erosion. However, every construction project in California that causes a disturbance of one acre or more of soil through grading, clearing, and or excavation is subject to the National Pollution Discharge Elimination System (NPDES) General Construction Permit requirements, also referred to as the General Construction Permit, adopted by the State Water Resources Control Board (SWRCB) (SWRCB, 2009). This

General Construction Permit requires dischargers to develop and implement a Storm Water Pollution Prevention Plan (SWPPP), which specifies Best Management Practices (BMPs) that would prevent construction pollutants from contacting storm drains, with the intent of keeping all products of erosion from moving off-site into receiving waters. Potential BMPs could include sandbagging, sediment control, and other practices that would prevent all construction pollutants from contacting stormwater. Compliance with the regulations of the General Construction Permit and the SWPPP, as well as adherence to the site-specific BMPs, would reduce impacts related to soil erosion to a less than significant level. Implementation of the Proposed Project would therefore not result in substantial soil erosion or the loss of topsoil, and no mitigation is required.

c. **Less than Significant Impact with Mitigation.** Lateral spreading, a phenomenon associated with seismically-induced soil liquefaction, is a display of lateral displacement of soils due to inertial motion and lack of lateral support. Lateral spreading is typically exemplified by the formation of vertical cracks on the ground surface of liquefied soils, and usually takes place on gently sloping ground, or on level ground with a nearby free surface such as a drainage or stream channel. Since no areas of free surface are located on or within close proximity to the project site, the potential for occurrence of seismically-induced lateral spreading is considered unlikely at the project site (ASE, 2009).[5] In addition, as discussed above, due to the lack of significant relief on the project site, it was determined that the potential for earthquake induced landslides is low (ASE, 2009). Finally, geotechnical investigation of the site also concluded that other seismic hazards, such as tsunami, lateral spreading, or lurching are also considered to be remote (ASE, 2009).

The project site is located in an area identified as having the potential for liquefaction in the event of a maximum probable earthquake. Liquefaction-induced settlement at the site has been estimated to range from a minimum of 1.11 in to a maximum of 1.70 inches, which is anticipated to impose a moderate impact to the Proposed Project's structures. However, as mentioned above, the Proposed Project's structures would be constructed in accordance with the seismic requirements found in Chapters 16 and 18 of the 2007 CBC, as well as in accordance with the seismic design parameters intended for structures located in Seismic Zone 4 (ASE, 2009). In addition, the Proposed Project would also implement Mitigation Measure GEO-1, in order to ensure compliance with the project-specific geologic and seismic recommendation made in the *Report of Final Geotechnical Investigation* for the Proposed Project. Compliance with the established seismic standards for development within California, as well as with the recommendations found in the project-specific geotechnical investigation, would reduce the risk of structural loss, injury, or death resulting from on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, to a less than significant level. Therefore, impacts are considered less than significant with implementation of Mitigation Measure GEO-1.

5 It should be noted that the project site is located approximately 550 feet west of the San Gabriel River. However, due to the project site's distance from this area, it has been determined that the San Gabriel River would not provide enough free space to induce lateral spreading at the project site.

Mitigation Measures: Implement Mitigation Measure GEO-1.

Significance after Mitigation: Less than significant.

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with this measure.

d. **Less than Significant Impact with Mitigation.** Expansive soils possess a "shrink-swell" behavior, which is defined as a cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may occur over a long period of time due to expansive soils, usually the result of inadequate soil and foundation engineering, or the placement of structures directly on expansive soils. As mentioned above, the project site is underlain by Holocene-aged younger alluvium, which consists predominantly of stratified clayey silts, clayey silts with sand, silts, silts with clay or sand, sandy silts, sandy silts with clay, silty clays, silty clays with sand, sandy clays, clays, silty sands, silty sands with clay, sands with silt, and clean sands. Laboratory testing of near surface soils at the project site indicated a "medium" soil expansion potential, as defined by the 2007 CBC (ASE, 2009). Subsequently, lightly loaded structural elements, such as shallow foundations and slabs associated with the Proposed Project, may be subject to movements and distress due to the expansion potential of the on-site clayey/silty soils. Although certain design provisions may help alleviate the effects of soil expansion, they may not completely eliminate the potential for structural damage due to expansion. Therefore, according to the project-specific geotechnical investigation, the soil expansion potential of the site should be re-evaluated through additional testing during or after rough grading operations, in order to verify the design adequacy of foundation against the re-tested soil expansion potential (ASE, 2009).

Table 4.F-1 below presents general guidelines for the Proposed Project regarding the removal and relocation of potentially expansive on-site soils. Any on-site soil exhibiting an unsatisfactory index according to Table 4.F-1 should be thoroughly removed and re-located to an area greater than the maximum recommended depth from the finished grade, or should be blended with non-expansive soils to reduce the expansive potential prior to replacement (ASE, 2009).

TABLE 4.F-1
EXPANSIVE SOIL GUIDELINES

Soils with Expansion Index	Allowable Depth from Finished Grade
Not greater than 20	No restriction
Between 21 and 50	Below 2 feet
Between 50 and 90	Below 4 feet
Greater than 90	Below 10 feet or disposal off-site

SOURCE: ASE, 2009.

The Proposed Project's structures would be constructed in accordance with the seismic requirements found in Chapters 16 and 18 of the 2007 CBC, as well as in accordance with the seismic design parameters intended for structures located in Seismic Zone 4 (ASE, 2009). The Proposed Project would also implement Mitigation Measure GEO-1, in order to ensure compliance with the project-specific geologic and seismic recommendations made in the *Report of Final Geotechnical Investigation* for the Proposed Project. Compliance with the established seismic standards for development within California, as well as with the recommendations found in the project-specific geotechnical investigation, would reduce the risk of structural loss, injury, or death resulting from expansive soils to a less-than-significant level. Impacts are considered less than significant with implementation Mitigation Measure GEO-1.

Mitigation Measure: Implement Mitigation Measure GEO-1.

Significance after Mitigation: Less than significant.

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with this measure.

e. **No Impact.** Soils on-site would not be required to support a septic tank or alternative wastewater disposal systems as the sewage from the Proposed Project would be transported off-site and treated at the appropriate treatment plant (refer to discussion provided in 4.N., Pubic Services, for additional information).

Issues (and Supporting Information Sources):		***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
4G.	**GREENHOUSE GASES** - Would the project:				
	a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?	☐	☐	☒	☐
	b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Explanation:

a., b. **Less than Significant Impact.** The following discussion addresses both (a) and (b) of the Greenhouse Gases discussion.

Gases that trap heat in the atmosphere are known as greenhouse gases (GHGs). The accumulation of GHGs in the atmosphere regulates the earth's temperature and without these natural GHGs, the earth's surface would be about 61 degrees cooler (AEP, 2007). Emissions from fossil fuel combustion by humans have elevated the concentration of

GHGs in the atmosphere to above-natural levels. Scientific evidence indicates a correlation between increasing global temperatures/climate change over the past century and human-induced levels of GHGs. As a result of human activities, such as electricity production, vehicle use, etc., GHGs are now accumulating in the earth's atmosphere at a faster rate than has historically occurred. Increasing GHG concentrations in the atmosphere are leading to global climate change (SCAQMD, 2008a).

The principal GHGs are CO_2, methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H_2O). CO_2 is the reference gas for climate change because it is the predominant GHG emitted. SCAQMD considers GHG emissions from gasoline and diesel combustion to be comprised of approximately 98.2 percent CO_2 (SCAQMD, 2009). To account for the varying warming potential of different GHGs, emissions are often quantified and reported as CO_2 equivalents (CO_2E).

In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill No. 32; California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), which requires CARB to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020 (representing an approximate 25 percent reduction in emissions).

The Proposed Project would contribute to global climate change as a result of emissions of GHGs, primarily CO_2, emitted by project construction and operations. As with other individual and relatively small projects, the specific emissions from the Proposed Project would not be expected to individually have an impact on Global Climate Change (AEP, 2009). SCAQMD has proposed a tiered GHG screening threshold as an interim method for determining significance under CEQA (SCAQMD, 2008). Consequently, the draft CEQA GHG significance threshold (pursuant to SCAQMD's proposal) of 6,500 metric tons of CO_2E/year, was applied to determine if the Proposed Project would conflict with the state's ability to meet the AB 32 goals.

Worse-case construction of the Proposed Project's GHG emissions would occur for Construction Scenario 2 (calendar year 2010) and would be approximately 1,599 metric tons of CO_2E/yr. Without incorporating proposed design features, BMPs, and the CHPS Criteria discussed in Section 2.4.1 of this Initial Study, operational emissions of GHG from vehicle trips, space heating, and indirect energy production, would account for 4,628 metric tons of CO_2E/yr (see Appendix A for worksheets). When compared to the draft SCAQMD CEQA GHG significance threshold of 6,500 metric tons of CO_2E/year, the maximum GHG emissions for the Proposed Project are well below the draft threshold and would not conflict with the state's ability to meet the AB 32 goals.

The Proposed Project would result in a less than significant impact based on tons of CO_2E/year, nor would it conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4H.	**HAZARDS/HAZARDOUS MATERIALS.** Would the project:				
	a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
	b. Create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
	c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
	d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
	e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
	f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
	g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
	h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒
	i. Be located on a site that is (a) a current of former hazardous waste disposal site or solid waste disposal site and, if so, has the waste been removed; (b) a hazardous substance release site identified by the State Department of Health Services in a current list adopted pursuant to Section 25356 of Division 20 of the Health and Safety Code; or (c) a site that contains one or more pipelines, situated underground or above ground, which carries hazardous substances, acutely hazardous materials or hazardous wastes, unless the pipeline is a natural gas line which is used only to supply natural gas to that school or neighborhood?	☐	☐	☒	☐

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4H.	**HAZARDS/HAZARDOUS MATERIALS.** Would the project:				
	j. Be located within one-fourth mile of any facilities, which might be reasonably anticipated to emit hazardous or acutely hazardous materials, substances or waste?	☐	☐	☒	☐
	k. Be located on a site where the property line less than the following distance from the edge of respective power line easement: (a) 100 feet of a 50-133 kV line, or (b) 150 feet of a 220-230 kV line, or (c) 350 feet of a 500-550 kV line?	☐	☐	☒	☐
	l. Be located on a site that is within 1,500 feet of a railroad track easement?	☐	☐	☒	☐
	m. Be located on a site that is near a reservoir, water storage tanks or high-pressure water lines?	☐	☐	☐	☒
	n. Be located within 1,500 feet of a pipeline that may pose a safety hazard?	☐	☐	☒	☐
	o. Be located on a site that contains, or is near, propane tanks that can pose a safety hazard?	☐	☐	☐	☒
	p. Be located on a site that does not have a proportionate length to width ratio to accommodate the building layout, parking and play fields that can be safely supervised?	☐	☐	☒	☐
	q. Be located on a site where the existing or proposed zoning of the surrounding properties is incompatible with schools and may pose a health or safety risk to students?	☐	☐	☒	☐
	r. Be located on a site that is within 2,000 feet of a significant disposal of hazardous waste?	☐	☐	☐	☒

Explanation:

a. **Less than Significant Impact.** This discussion addresses the routine use or disposal of hazardous materials, as specifically applicable to Proposed Project's operational activities as opposed to temporary project construction activities. Project operations would involve the limited use of hazardous materials in the seven proposed Academy Classroom Labs associated with advanced class work and janitorial and maintenance activities. Chemicals associated with school labs could include small amounts of potentially toxic chemicals; janitorial and maintenance operations could include the use of commercial cleansers, lubricants, solvents and paints, among other things. Janitorial and maintenance materials would not be considered acutely hazardous and would be used in limited quantities at the project site. All hazardous materials used at the site in science labs would be stored, handled, and disposed of in accordance with local, county, and state laws that protect public safety and the students. Compliance with the existing regulations, including the manufacturer's product label, would ensure that no significant hazard to the public, the students or the environment would result through the routine transport, use, or disposal of

hazardous materials and no mitigation is required.

b. **Less than Significant Impact With Mitigation Incorporated.** On March 20, 2009, the District was provided with a Final Phase I Environmental Site Assessment (Petra, 2009), which identified potential hazardous materials at the project site. These hazardous materials included the presence of asbestos-containing materials (ATC Associates, Inc., 2008) contained in flooring tile, pipe elbows, drywall firewall materials, carpet mastic, roof mastic, fire door insulation, and transit pipe. Lead-containing materials were found primarily in ceramic floor tile, the porcelain drinking fountains and bathroom sinks, and ceramic base coves, as well as in some painted concrete and paint (ATC Associates, Inc., 2008). Removal of asbestos and lead-containing materials is regulated by local regulations, as well as state and federal law. However, the Final Phase I recommended soil sampling for both asbestos and lead. According to the Final Limited Phase II Investigation Report (Petra, 2009), samples were taken from the drip lines of existing buildings. Those samples were below the USEPA's Regional Screening Levels (RSL) and the Cal/EPA's Human Health Screening Levels (400 and 150 mg/kg, respectively.

According to the Final Limited Phase II Investigation Report, soil samples were also tested for naturally-occurring arsenic, often found in California soils. According to the Limited Phase II Investigation Report, these levels are below levels of significance for California Department of Toxic Substances Control (DTSC) standards. In addition, no volatile organic compounds (VOCs) were found at the site. None of any test chemicals were found to exceed USEPA or Cal/EPA standards. A copy of the Hazardous Materials Report (ATC Associates, Inc., 2008), and the Final Phase I Environmental Site Assessment (Petra, 2009) along with the Limited Phase II Investigation Report are attached as **Appendix F** and **Appendix G**, respectively.

However, because these potentially hazardous materials could pose a health threat if they are disturbed by demolition or grading and become airborne and inhaled (ATC, 2008), the hazardous materials identified on-site could create a potential impact. Implementation of **Mitigation Measures HAZ-1** and **HAZ-2** (see below), would reduce the potential for any hazardous materials found at the site to be further mitigated to a level of insignificance.

Mitigation Measure HAZ-1: To mitigate impacts related to the accidental release of LBP and ACM, the following shall be implemented during construction/demolition activities:

- Prior to the demolition work and grading at the project site, a licensed asbestos abatement removal contractor shall remove any identified Asbestos Containing Materials.
- Prior to the demolition work and grading at the project site, a licensed lead abatement removal contractor shall remove any identified Lead Based Paint.
- If during construction of the project, soil contamination is suspected, construction in the area shall stop, and the District's Facilities Development and Planning Branch shall be contacted to implement and oversee appropriate health and safety procedures

and any required investigation and/or remediation in compliance with applicable laws and regulations.

- Potentially hazardous materials such as asbestos-containing materials and lead-based paint shall be transported and disposed of off-site, in accordance with applicable laws and regulations. Disposal shall occur in a facility approved to dispose of such waste.
- The District's Facilities Development and Planning Branch shall ensure that its contractor follows the provisions of CCR, Title 8, Sections 5163 through 5167 for General Industry Safety Orders to protect the project area from being contaminated by the accidental release of any hazardous materials and/or wastes.
- The District's Facilities Development and Planning Branch shall contact the local fire agency and the County Department of Environmental Health for any site-specific requirements regarding hazardous materials or hazardous waste containment or handling.

Mitigation Measure HAZ-2: The following shall be implemented to mitigate impacts related to the accidental release of mercury, and other miscellaneous hazardous materials indentified in the Hazardous Materials Survey Report of Cecil B. DeMille Middle School, prepared by ATC Associates Inc. on December 30, 2008:

- The construction contractor shall remove all items identified and listed in the Hazardous Materials Survey (see Appendix F) as part of the pre-demolition activities in accordance with applicable federal, state and local regulations.
- A District consultant shall perform a follow-up inspection of the school facility prior to demolition to confirm the hazardous items have been removed before commencing demolition activities.

Significance after Mitigation: Less than significant.

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with these measures.

c. **Less than Significant Impact.** In addition to the existing middle school located on-site, there is one school located within a 0.25-mile radius of the project site. Grace First Presbyterian Preschool is located on 3955 N. Studebaker Road in the City of Long Beach, approximately 0.14 mile southwest of the project site. The Proposed Project would involve the handling of limited hazardous substances during project operations. However, as discussed above, with adherence to all local, county, state and federal policies and regulations related to hazardous materials, these limited hazardous substances would result in a less than significant impact. In addition, adverse impacts related to hazardous materials that could be potentially emitted during project construction and/or demolition activities would be mitigated to a level of insignificance with implementation of Mitigation Measures HAZ-1 and HAZ-2. Therefore, with respect to hazardous materials, the Proposed Project would not adversely affect schools located within the project vicinity. Impacts from the Proposed Project would be less than significant.

d. **Less than Significant Impact.** The Phase I Environmental Site Assessment (Petra, 2009) obtained and reviewed a search of pertinent federal, state, and local regulatory agency databases concerning environmental conditions on and in the vicinity of the site. The investigation was performed in conformance with the scope and limitations of the standards set forth in the ASTM Practice E 1527-05 and the EPA's All Appropriate Inquiry (AAI) regulations 40 CFR Part 312. The Phase I Environmental Site Assessment concluded that the project site has not been identified by any government agency database records as having severely contaminated soils or groundwater (see **Appendix G**).

Based on information provided as an addendum to the Phase 1 Environmental Site Assessment (Petra, 2009), the project site was found to have been listed on the Resource Conservation and Recovery Act Information, Small Quantity Generator (RCRA-SQG), Facility Index System/Facility Registry System (FINDS), and Hazardous Waste Information System/Facility and Manifest Data (HAZNET) databases. The RCRA listing was for a generator of small quantities of hazardous waste and no violations were listed. The HAZNET listing was for generation or shipment of materials requiring a waste manifest. The HAZNET materials listed were for asbestos-containing materials, PCBs, other inorganic solid waste, and laboratory waste chemicals. The assessment states, "[b]ased on the nature of the listings and the lack of recorded violations, these listings do not appear to represent a recognized environmental condition with regards to the subject site" (Petra, 2009). ESA staff also reviewed information gathered from DTSC EnviroStor database, and found that the project site is not located on a Cortese List, nor is the site located on a Federal Superfund Site (NPL), State Response Site, Voluntary Cleanup Site, School Cleanup Site, or Corrective Action Site. Furthermore, Therefore, impacts from the Proposed Project would be less than significant and no mitigation is required.

e. **No Impact.** There are no public use airports within two miles of the project site. Of the many airports located in the Los Angeles metropolitan area, the Proposed Project is located nearest to the Long Beach Airport, which is approximately 3.5 miles southwest of the project site. The project site is completely outside of the airport's airport influence area (Los Angeles County Airport Land Use Commission, 2004). The Project site is not located within an aircraft flight path or directly in line with the airport runways, nor does it include any high-rise structures that could act as a hazard to aircraft navigation. As such, the Proposed Project would not create a safety hazard for people residing or working in or adjacent to the project site as a result of proximity to an airport and no mitigation is required.

f. **No Impact.** The Proposed Project is not located within the vicinity of a private airstrip, and implementation would not result in a safety hazard for people residing or working in at the project site as a result of proximity to a private airstrip. There would be no project-related impacts associated with any private airport facilities and no mitigation is required.

g. **Less than Significant Impact.** The Proposed Project would not adversely impair implementation of or physically interfere with an adopted emergency response plan or

emergency evacuation plan. The Proposed Project does not include any uses or design features that would interfere with an adopted emergency response plan or emergency evacuation plan. Also, the project site itself is not located in an area that could interfere with an adopted emergency response plan or emergency evacuation plan. The District's School Safety and Emergency preparedness Division would require the school to prepare an Emergency Operations Plan when the school is in operation. The Proposed Project would therefore implement this requirement as necessary. Thus, impacts related to adversely affecting implementation of or physically interfering with an adopted emergency response plan or emergency evacuation would be less than significant and no mitigation is required.

h. **No Impact.** The Proposed Project would not expose people or structures to the risk of wildland fires. The area surrounding the project site does not contain highly flammable brush or grass. Trees exist within the project site and the adjacent Campfire USA property and were planted as part of the overall landscaping of both sites, in areas routinely subject to irrigation. However, the quantity and density of existing trees would therefore not pose a substantial fire risk. In addition, both the project site and Campfire USA property are surrounded by urban development. Therefore, there are no wildlands located within the project vicinity. The Proposed Project would have no impact and no mitigation is required.

i. **Less than Significant Impact.** The Phase I Environmental Site Assessment determined that the project site is not located on a former hazardous waste disposal site, solid waste disposal site, or hazardous substance release site (see Appendix G). Pursuant to Title 5 of the California Code of Regulations, a Pipeline Safety Hazard Assessment (PSHA) was prepared for the Proposed Project by ESA in February 2009 (see **Appendix H**). The PSHA determined that the project site does not contain any pipelines situated underground or above ground that carry hazardous substances, acutely hazardous materials or hazardous wastes. Therefore, impacts related to proximity of the Proposed Project to former hazardous waste disposal sites would be less than significant and no mitigation is required.

j. **Less than Significant Impact.** The Phase I Environmental Site Assessment conducted a search of the project vicinity for facilities that might reasonably be anticipated to emit hazardous substances within a minimum of one-quarter mile of the project site. The report concluded that there are no known facilities within one-quarter mile of the project site that might be reasonably anticipated to emit hazardous substances (see Appendix G). Therefore, the Proposed Project would have a less than significant impact and no mitigation is required.

k. **Less than Significant Impact.**

(a) A High Voltage Power Transmission Line Evaluation (Evaluation) was prepared for the Proposed Project by ESA in October 2009 (see **Appendix I**). The Evaluation identified 66 kV transmission lines located along the west side of Los Coyotes

Diagonal. These transmission lines cross Los Coyotes Diagonal near the Carson Street intersection and continue along the south side of Carson Street, which is located approximately 175 feet north of the Project's northern boundary. The CDE requires school site power transmission line setbacks, as established in the California Code of Regulations, Title 5, Section 14010(c), to prevent potential hazards associated with electromagnetic fields that surround transmission lines if site approval is required. Even though the Proposed Project would not require site approval, it would not encroach on the 100-foot setback. No mitigation would be required.

(b) The Evaluation determined that parallel to the project site's easterly boundary, two steel, four-leg lattice transmission towers and associated high-voltage lines exist. These lines are 230 kV and are owned and operated by Los Angeles Department of Water and Power (DWP). DWP maintains a 100-foot wide easement under the transmission lines. The western edge of the 100-foot easement abuts the eastern boundary of the project site. The required CDE setback (if a project requires site approval) from the existing 230 kV transmission lines is 150 feet from the edge of the easement. The Proposed Project would result in no changes in the relationship of the existing school to the transmission lines, and as a result the Proposed Project would result in no impact. No mitigation would be required.

(c) The Proposed Project is not located within 350 feet of a 500 to 550 kV line.

l. **Less than Significant Impact.** The Proposed Project is not located within 1,500 feet of a railroad track easement. The nearest railroad track easement is located two miles northeast of the project site and is owned by the Union Pacific railroad. As a result, impacts would be less than significant and no mitigation is required.

m. **No Impact.** The project site would not be located near a reservoir or water storage tank, or located near a high pressure water line (see Appendix I). Impacts from the Proposed Project would result in no impact related to proximity to a reservoir or water storage tank, and no mitigation is required.

n. **Less than Significant Impact.** Pursuant to the CDE pipeline safety hazard regulations, established in the California Code of Regulations, Title 5 requirements for school site selection and approval, a PSHA was prepared to identify any pipelines/pipeline facilities of concern and to estimate these facilities' individual fatality risk (IR) (see **Appendix H**). One pipeline of concern was identified 813 feet east of the project site's easterly project boundary. This pipeline is a 30-inch diameter natural gas transmission line that operates at 465 pounds per square inch gauge (psig). Approximately 3,350 feet of this pipeline lies within 1,500 feet of the proposed school site. The CDE's *2007 Guidance Protocol for School Site Pipeline Risk Analysis* (the Protocol) was used to estimate the existing pipeline's IR. The Protocol specifies an IR maximum criterion of 1.0E-06 (i.e., a one-in-one-million annual probability of a fatality to an individual). A Probability Analysis was subsequently conducted to calculate the pipeline's IR. All calculations for the Probability

Analysis were conducted according to the Protocol. The calculations revealed that the estimated total IR for the existing pipeline is 4.68E-09, which is substantially below the CDE IR criterion of 1.0E-06. Therefore, by CDE standards, the existing 30-inch natural gas transmission line would not create a significant fatality hazard to future students and staff attending the proposed school.

The PSHA also discusses risks associated with high volume water lines, which generally consist of flooding or subterranean failure (e.g., subsidence or sinkhole). The District has requested that the Long Beach Water Department (LBWD) realign a 24-inch water line that currently underlies the existing athletic fields, but which would be located where a new building would be constructed. Construction of the proposed water main would take place prior to implementation of the Proposed Project. As proposed, the water main would generally consist of a new proposed 24-inch line located along the northern property boundary; the existing 24-inch line would be abandoned. The proposed pipeline would operate at approximately 125 psig. The report determined that the potential flood distance from the proposed realignment would not affect any of the proposed structures on-site. In the event of a subterranean release, the PSHA determined that the existing subsurface geological characteristics would not tend to hazardous geological phenomenon related to subterranean saturation.

Thus, with respect to pipeline safety hazard risks, the Proposed Project would be consistent with the CDE requirements for school site selection and approval, although not required. Therefore, the Proposed Project would have less than significant impacts and no mitigation is required.

o. **No Impact.** The Phase I Environmental Site Assessment and PSHA are required to identify facilities of concern including propane tanks. Neither report indentified any propane tanks on or near the project site. Therefore, it is assumed that there are no propane tanks that could cause a significant safety hazard for those utilizing the project site. The Proposed Project would have no impact related to proximity to propane tanks and no mitigation is required.

p. **Less than Significant Impact.** The CDE Standards for School Site Selection require that school sites have a proportionate length-to-width ratio to accommodate the building layout, parking, and playfields to ensure that students can be safely supervised (2007). The project site is roughly rectangular, and encompasses approximately 24.2 acres. The Proposed Project would result in a length-to-width roughly ratio of 2:1. The Proposed Project would not result in a need for CDE site approval, because its use would not change. Sufficient site axes exist throughout the campus, making the western parking lot visible from the eastern side of the campus, and providing views through the campus at various points. However, because the ratio is proportionate and because views through the campus are available throughout the campus, the site would not result in a campus that cannot be supervised adequately and safely. Impacts would be less than significant and no mitigation is required.

q. **Less than Significant Impact.** According to the City of Long Beach Zoning Code, the project site has a zoning designation of *Institutional* (LBPD, 2008). The Institutional zoning district is established to create, preserve and enhance areas for public and institutional uses such as, but not limited to, day care centers and schools, botanical gardens, churches, cultural centers, government offices, museums and hospitals (LBPD, 2008). Surrounding zoning districts include P (*Park*), CNA (*Neighborhood Commercial Automobile-Oriented)*, PR (*Public Right-of-Way*), CHW (*Regional Highway Commercial*), and R-1-N (*Single-Family Residential, standard lot*). The City of Long Beach Zoning Map identifies P (*Park*) zones adjacent to and west of the project site, and PR (*Public-Right-of-Way*) zoning adjacent to and east of the project site along the San Gabriel River right-of-way. A parcel zoned as CAN (*Neighborhood Commercial Automobile-Oriented*) is located at the intersection of Los Coyotes Road and Studebaker Road, at the southwest corner of the project site and provides commercial uses that are normally accessed by motor vehicles, such as a restaurant. A CHW (*Regional Highway Commercial*) zone is located west of the San Gabriel River and its banks; this zoning would not affect the project site because the river provides a substantial barrier between the school and the CHW zone.

The predominant zoning in the project site vicinity is R-1-N (*Single-Family Residential, standard lot*), which extends throughout the nearby area southward and eastward. None of the surrounding zoning is incompatible with the Proposed Project, and would have little impact on the Proposed Project. Surrounding zoning districts are compatible with schools and would not pose a specific health or safety risk to students attending school at the project site. The Proposed Project would have a less than significant impact associated with surrounding zoning districts and no mitigation is required.

r. **No Impact.** The Phase I Environmental Site Assessment researched the project site and site vicinity for any areas that may contain a significant disposal of hazardous waste. The report determined that the project site is not located within 2,000 feet of an area that may contain a significant disposal of hazardous waste. Thus, the Proposed Project would have no impact related to proximity of a significant disposal of hazardous waste, and no mitigation is required.

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4I.	**HYDROLOGY AND WATER QUALITY.** Would the project:				
	a. Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
	b. Substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
	c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-or off-site?	☐	☐	☒	☐
	d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐
	e. 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?	☐	☐	☒	☐
	f. Otherwise substantially degrade water quality?	☐	☐	☒	☐
	g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
	h. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
	i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
	j. Be subject to inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

Explanation:

a. **Less than Significant Impact.** A significant impact would occur if the Proposed Project resulted in the discharge of pollutants into receiving waters, which could occur from the disturbance of soils associated with construction activities. The Proposed Project would be constructed on a mostly-paved site that is larger than one acre that is currently largely developed and is located in an urbanized area. Since the Proposed Project is greater than one acre, the construction contractor would be required to comply with NPDES General

Construction Permit requirements, and would be required to prepare and comply with the requirement of a SWPPP. The requirement of a SWPPP has been incorporated into the Project Description as a BMP, with two major objectives: to help identify the sources of sediment and other pollutants that could affect the quality of stormwater discharges; and to describe and ensure implementation of measures to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges. Furthermore, the SWPPP BMPs would: (1) prevent pollutants from contacting stormwater during all phases of construction; (2) provide a site description; (3) implement proposed post-construction controls; and (4) provide for non-stormwater management. As such, implementation of these mandatory control measures would ensure that the Proposed Project would not violate water quality standards or waste discharge requirements during construction. Therefore, with adherence to the abovementioned regulations, including adherence to the requirements of the NPDES General Construction Permit and a SWPPP, implementation of the Proposed Project would not violate water quality standards and waste discharge requirements. The Proposed Project would have a less than significant impact and no mitigation is required.

b. **No Impact.** In keeping with the City of Long Beach's stormwater requirements, the Proposed Project would not be connected to a public storm drain system. The District has taken measures to manage its stormwater by using a larger building setback from existing city streets than the existing campus, and by using playfields and landscaped areas to filter stormwater. In addition, the District proposes to use pervious pavers in the proposed student parking lot. Acting as retention basins, percolation through playfields would allow runoff to be absorbed slowly before being slowly released from the site, and trapping dirt that may wash from building walls and rooftops in the soil. Most of the Proposed Project's buildings would have sloped roofs that discharge stormwater runoff onto unpaved areas, allowing stormwater to be naturally filtered before entering area drains (off-site). All landscaping and planter areas would be irrigated with reclaimed water, so that no potable water would be used for irrigation. Therefore, the Proposed Project would not significantly or adversely impact groundwater levels or interfere with groundwater recharge when compared to existing conditions. Impacts would be less than significant, and no mitigation is required.

c. **Less than Significant Impact.** The Proposed Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river in a manner that would result in substantial erosion or siltation on- or off-site. However, construction of the Proposed Project would require earthwork activities including demolition, excavation, and grading of the site. As such, during precipitation events in particular, construction activities would have the potential to result in minor soil erosion during grading and soil stockpiling, subsequent siltation, and conveyance of pollutants into neighboring waterways. Still, the project site is currently serviced by existing drainage infrastructure. Although the San Gabriel River is located approximately 550 feet from the eastern edge of the project site, the Proposed Project would not directly alter the course of this river in any way. To address impacts resulting

from the project site's close proximity to the San Gabriel River, the Proposed Project would comply with applicable ordinances regulating drainage improvements and grading plans, as they relate to construction of on-site improvements that affect off-site drainage. (Please see (b), above, for additional discussion of stormwater drainage at the project site.) Furthermore, as mentioned above, the Proposed Project would be required to comply with the requirements of the NPDES General Construction Permit, as well as with the BMPs included in the project-specific SWPPP. Therefore, with adherence to the aforementioned water control regulations, the Proposed Project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river in a manner that would result in substantial erosion or siltation on- or off-site. Impacts are considered less than significant and no mitigation is required.

d. **Less than Significant Impact.** The Proposed Project would not substantially alter the existing drainage patterns of the site or area in such a manner that would result in flooding on- or off-site. As mentioned above, in order to address impacts resulting from the project site's close proximity to the San Gabriel River, the Proposed Project would comply with applicable ordinances regulating drainage improvements and grading plans, as they relate to construction of on-site improvements that affect drainage (Please see (b), above, for additional discussion of stormwater drainage at the project site.). In addition, the Proposed Project would be required to comply with the requirements of the NPDES General Construction Permit, as well as with the BMPs identified in the project-specific SWPPP. Compliance with these requirements would ensure that the Proposed Project would not adversely affect the local drainage system in a manner that would result in substantial flooding on-or off-site. Impacts would be less than significant for the Proposed Project, and no mitigation is required.

e. **Less than Significant Impact.** Please see the discussion provided in (b), above. The District has designed the stormwater system to accommodate the estimated stormwater runoff, which would be similar to existing levels (District, 2009). The impact of the Proposed Project on the stormwater drainage systems would be less than significant and no mitigation is required.

f. **Less than Significant Impact.** Please see the discussion provided in (a) and (b), above. The Proposed Project would not substantially degrade water quality and no mitigation is required.

g. **No Impact.** The Proposed Project would not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, a Flood Insurance Rate Map, or on any other flood hazard delineation map. According to the project-specific geotechnical investigation, the project site is designated as Zone X according to the latest FEMA Flood Insurance Rate Map, which indicates the site is not within a 100- or 500-year flood zone area (ASE, 2009). Furthermore, the Proposed Project does not involve the construction of housing units or any residential land uses. Therefore, the

Proposed Project would have no impact associated with placing housing within a 100-year flood zone and no mitigation is required.

h. **No Impact.** The Proposed Project would not place structures within a 100-year flood hazard area that could potentially impede or redirect flows. As mentioned above, the project site is designated as Zone X according to the latest FEMA Flood Insurance Rate Map, which indicates the site is not within a 100- or 500- year flood zone area (ASE, 2009). Therefore, the Proposed Project would have no impact associated with the placement of structures that would impede or redirect flows in a 100-year flood hazard zone, and no mitigation is required.

i. **Less than Significant Impact.** The Proposed Project would not expose people or structures to risk associated with a flood control basin or dam inundation. Although the project site is located adjacent to San Gabriel River, the latest FEMA Flood Insurance Rate Map shows that the project site is not located within a 100- or 500- year flood hazard zone (ASE, 2009). Furthermore, the Proposed Project is not located down slope from any nearby flood control basins or dams that could potentially inundate the site. The potential for inundation hazards, though remote, would not be exacerbated by implementation of the Proposed Project, as the Proposed Project would have established Emergency Plan, as required, for the systematic evacuation of students from classrooms and other school facilities in the event of an emergency. Therefore, impacts would be less than significant regarding inundation by levee or dam, and no mitigation is required.

j. **Less than Significant Impact.** The project site is not in an area considered susceptible to flooding from seiche, tsunami or mudflow. The project site is located approximately 6.5 miles north and east of the Pacific Ocean, and is not located adjacent to any large bodies of water; therefore, the project would not be susceptible to seismic hazards such as a tsunami (ASE, 2009). In addition, the project site's topography is flat, and is not positioned down slope from an area of potential mudflow. Therefore, the likelihood of inundation by mudflow is considered to be very remote for the project site. The Proposed Project would not be subject to significant risks associated with inundation by seiche, tsunami or mudflow and no mitigation is required.

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4J.	**LAND USE AND PLANNING.** Would the project:				
	a. Physically divide an established community?	☐	☐	☐	☒
	b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
	c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Explanation:

a. **No Impact.** The Proposed Project would not divide an established community. Land uses south of the project site include single-family residences, while land uses west of the project site consist of recreational activities associated the adjacent park. Land uses east of the project site, beyond the San Gabriel River, include community and highway commercial establishments. Land uses to the north, beyond Carson Street, include additional single-family residences. The Proposed Project would be located on a site that has been in use as a public school since 1955 (District, 2008) and that has therefore been an established part of the community for approximately 54 years. The Proposed Project would continue the longstanding presence of an educational institution at the project site. The Proposed Project would be constructed on nearly the same footprint of the existing buildings at the project site. In addition, the Proposed Project would not significantly change the land uses currently existing at the site, or create an incompatible use. The continued use of the site as a school campus would not result in a new barrier in the community that would newly divide the established surrounding community. The Proposed Project would have no adverse impacts on existing land uses in nearby communities in the area and no mitigation is required.

b. **No Impact.** The project site is designated by the City of Long Beach's *Land Use Element of the Long Beach General Plan* as *Institutional*. This land use classification is described as a "long term" land use "established for the proper citywide or subregional distribution of public services" (LBPD, 1989) such as county and state regional office buildings, academic research institutes and headquarters, colleges, universities, public schools, and other public uses.[6] As stated in the General Plan, "Institutional uses serve basic public needs over a long period of time, enduring through changes in the surrounding socio-economic development" (LBPD, 1997). In general, the Land Use Element does not provide policies and goals for schools, other than as part of a general discussion on the City's need to "maintain quality" and as part of an overall goal related to "maintaining and improving the overall quality of life" (LBPD, 1997). According to the City of Long Beach General Plan Zoning Maps, the project site has a zoning designation of

6 The City of Long Beach is currently undergoing a General Plan Update (LBPD, 2009).

Institutional (LBPD, 2008).

The *Institutional* zoning district was established to create, preserve and enhance areas for public and institutional uses such as, but not limited to, day care centers and schools, botanical gardens, churches, cultural centers, government offices, museums and hospitals (LBPD, 2008).

The Proposed Project would not require a General Plan Amendment, nor would it require a rezoning, and would conform to both the General Plan and the Zoning Map.

The project site is not located within a redevelopment plan area or within a specific plan area or any other special planning area. In addition, the site is not located within an established neighborhood or major activity center identified in the General Plan (LBPD, 1997). As a result, the Proposed Project would not substantially conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. The Proposed Project would result in no impacts associated with applicable plans and policies, and no mitigation is required.

c. **No Impact.** The Proposed Project would not conflict with any applicable Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). The Project site is not located within a habitat conservation community or a within a natural community conservation area (LBPD, 2008). The Proposed Project would have no impact on HCPs or NCCPs, and no mitigation is required.

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4K.	**MINERAL RESOURCES.** Would the project:				
	a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
	b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Explanation:

a. **No Impact.** The Proposed Project would not result in the loss of availability of a known mineral resource. The primary mineral resource within the City of Long Beach is petroleum; however, petroleum extraction operations over the last century have diminished as the amount of petroleum has diminished. Today petroleum extraction continues but on a much reduced scale in comparison to that which occurred in the past. The project site does not contain oil extraction operations nor is it a known to contain a known source of petroleum. There are no other known mineral resources on the project site or within the project vicinity that could be adversely affected by the Proposed Project

(DRP, 2008). Therefore, the Proposed Project would result in no impact to mineral resources and no mitigation is required.

b. **No Impact.** The Proposed Project would not result in the loss of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. As stated above, the project site is currently developed and is not located within an area containing petroleum or any other significant mineral resources (DRP, 2008). The project site is also located in an area where urban development has already occurred and therefore the surrounding land uses would likely preclude mining in the area. The Proposed Project would have no impact and no mitigation is required.

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4L. NOISE. Would the project result in:				
a. Result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	☒	☐
c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e. If a project is 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, or within the vicinity of a private airstrip would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Explanation:

a. **Less than Significant Impact with Mitigation Incorporated.**

Existing Noise Levels. A Metrosonics Model db3080 sound level meter was used to measure existing ambient noise levels at various locations on the project site and the surrounding area. The meter was calibrated to ensure the accuracy of the measurements. Short-term noise level measurements were taken at five locations around the project site. The noise measurement results are presented below in **Table 4.L-1** and measurement sheets are included in **Appendix J**).

Construction

The project site is separated from a residential development by Carson Street, and is located approximately 70 feet from a residential property line on the south perimeter. These uses would be considered sensitive receptors that would be exposed to noise from

the short-term construction of the Proposed Project. Noise from construction activities generally attenuates at a rate of 6 dBA to 7.5 dBA per doubling of the distance between the source and the receptor. Based on the project site layout and terrain, an attenuation of 6 dBA will be assumed. Excavation noise levels are 89 dBA at 50 feet (USEPA, 1971). Attenuated at 70 feet, these residences would experience noise levels of up to 86 dBA L_{eq} during finishing and excavation, which are the loudest of construction activities that would occur.

TABLE 4.L-1
EXISTING NOISE ENVIRONMENTS SURROUNDING THE PROJECT SITE

Location	Time Period	Leq (dBA)	Noise Sources
Site 1: Southeast side of school	Friday 12/19/08 8:12 – 8:17 PM	5-minute Leq 57 dBA	Cars dropping off students: 57 – 64 dBA School bus: 69 dBA
Site 2: Southern middle of school	Friday 12/19/08 8:20 – 8:25 PM	5-minute Leq 61 dBA	Cars dropping off students: 54 – 61 dBA School bus: 64 – 73 dBA
Site 3: Southwest side of school	Friday 12/19/08 8:29 – 8:34 PM	5-minute Leq 66 dBA	Hammering: 66 dBA School bus: 66 – 78 dBA
Site 4: Southwest side of school	Friday 12/19/08 8:39 – 8:44 PM	5-minute Leq 62 dBA	Students: 60 – 65 dBA
Site 5: Northern middle of school	Friday 12/19/08 8:47 – 8:52 PM	5-minute Leq 55 dBA	Traffic on Los Coyote Diagonal and Carson Street: 55 – 57 dBA School bell: 65 dBA

SOURCE: ESA, 2008a.

The site clearance, grading and construction period for the Proposed Project would extend for approximately 20 to 21 months. Demolition and site clearance would take begin after the 2009-2010 school year ends. Under both construction scenarios construction would begin in September 2010 and end in February/March 2012. Both scenarios are described in detail in this Initial Study in Tables 2-1 and 2-3, in the Project Description.

Construction activities could temporarily disturb sensitive receptors south of the school site. As a part of the Proposed Project, if Construction Schedule – Scenario 1 is adopted (8^{th} grade students would be on-campus during construction), the District would construct a sound wall around the construction perimeters that would most affect sensitive receptors. However, implementation of **Mitigation Measure NOI-1** would be implemented to ensure that impacts are less than significant.

Mitigation Measure NOI-1: To reduce daytime noise impacts due to construction, the District's Facilities Development and Planning Branch shall require construction contractors to implement the following measures**:**

1. Construction shall be limited to the hours of 7 AM and 7 PM on weekdays and federal holidays, between the hours of 9 AM and 6 PM on Saturdays, with no construction allowed on Sundays as established by the City of Long Beach Municipal Code (Section 8.80.202).
2. A noise disturbance coordinator shall be identified. The noise disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The noise disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad mufflers, etc.) and would be required to resolve the noise complaints. All notices sent to adjacent land uses within 300 feet of the construction site and all signs posted at the construction site shall list the telephone number and e-mail address for the noise disturbance coordinator.
3. During construction, the contractor shall outfit all equipment, fixed or mobile, with properly operating and maintained exhaust and intake mufflers, consistent with manufacturers' standards.
4. Construction will not occur during academic test periods.
5. Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. External jackets on the tools themselves shall be used where feasible. Quieter procedures, such as use of drills rather than impact tools, shall be used whenever feasible.

Significance after Mitigation: Less than significant.

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with all appropriate measures.

Project Operations

The City of Long Beach Municipal Code states that the project site is located in District 1 and would need to meet the daytime noise level requirement for that district, which is 50 decibels at the property line of the nearest receptor (Section 8.80.160). The final modifier of the noise level limits is the background noise level (the ambient noise level). As depicted in **Table 4.K-1**, existing noise levels are generally high in the area.

Traffic

The student population would decrease as a result of the Proposed Project, and would result in a decrease in trip generation. Each student dropped off at the middle school would produce one inbound and one outbound trip in each peak hour, while each student driving to the high school produces either one inbound or one outbound trip per peak hour (please see Section 2, Project Description and Section 4.P, Traffic and Circulation of this Initial Study for additional detail). Traffic volumes are forecasted to improve with implementation of the Proposed Project. Therefore, the Proposed Project would not result in a significant increase in noise levels on the roadway network due to vehicular trips.

Stationary Equipment

There are currently Heating, Ventilation, and Air Conditioning (HVAC) systems on-site, and therefore potential noise levels from HVAC systems associated with the Proposed Project would not result in a substantial permanent increase in ambient noise levels over existing conditions. Noise related to HVAC would be a less than significant impact.

Recreational Fields

Though playfields are currently in place at the project site, they will be relocated from the eastern side of the campus to the western side, and therefore may potentially affect new residences. Noise measurements were taken by ESA at a big league baseball field in 2002. The data showed noise levels between 54 and 62 dBA at 50 feet. The Proposed Project would result in an approximate 170 foot distance between the athletic fields and the nearest residential property line, which would attenuate the noise levels to between 43 and 51 dBA. Furthermore, the Proposed Project would not have permanent seating and would thus be quieter than the big league fields measured. In addition, the existing school already has used the eastern side of the campus for some athletic activities. However, the projected noise levels from recreational fields under the Proposed Project would be less than existing ambient noise, and would therefore result in a less than significant impact, and no mitigation is required.

Further, the Proposed Project operations would not be expected to change substantially from current uses. No element of project operations would result in significant noise impacts. Thus, a less than significant impact is anticipated and no mitigation is required.

b. **Less than Significant Impact.** Vibration and ground-borne noise tends to occur when physically forceful or ground-penetrating equipment is utilized, such as pile drivers or where blasting is necessary, or when development is located near a rail line. No such equipment or activities (including pile driving) would be required during construction or operations of the Proposed Project, and the Proposed Project would not be located along a rail line. Thus, the Proposed Project would not generate significant groundborne vibration or groundborne noise impacts, and no mitigation is required.

c. **Less than Significant Impact.** See the discussion under (a), above, regarding operation-related noise for issue a. above. This would be a less than significant impact with no mitigation required.

d. **Less than Significant with Mitigation Incorporated.** See the discussion regarding construction-related noise for issue a. above.

Mitigation Measure: Implement Mitigation Measure NOI-1.

Significance after Mitigation: Less than significant.

Monitoring: The District's Facilities and Planning Branch shall verify compliance with appropriate measures.

e. **No Impact.** Of the many airports located in the Los Angeles metropolitan area, the Proposed Project is located nearest to the Long Beach Airport, which is approximately 3.5 miles southwest of the project site. The project site is completely outside of the airport's airport influence area, including the airport noise contours (Los Angeles County Airport Land Use Commission, 2004). The Proposed Project would not be located on a site subject to an airport land use plan and is not located within two miles of a public airport or public-use airport, or in the vicinity of a private airstrip. Therefore, the Proposed Project would not be substantially affected by noise related to the Long Beach Airport.

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4M. POPULATION AND HOUSING. Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace substantial numbers of businesses or jobs necessitating the construction of replacement businesses elsewhere and/or creating longer travel distances for patrons and/or employees?	☐	☐	☐	☒

Explanation:

a. **No Impact.** The Proposed Project would not induce population growth in the project area, nor would it create the need for additional housing. The Proposed Project is intended to serve existing and future students in the local community. Generally, the student population in the District is expected to slowly decline over the next seven years. The Proposed Project would not result in the creation of housing or businesses that would induce or accelerate population or growth that would exceed SCAG Year 2020 projections. Additionally, the Proposed Project would be located on an existing school site, and adjacent to a number of existing roadways that currently serve the site. The project site is already served by utilities infrastructure. Therefore, the Proposed Project would not require the extension of on- or off-site infrastructure. Lastly, the Proposed Project would not include the construction of any housing or residential land uses. Therefore, the Proposed Project would not induce substantial population growth either directly or indirectly. The Proposed Project would have no impact and no mitigation is required.

b. **No Impact.** The project site does not contain any residences or housing units and does not accommodate residential use, and therefore the Proposed Project would not displace existing people or housing that would necessitate the construction of replacement housing elsewhere. The Proposed Project consists of the demolition of an existing school and

construction of a new school on an existing school site that is currently located on a parcel designated for Institutional uses by the City of Long Beach General Plan (1997). Accordingly, implementation of the Proposed Project would not require the displacement of housing or people that would require the construction of housing elsewhere. The Proposed Project would have no impact in relationship to the displacement of a substantial number of existing housing units or people.

c. **No Impact.** The Proposed Project would not involve the displacement of substantial numbers of jobs or businesses that would necessitate the construction of replacement business elsewhere. Students at the existing site would still require approximately the same number of teachers and staffing elsewhere. The Proposed Project would have no impact and no mitigation is required.

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4N. 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?	☐	☐	☐	☒
b. Police protection?	☐	☐	☐	☒
c. Schools?	☐	☐	☐	☒
d. Other public facilities (e.g., libraries, childcare, teen or senior centers)?	☐	☐	☐	☒

Explanation:

a. **No Impact.** The Proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities in order to maintain acceptable service ratios for fire protection. Fire protection services would be provided to the site by the City of Long Beach Fire Department. Fire Station 5 would be the primary responder to the project site. Fire Station 5 is located at 7575 E. Wardlow Road, approximately 0.8 mile southeast of the project site. Fire protection service needs are generally related to the size of the population and geographic area served, the number and types of calls for service, and other community and physical characteristics. Because land uses at the project site would remain the same as under current conditions, an increase in the demand for fire services resulting from the Proposed Project is not anticipated. The project site is located in an urbanized area that is void of any wildlands that may create significant fire risks to the project site. Emergency access to the site would be provided by driveways from Los Coyotes Diagonal and East Parkcrest Street, along the eastern and southern boundaries. Emergency access to the northern portion of the campus would be provided directly from a driveway at the northwestern corner of the site. Access to the eastern portion of the site would be

provided by a driveway near the southeastern corner of the campus. During construction, under either Scenario 1 or Scenario 2, the District would maintain full access to the project site. In addition, the ensure conformance with state Fire Codes, the Proposed Project would not result in hazardous street closures that would result in inadequate access to the project site. Therefore, with sufficient emergency access, and with a station located less than a mile from the project site, the Proposed Project would not generate a need for a new fire station. The Proposed Project would result in no impacts to fire protection services and no mitigation is required.

b. **No Impact.** The Proposed Project would not result in adverse physical impacts associated with the provision of new or physically altered facilities to maintain acceptable service ratios for police protection. The District maintains its own safety department to provide security for the schools within its jurisdiction. The District's School Safety and Emergency Preparedness Department would provide on-campus security for the Proposed Project. Additional officers would be made available to serve the Proposed Project as necessary. The City of Long Beach Police Department would be the secondary provider of law enforcement services within the project area and would supplement the District's School Safety Emergency Preparedness Department as needed. The police substation nearest to the project site is located at 4800 Los Coyotes Diagonal, approximately 3.4 miles southwest of the project site. The Proposed Project would not primarily rely on City of Long Beach Police Department police protection services, and would not induce population growth resulting in need for additional police services. Therefore, the Proposed Project would result in no impacts to police protection services during construction (under Scenario 1 or Scenario 2) and during operation of the Proposed Project, and no mitigation is required.

c. **No Impact.** Implementation of the Proposed Project would result in the demolition of an existing middle school and the construction of a new high school. Most of the students currently attending Cecil B. DeMille Middle School are bused to the project site from throughout the District, and other arrangements would be made for continuing middle school students. These arrangements have not been finalized by the District. Most of the District's middle schools are substantially under capacity, including schools in the existing students' attendance area (District, 2009). Construction Scenario 1 would result in 8th grade students at the site for year longer, which would further reduce a potential impact to the other District middle schools. No new school facilities would be required as a result of the Proposed Project. The Proposed Project would result in no impacts to schools, and no mitigation is required.

d. **No Impact.** The Proposed Project would not result in adverse physical impacts associated with the provision of new or physically altered facilities to maintain acceptable service ratios for any other public service. No new or altered government facilities would be required, and the Proposed Project would not contribute to increased demand for other public service facilities. The Proposed Project would have no impact and no mitigation is required.

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4O. RECREATION AND PARKS. Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Explanation:

a. **No Impact.** Implementation of the Proposed Project would not increase the use of existing neighborhood or regional parks, or any other nearby recreational facilities. The General Plan Open Space and Recreation Element identifies two parks/open spaces adjacent to the project site, along its northern perimeter and at the northwestern corner: (1) a 0.90-acre mini-park, and (2) a 153.90-acre golf course. The smaller minipark, Long Beach Campfire USA, is designated as a City Park by the City of Long Beach General Plan Open Space and Recreation Element. The City-owned golf course, Hartwell Golf Course, extends 170 feet west of the project site. The Open Space and Recreation Element includes Policy 4.8, which is to "fully utilize all recreational resources including those at public schools" (LBPD, 2002). The Cecil B. DeMille campus does not currently make use of these parks because it provides its own recreational facilities.

Physical impacts to existing recreational facilities are usually associated with population growth. As discussed above, the Proposed Project would neither directly increase the local population, nor would it indirectly induce population growth in the future. The Proposed Project would result in fewer students at the project site. Furthermore, the Proposed Project would include recreational facilities and these facilities would be available for community use after school hours. Students attending the Proposed Project would therefore not be required to use recreational facilities off-site. The Proposed Project would therefore have no impact on existing neighborhood or regional parks and no mitigation is required.

b. **No Impact.** The Proposed Project would include recreational facilities for its students and would not require the construction or expansion of off-site recreational facilities. Given that the Proposed Project is intended relieve overcrowded conditions at existing high schools in the area, the Proposed Project would not burden any facility beyond capacity by generating additional recreational users. The Proposed Project would provide adequate recreational facilities for its students and would not require the expansion of existing off-site recreational facilities that would result an adverse physical effect on the environment. Therefore, the Proposed Project would have no impact and no mitigation is required.

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4P.	**TRANSPORTATION/TRAFFIC.** Would the project:				
	a. Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☐
	b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
	c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
	d. Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☒	☐
	e. Result in inadequate emergency access?	☐	☐	☒	☐
	f. Result in inadequate parking capacity?	☐	☐	☒	☐
	g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☒	☐

Explanation:

This section is based on the *Traffic Impact Analysis, Early College Academic and Technical School, Long Beach Unified School District*, prepared by LSA, September 2009. This report is included in Appendix K of this document.

a. Less than Significant Impact.

Methodology

Level of Service (LOS) is a professional industry standard by which the operating conditions of a given intersection are measured. LOS is defined on a scale of A to F; where LOS A represents the best operating conditions and LOS F represents the worst operating conditions. LOS F facilities are characterized as having forced flow with many stoppages and low operating speeds. To determine intersection LOS, the Intersection Capacity Utilization (ICU) methodology was used. The ICU method compares the amount of traffic an intersection is able to process (capacity) to the level of traffic during peak hours (volume). The volume-to-capacity (V/C) ratio is used to determine at which LOS the intersection is operating. **Table 4.P -1** gives a description and V/C range of each LOS.

TABLE 4.P-1
DEFINITIONS FOR INTERSECTION LEVEL OF SERVICE

Levels of service (LOS) for Signalized Intersections and Unsignalized Intersections

Level of Service	Description	Signalized Intersection (V/C) Ratio	Stop-Controlled Intersection Delay (seconds per vehicle)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0.000-0.600	≤ 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>0.600-0.700	>10 and ≤ 15
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>0.700-0.800	>15 and ≤ 25
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>0.800-0.900	>25 and ≤ 35
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>0.900-1.000	>35 and ≤ 50
F	Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 1.000	> 50

SOURCE: *Highway Capacity Manual 2000*, Transportation Research Board, Washington, D.C., 2000.

SIGNALIZED INTERSECTIONS IN THE CITY OF LONG BEACH

Level Of Service	Volume to Capacity (ICU Methodology)
A	≤ 0.600
B	0.610 - 0.700
C	0.710 – 0.800
D	0.810 – 0.900
E	0.910 – 1.000
F	> 1.000

Because the ICU methodology does not provide an accurate representation of the LOS of an unsignalized intersection, the 2000 HCM methodology has been used to determine intersection LOS at unsignalized intersections within the study area (LSA, 2009). For the unsignalized HCM methodology, the LOS is presented in terms of total intersection delay (at four-way stop intersections) and approach delay of the major and minor streets (at two-way stop intersections) in seconds per vehicle. The relationship of delay and LOS at unsignalized intersections within the City of Long Beach is summarized below.

UNSIGNALIZED INTERSECTIONS IN THE CITY OF LONG BEACH

Level Of Service	Unsignalized Intersection delay per Vehicle (sec)
A	≤ 10.0
B	≤ 10.0 and ≤ 15.0
C	≤ 15.0 and ≤ 25.0
D	≤ 25.0 and ≤ 30.0
E	≤ 30 and ≤ 50.0
F	≤ 50.0

According to the City General Plan Transportation Element, the City considers LOS D to be the maximum limit of satisfactory operations for both signalized and unsignalized intersections within the City of Long Beach (City of Long Beach, 1991). Furthermore, the City of Long Beach considers project-related traffic to significantly impact an intersection if the associated V/C ratio is increased by 0.02 or more, where the final LOS is D through F.

Existing Traffic Operations

As mentioned above, LOS analysis was conducted at the above study area intersections using the traffic counts for the peak hours typically associated with high school operations (i.e. 7:00 AM to 9:00 AM and 2:00 PM to 4:00 PM). Existing counts at the five study area intersections were collected in July 2008, when the school was not in session. The traffic generated by the school was calculated using trip generation rates found in the ITE Trip Generation Manual, 7th Edition. Traffic volumes for the afternoon peak hour were collected by adding middle school traffic volumes to existing traffic counts when the school was not in session. The resulting LOS at each study area intersection is presented in **Table 4.P-2**, below.

According to the aforementioned City of Long Beach traffic criteria, all five study area intersections function acceptably during both the AM and afternoon peak hours.

Project Conditions

Project Trip Generation

In general, the trip generation rate of a particular school is affected by the distance students travel to the school, as well as by the demographics of the student population (i.e., whether or not the student has access to an automobile). According to the Institute of Transportation Engineers (ITE) Trip Generation Manual, 7th Edition, in the AM peak hour, trip generation rates for high schools range from between 0.14 to 1.15 per student,

TABLE 4.P-2
EXISTING PEAK HOUR LOS SUMMARY- STUDY INTERSECTIONS

	AM Peak Hour		Mid-Day Peak Hour	
Intersection	**ICU/ Delay**	**LOS**	**ICU/Delay**	**LOS**
#1 Los Coyotes Diagonal/Carson Street	0.732	C	0.875	D
#2 Los Coyotes Diagonal/Parkcrest Street	0.612	B	0.634	B
#3 Los Coyotes Diagonal/Studebaker Road	0.543	A	0.523	A
#4 Lees Avenue/Parkcrest Street	12.8 sec	B	10.1 sec	A
#5 Karen Avenue/Parkcrest Street	10.8 sec	B	10.8 sec	A

ICU = Intersection Capacity Utilization
LOS = Level of Service
Sec = seconds

SOURCE: LSA Associates, Inc., 2009.

with an average of 0.41 trips per student. For the afternoon peak hour, trip generation rates for high schools range from between 0.10 to 0.74 per student, with an average of 0.28 trips per student (LSA, 2008). For the Proposed Project, traffic counts from Millikan High School were used. Millikan High School is located 1.6 miles southwest of the project site and is a fully operational high school with a 2006 enrollment of approximately 4,196 students in grades 9 through 12. Cecil B. DeMille Middle School is a feeder school for Millikan High School. Traffic counts were obtained by National Data Services (NDS), an independent traffic count and survey firm. NDS surveyed Millikan High School on two typical weekdays in order to collect data regarding the number of vehicles parked on adjacent streets, the number of incoming bicycles, and the number of vehicles stopped to drop off students. Please see Appendix K for more details of those counts.

The TIA concluded that the Proposed Project would generate approximately 2,052 average daily trips (ADT), with approximately 492 AM peak hour trips and 336 mid-day peak hour trips. Projected trip generation for the Proposed Project is described further below, in **Table 4.P-3**.

Trip Distribution and Assignment

In order to determine trip distribution for the Proposed Project, the TIA examined the distribution of student populations within the surrounding area, including those from Millikan High School, as well as DeMille Middle School, which would represent future high school students at the time of project completion. The TIA determined that approximately 40 percent of students within the area travel from the southwest portion of the District, 30 percent travel from the northwest portion of the District, 20 percent travel

TABLE 4.P-3
PROPOSED PROJECT TRIP GENERATION

Land Use (Land Use Code)	Size	Units	ADT	AM Peak Hour			Afternoon Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rate									
High School (530)		Student	1.71	0.28	0.13	0.41	0.09	0.19	0.28
Trip Generation									
ECATS	1,200	Student	2,052	339	153	492	108	228	336

SOURCE: LSA Associates, Inc., 2008.

from near the project site south of Carson Street, and 10 percent travel from near the project site north of Carson Street. In addition, Carson Street, Los Coyotes Diagonal, and Studebaker Road were found to be the primary roadways utilized by vehicles traveling to and from the project site. Therefore, based on this information, the resulting trip assignment estimates for Proposed Project found approximately 40 percent of project outbound traffic travels west on Carson Street from the intersection of Los Coyotes Diagonal/Carson Street, 40 percent of project outbound traffic travels south on Los Coyotes Diagonal, 15 percent of project outbound traffic travels south on Studebaker Road, and the remaining 5 percent travels south along local roads. The Proposed Project's trip distribution and assignments are in Appendix K.

Existing Plus Project Conditions

Because the Proposed Project would replace an existing middle school with a future high school, projected high school trip generation could not be added to existing traffic counts to determine the Existing Plus Project Condition. Instead, additional counts were collected in July 2008 at the project site, for both the AM and afternoon peak hours. As mentioned above, counts were conducted during a non-holiday week when the existing middle school was not in session. This provided a base where projected high school traffic could be added to existing nonschool traffic to determine the Existing Plus Project Condition. Traffic volumes for the Existing Plus Project Condition are shown in **Table 4.P-4.**

For each of the five study area intersections surrounding the project site, LOS with the Proposed Project meets or exceeds the City's criteria. Furthermore, traffic operations at the study area intersections are, in fact, forecast to improve after the replacement of the existing middle school with the proposed high school due to the following reasons:

- The student population at the new school will be approximately the same as the existing school;

TABLE 4.P-4
EXISTING AND EXISTING PLUS PROJECT CONDITION LEVELS OF SERVICE

	Existing No Project				Existing Plus Project			
	AM Peak Hour		Afternoon Peak Hour[a]		AM Peak Hour		Afternoon Peak Hour[a]	
Intersection	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS
Los Coyotes/Carson St	0.732	C	0.875	D	0.726	C	0.871	D
Los Coyotes/Parkcrest St	0.612	B	0.634	B	0.562	A	0.615	B
Los Coyotes/Studebaker Rd	0.453	A	0.523	A	0.430	A	0.492	A
Lees Ave/Parkcrest St	12.8 sec	B	10.1 sec	A	9.4 sec	B	9.4 sec	A
Karen Ave/Parkcrest St	10.8 sec	B	10.8 sec	A	9.0 sec	A	9.1 sec	A

[a] Afternoon school peak hour, which is typically between 2:00 PM and 4:00 PM

ICU = intersection capacity utilization
LOS = level of service
sec = seconds

- ITE surveyed trip generation rates are lower for high school (530) than for middle school (522); and
- Each student dropped off at the middle school produces an inbound and an outbound trip in each peak hour, while each student driving to the high school produces either one inbound or one outbound trip per peak hour.

Cumulative (2012) Baseline Condition

The Cumulative (2012) Baseline Condition traffic forecasts include a determination of the annual ambient traffic growth rate combined with specific related development projects in the area. The ambient growth rate accounts for projects that would occur in the future, but are not yet known, and smaller projects that are not on the local jurisdiction's list of related projects. See the TIA in Appendix K for information on how the ambient growth rate was determined. The Cumulative (2012) Baseline Condition does not account for the traffic caused by the Proposed Project. Two future projects within proximity of the Proposed Project include: (1) the addition of a Culinary Arts Center to Long Beach City College; and, (2) Douglas Park, located north of Long Beach Airport. However, because the Culinary Arts Center would not be completed before the Proposed Project's completion date, this structure's projected trips were not factored into the TIA analysis (LSA, 2009). Therefore, the only related project considered for the Cumulative (2012) Baseline Condition is Douglas Park, for which grading is currently taking place. LOS values at all five study intersections for the Cumulative (2012) Baseline Condition are summarized in **Table 4.P-5**.

TABLE 4.P-5
CUMULATIVE (2012) BASELINE CONDITION LEVELS OF SERVICE

	Intersection	AM Peak Hour ICU/ Delay	AM Peak Hour LOS	Afternoon Peak Hour[a] ICU/ Delay	Afternoon Peak Hour[a] LOS
1	Los Coyotes/Carson St	0.753	C	0.909	E
2	Los Coyotes/Parkcrest St	0.632	B	0.654	B
3	Los Coyotes/Studebaker Rd	0.467	A	0.539	A
4	Lees Ave/Parkcrest St	13.1 sec	B	10.2 sec	B
5	Karen Ave/Parkcrest St	11.0 sec	B	10.9 sec	B

[a] Afternoon school peak hour, which is typically between 2:00 PM and 4:00 PM

ICU = intersection capacity utilization
LOS = level of service
sec = seconds

As shown above, all five study area intersections are projected to operate at acceptable LOS during the AM peak hour. However, during the afternoon peak hour, the intersection of Los Coyotes Diagonal/Carson Street is projected to function at LOS E, which exceeds the City of Long Beach traffic impact criteria for this intersection. All other study area intersections would operate at acceptable LOS during the afternoon peak hour under the Cumulative (2012) Baseline Condition.

Cumulative (2012) Baseline Plus Project Conditions

To determine Cumulative (2012) Baseline Plus Project Conditions, the estimated trip generation from the Proposed Project was added to the Cumulative (2012) Baseline Conditions, which were determined as described above. The Cumulative (2012) Baseline Plus Project Conditions are summarized in **Table 4.P-6.**

As indicated in **Table 4.P-7**, with implementation of the Proposed Project, all five study area intersections are projected to operate at the same LOS as without the Proposed Project during both the AM and afternoon peak hour. Moreover, with implementation of the Proposed Project, operations at the intersection of Los Coyotes Diagonal/Carson Street are projected to improve slightly. Thus, although the LOS would remain at the unacceptable LOS E, intersection operations would not degrade any further so would not pose a significant project impact. As previously mentioned, this is primarily caused by a lower student population anticipated for the Proposed Project than that at the current middle school, as well as by the lower trip generation rates at high schools when compared to middle schools.

TABLE 4.P-6
CUMULATIVE (2012) BASELINE AND CUMULATIVE BASELINE PLUS PROJECT CONDITION LEVELS OF SERVICE

		Existing No Project				Existing Plus Project			
		AM Peak Hour		Afternoon Peak Hour[a]		AM Peak Hour		Afternoon Peak Hour[a]	
Intersection		ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS
1	Los Coyotes/Carson St	0.753	C	0.909	E	0.746	C	0.904	E
2	Los Coyotes/Parkcrest St	0.632	B	0.654	B	0.574	A	0.631	B
3	Los Coyotes/Studebaker Rd	0.467	A	0.539	A	0.440	A	0.506	A
4	Lees Ave/Parkcrest St	13.1 sec	B	10.2 sec	B	9.4 sec	B	9.4 sec	A
5	Karen Ave/Parkcrest St	11.0 sec	B	10.9 sec	B	9.0 sec	A	9.1 sec	A

[a] Afternoon school peak hour, which is typically between 2:00–4:00 p.m.

ICU = intersection capacity utilization
LOS = level of service
sec = seconds

Summary of Traffic Impacts for the Proposed Project

According to the City of Long Beach significance criteria, prior to implementation of the Proposed Project all five study are intersections were found to operate at an acceptable LOS. With implementation of the Proposed Project, the project-related V/C increase at the five study intersections does not result in a significant impact during the AM or afternoon peak hours. Furthermore, as mentioned above, the LOS at the intersection of Los Coyotes Diagonal/Carson Street is projected to improve slightly with implementation of the Proposed Project due to project-specific traffic improvements at Los Coyote Diagonal and East Parkcrest Street. Therefore, the Proposed Project would not cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system, which could potentially result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections.

As described in Chapter 2, Project Description, the Proposed Project may, depending on several variables, including funding, incorporate other uses, such as adult education and summer school. The number of summer school attendees would not exceed 1,200, which is the number of students that would attend the Proposed Project during the regular session. Adult education would not result in peak hour trips, and would be scheduled to avoid peak hour trips in the area. As such, impacts for the Proposed Project are considered less than significant, and no mitigation is required.

TABLE 4.P-7
LOS COYOTES DIAGONAL DELAY SUMMARY

		Existing No Project				Existing Plus Project			
		AM Peak Hour		Afternoon Peak Hour[a]		AM Peak Hour		Afternoon Peak Hour[a]	
Intersection		ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS
1	Los Coyotes/Carson St	23.2 sec	C	25.6 sec	C	21.3 sec	C	26.0 sec	C
2	Los Coyotes/Parkcrest St	6.9 sec	A	5.2 sec	A	5.6 sec	A	5.3 sec	A
3	Los Coyotes/Studebaker Rd	9.7 sec	A	10.7 sec	B	11.4 sec	B	10.5 sec	B
		Future No Project				**Future Plus Project**			
		AM Peak Hour		Afternoon Peak Hour[a]		AM Peak Hour		Afternoon Peak Hour[a]	
Intersection		ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS	ICU/ Delay	LOS
1	Los Coyotes/Carson St	21.3 sec	C	27.2 sec	C	21.8 sec	C	27.4 sec	C
2	Los Coyotes/Parkcrest St	4.8 sec	A	5.7 sec	A	5.8 sec	A	5.4 sec	A
3	Los Coyotes/Studebaker Rd	10.6 sec	B	11.1 sec	B	11.7 sec	B	10.9 sec	B

[a] Afternoon school peak hour, which is typically between 2:00–4:00 p.m.

ICU = intersection capacity utilization
LOS = level of service
sec = seconds

b. Less than Significant Impact. The Congestion Management Program (CMP) was created statewide as a result of Proposition 111, and is currently being implemented locally in Los Angeles County by the Metropolitan Transit Authority (MTA). The CMP requires that the traffic impact of individual development projects of potential regional significance be analyzed. According to the CMP Traffic Impact Analysis Guidelines developed by MTA, a traffic impact analysis is required given the following conditions for intersections and mainline freeways:

- CMP arterial monitoring intersections, including freeway on- or off-ramps, where the Proposed Project would add 50 or more trips during either the am or pm weekday peak hours.
- CMP freeway monitoring locations where the Proposed Project would add 150 or more trips, in either direction, during either the am or pm weekday peak hours.

According to the CMP, a significant impact would occur if the Proposed Project added 50 or more trips to any of the CMP arterial monitoring stations. Based on the projected trip generation rates for the Proposed Project, it is anticipated that the Proposed Project would not add more than 50 trips at any of the CMP arterial monitoring stations near the project site, including at the nearest CMP monitoring station, which is located at the intersection of Lakewood Boulevard and Carson Street, approximately 2.5 miles west of the project

site. As mentioned above, with implementation of the Proposed Project, the project-related V/C increase at the five study intersections does not result in a significant impact during the AM or afternoon peak hours. Furthermore, the LOS at the intersection of Los Coyotes Diagonal/Carson Street is projected to improve from LOS E to LOS D with implementation of the Proposed Project due to project-specific traffic improvements at the intersection of Los Coyotes Diagonal and East Parkcrest Street. Therefore, neither a CMP intersection analysis, nor a CMP mainline freeway a segment analysis, was deemed necessary for the Proposed Project.

In conclusion, the Proposed Project would not result in significant impacts to traffic according to the CMP significance thresholds for intersections or freeways, as set forth in the 2004 Congestion Management Program for Los Angeles County. Therefore, the Proposed Project would not exceed, either individually or cumulatively, a LOS standard established by the county congestion management agency for designated roads or highways. Impacts for the Proposed Project would be less than significant, and no mitigation is required.

c. **No Impact.** The project site is located in an urban setting and is not located within two miles of any public airport or private airstrip. Of the many airports located in the Los Angeles metropolitan area, the Proposed Project is located nearest to the Long Beach Airport, which is approximately 3.5 miles southwest of the project site. The project site is completely outside of the airport's airport influence area (Los Angeles County Airport Land Use Commission, 2004). The project site is not located within an aircraft flight path or directly in line with the airport runways, nor does it include any high-rise structures that could act as a hazard to aircraft navigation. As such, the Proposed Project would not result in an increase in air traffic levels or a change in location of air traffic patterns that would result in substantial safety risks, as air traffic patterns would not be affected (i.e., the only mode of transport affected by the project is automobile operations). Therefore, the Proposed Project would not result in a change in air traffic patterns, or create a safety hazard for people residing or working in or adjacent to the project site. The Proposed Project would have no impact, and no mitigation is required.

d. **Less than Significant Impact.** As mentioned above, the Proposed Project would not cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system, or potentially result in a substantial increase in either the number of vehicle trips, the V/C ratio on roads, or congestion at intersections. Furthermore, with implementation of the Proposed Project, operational land uses at the project site would not differ substantially from those currently existing on-sites. Therefore, due to the similarity in land uses, the Proposed Project would not substantially increase hazards due to a design feature or due to incompatible uses. As previously mentioned, current deficiencies at the intersection of Los Coyotes Diagonal/Studebaker Road are inherent to an existing condition that would not worsen because of the Proposed Project. The Proposed Project would include a reconfiguration of the intersection of Los Coyotes Diagonal/Parkcrest Avenue, which is a T-intersection (three-legged) with two northbound lanes, three southbound lanes, and two westbound lanes. This

intersection is located approximately 100 feet north of the intersection of Los Coyotes Diagonal/Studebaker Road. The Proposed Project would not worsen existing conditions at this intersection (LSA, 2009). However, for both safety concerns and because of the number of AM peak hour trips, the District proposes to restripe the southbound approach to the intersection to include one left-turn land and two through lanes (one to Los Coyotes Diagonal and the other to Studebaker Road). The signal phasing at the intersection would be changed to include a left-turn-only signal phase. These changes would allow safe turns onto eastbound Parkcrest Avenue from Los Coyotes Diagonal.

The Proposed Project would have no further responsibility to implement any changes to the current intersections or corridors. This would be the sole responsibility of the City of Long Beach (LSA, 2009). As such, the Proposed Project would have a less than significant impact regarding hazards due to a design feature, or incompatible land uses, and no mitigation is required.

e. **Less than Significant Impact.** As illustrated in the TIA (see Appendix K), access to the project site would continue to be primarily provided from Parkcrest Street. Two driveways along Parkcrest Street would provide access to the site, which include: (1) a full-access driveway (Driveway 2) into the student and visitor parking lot; and, (2) the bus drop-off/pick-up area entrance/exit (Driveway 3). Access to the faculty parking lot would be provided through the student and visitor parking lot driveways. In addition to the two driveways on Parkcrest Street, a right-in/right-out driveway (Driveway 1) from Los Coyotes Diagonal will access the student and visitor parking lot, as well as the faculty parking. Currently this driveway provides access to an unpaved road facilitating maintenance of the athletic fields; however, the existing concrete median on Los Coyotes Diagonal and placement of a new "Right Turn Only" sign at the exit of the student and visitor parking lot onto Los Coyotes Diagonal would guarantee that no left turns are made into or out of this driveway. This median will continue to be maintained and will be landscaped after project opening, ensuring that the driveway on Los Coyotes Diagonal will continue to be right-in/right-out only. The "Right Turn Only" sign would be implemented as part of the Proposed Project.

The Proposed Project would reduce the number of students being dropped off on Parkcrest Street by providing a drop-off area along a loop road between the student parking area full-access driveway (Driveway 2) on Parkcrest Street, and the right-in/right-out access on Los Coyotes Diagonal (Driveway 1). The provision of this drop-off area would reduce the number of vehicles related to school activity along Parkcrest Street. This analysis assumes full access from the student and visitor lot to the parent drop-off loop at both the north and the south connections. As analyzed, the primary access to the school for parents dropping off students would be Los Coyotes Diagonal/Parkcrest Street. Students and parents would then proceed to Driveway 2 and the designated drop-off area, head north to Carson Street, and exit at Driveway 1. Parents headed south on Los Coyotes Diagonal or Studebaker Road would turn into the student and visitor parking lot at the north end, exit the lot at the south end, and return to Los Coyotes Diagonal/Parkcrest Street in order to turn southbound on Los Coyotes Diagonal.

In order to determine the delay at the two project driveways located along Parkcrest Street, the TIA examined the length of forecast queues, a function of delay, in relation to the distance between driveways and intersections (LSA, 2009). The distance between Los Coyotes Diagonal and Driveway 2 is 282 ft; the distance between Driveway 2 and Driveway 3 is 105 ft; the distance between Driveway 3 and Lees Avenue is 40 ft; and, the distance between Lees Avenue and Karen Avenue is approximately 255 ft.[7] Based on site reconnaissance, it was observed that there was congestion at the intersection of Los Coyotes Diagonal/Parkcrest Street and along Parkcrest Street during the peak 15- minute period before school started, and after school ended. Therefore, due to the nature of operations and the type of land use, it is assumed that the congestion at the intersection of Los Coyotes Diagonal/Parkcrest Street and along Parkcrest Street would continue. However, the Proposed Project would also have the following major differences from the existing middle school that would help to reduce the congestion during the peak 15 minutes before and after school (LSA, 2009):

1. The proposed high school has a lower number of students than the existing middle school.
2. Vehicles currently queue to drop off or pick up students on Parkcrest Street adjacent to a residential neighborhood. Turning movements to return to Los Coyotes Diagonal also occur on the street adjacent to the residential neighborhood. The proposed site plan for the ECATS project will improve conditions during the school traffic peak hours from what is currently experienced. The ECATS plan provides an on-site drop-off/pick-up area. The majority of queuing from entering and exiting vehicles should be contained on site, with all of the queuing kept near Los Coyotes Diagonal and separate from the residential neighborhood. In addition, any pedestrian issues along Parkcrest Street resulting from existing student drop-off, would be eliminated.

Although some queuing is to be expected at the intersection of Los Coyotes Diagonal/Parkcrest Street and along Parkcrest Street during the schools peak hours, the Proposed Project would not significantly affect emergency access to the project site. The Proposed Project would comply with all applicable City of Long Beach Fire Department regulations, as well as with Title 24 of the California Building Code standard design requirements. In addition, the District would also provide the City of Long Beach Fire Department with a full site plan for review, including the location of all buildings, fences, drive gates, retaining walls or other features that might affect City of Long Beach Fire Department access. This review process, along with the District's compliance with applicable regulations and standards, would ensure that adequate emergency access would be provided to the project site. Therefore, implementation of the Proposed Project would not result in inadequate emergency access and no mitigation measures are required.

f. **Less than Significant Impact.** In order to estimate parking generation rates for a school located in the District, a parking generation survey was conducted at Millikan High School, the high school closest to the Proposed Project. As noted previously, Millikan

[7] It should be noted that the proposed offset between Driveway 3 and Lees Avenue is the same as the offset between the existing faculty parking driveway and Lees Avenue.

High School is located 1.6 miles southwest of the project site and is a fully operational high school with a 2006 enrollment of approximately 4,196 students in grades 9 through 12. Cecil B. DeMille Middle School is also a feeder school for Millikan High School. Reconnaissance of Millikan High School was performed on two typical weekdays, in order to conduct parking accumulation surveys among two parking lots between the hours of 6:30 AM and 8:30 AM In addition, once school was in session, the number of vehicles parked on roadways within walking distance of the school was also counted. The total number of parked vehicles at Millikan High School was then compared to the estimated 3,800 students in attendance (approximately 4,196 students enrolled and 94 percent average attendance).

Table 4.P-8, below, illustrates the results of the parking survey, and provides an estimate of the resulting parking demands anticipated for the Proposed Project. The number of parking spaces provided on the latest site plan (230 student and visitor parking spaces and 72 faculty parking spaces) exceeds the estimated demand (150 stalls based on the parking survey). In addition, no neighborhood parking impacts are projected as a result of the Proposed Project. Therefore, implementation of the Proposed Project would not result in inadequate parking capacity, and no mitigation is required.

g. **Less than Significant Impact**. The Proposed Project would not conflict with adopted policies, plans, or programs supporting alternative transportation within the project area. The Proposed Project includes the replacement of an existing middle school with the Proposed Project. As such, a small percentage of potential students and residents may use area transit, however, it is anticipated that demand could be handled by the current transit options available near the project site. Long Beach Transit (LBT) operates three bus routes near the project site, which include:

- LBT Route 101 Carson Street (operates Monday through Saturday)
- LBT Route 102 Spring Street (operated Monday through Friday)

TABLE 4.P-8
PARKING GENERATION

	Wednesday May 7, 2008	Thursday May 8, 2008	Average
Parking Lots			
Belen Parking Lot	166	161	163.5
Snowden Parking Lot	201	193	197
On-Street Parking			
Barbanell Street	38	39	38.5
Belen Street	33	30	31.5
Snowden Avenue	41	46	43.5
Total	**479**	**469**	**474**
Spaces per Student	0.126	0.123	0.125
Spaces for 1,200 ECATS students			**150**

- LBT Route 103 Lakewood Mall (operates Monday through Saturday)

As discussed in Table 4.P-3 above, it is anticipated that approximately 20 students would bike to school each day. In order to accommodate these students, the Proposed Project would have bicycle storage facilities located on campus. As such, the Proposed Project would not conflict with adopted policies, plans, or programs supporting alternative transportation. Impacts to alternative transportation would be less than significant with implementation of the Proposed Project, and no mitigation is required.

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4Q.	**UTILITIES AND SERVICE SYSTEMS.** Would the project:				
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Explanation:

a. **No Impact.** Implementation of the Proposed Project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (RWQCB). During construction of the Proposed Project, the District's construction contractor would be required to obtain an NPDES General Construction Permit from the RWQCB, which would outline wastewater discharge requirements and BMPs, and would require preparation of a SWPPP. The Proposed Project's effluent quality criteria would be specified, as determined by the RWQCB, based on receiving water guidelines and waste load allocations. The District's construction contractor would be required to comply with the effluent quality criteria specified within the NPDES General

Construction Permit. Impacts from the Proposed Project would therefore have no impact on wastewater treatment requirements, and no mitigation is required.

b. **No Impact.** Implementation of the Proposed Project would not require or result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities. The Long Beach Water Department is responsible for the provision of wastewater treatment facilities that serve the City. The existing on-site middle school currently serves approximately 1,200 students, whereas the Proposed Project is anticipated to serve approximately 1,200 students. Therefore, the generation of wastewater on the project site would not differ substantially from existing conditions. Additionally, because the majority of students attending the Proposed Project would be transferred from existing schools that already utilize water and generate wastewater in the surrounding area, the net increase in wastewater generation and water treatment within the City as a whole would also not be significant. The Proposed Project would have no impact on wastewater and water treatment facilities, and no mitigation is required.

c. **No Impact.** The Proposed Project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities. The project site is located in a developed area of the City of Long Beach, and is currently serviced by an existing stormwater collection and conveyance system. Since the project site is currently by a school facility with existing impervious surfaces (i.e., the school parking lots, and existing buildings and structures) the increase in runoff associated with the Proposed Project would be minimal as compared to existing conditions. Development of any necessary on-site stormwater drainage improvements would be required to comply with the NPDES regulations and applicable regional ordinances. Compliance with the policies of the NPDES General Construction Permit and all other applicable regional ordinances would ensure that construction of any new stormwater facility improvements would not result in adverse impacts. The Proposed Project would have no impact on stormwater drainage facilities and no mitigation is required.

d. **No Impact.** The LBWD is responsible for supplying water within the City limits and for ensuring that the delivered water meets applicable California Department of Health Services standards for drinking water. Since the project site is currently serviced by existing LBWD water infrastructure, and because the proposed student capacity would be comparable to student capacity at the existing school, no substantial increase in water supply requirements would be expected upon implementation of the Proposed Project. In addition, the District would comply with local, regional, and state water conservation policies and would follow standard BMPs, including Title 22 regulations, in order to reduce water consumption. The Proposed Project would result in no need for new or expanded entitlements. Therefore, the Proposed Project would have no impacts on water supply and no mitigation is required.

e. **No Impact.** Implementation of the Proposed Project would not result in inadequate capacity at the wastewater treatment facility that would serve the Proposed Project. As stated above, the student capacity of the Proposed Project is approximately the same as

number of students that currently attend the existing middle school. Since the proposed student capacity is comparable to the student capacity at the existing school, it is anticipated that no net increase in wastewater generation for the region would occur. Furthermore, the Proposed Project would be located on a previously developed site with sewer line connections that are currently serviced by the City of Long Beach. Therefore, the Proposed Project would have no impact on wastewater treatment capacity, and no need to contribute to new or expanded wastewater treatment facilities. No mitigation is required.

f. **Less than Significant Impact.** The Proposed Project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. Construction of the Proposed Project would result in the generation of solid waste including include scrap lumber, concrete, residual waste, packaging materials, plastics, and vegetation. To ensure optimal diversion of solid resources by a project, the District requires its contractors to recycle or salvage non-hazardous waste materials generated during demolition and/or new construction, to foster material recovery and reuse, and to minimize disposal in landfills. With the incorporation of these requirements into the project, impacts to landfills resulting from construction of the Proposed Project would be less than significant. Furthermore, because the proposed student capacity is comparable to the student capacity of the existing middle school, solid waste generation during operation of the Proposed Project would not differ substantially from that under existing conditions. As a result, impacts would be less than significant.

g. **Less than Significant Impact.** During construction and operation of the Proposed Project, the District would comply with all city, county, and state solid waste diversion, reduction, and recycling mandates, including compliance with the county-wide Integrated Waste Management Plan (IWMP). Therefore, impacts would be less than significant.

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4R. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:				
a. Have the potential to 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, 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?	☐	☒	☐	☐

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4R.	**MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:**				
	b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
	c. Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Explanation:

a. **Less than Significant with Mitigation Incorporated.** Although there is a possibility that archaeological or paleontological resources exist at deep levels below ground surface of the project site, the likelihood of uncovering of such resources would be considered remote. Nonetheless, the Proposed Project would have the potential to degrade the quality of the environment if archeological or paleontological resources are accidentally discovered during construction activities. Pursuant to Mitigation Measures CUL-1, CUL-2 and CUL-3, if a unique archaeological or paleontological resource is discovered during construction activities, the contractor shall halt construction activities in the immediate area and notify the District. Therefore, with the implementation of these mitigation measures, the Proposed Project would not eliminate important examples of the major periods of California history or prehistory.

As described in the discussion of Biological Resources above, the Proposed Project is located in a highly urbanized area of the City of Long Beach and does not contain any sensitive natural resources that could be disturbed as a result of the Proposed Project. The project site does contain one mature oak tree; however; implementation of the Proposed Project would not disrupt or remove this tree during either construction or operational activities. Furthermore, the Proposed Project would implement Mitigation Measure BIO-1 to ensure impacts to nesting birds remain less than significant. Because of the highly urbanized and disturbed nature of the project area, and with implementation of mitigation, the Proposed Project would not reduce the habitat of fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. Impacts from the Proposed Project would be less than significant and no additional mitigation is required. .

Mitigation Measures: Implement Mitigation Measures BIO-1, CUL-1, CUL-2, and CUL-3.

Significance after Mitigation: Less than significant.

Monitoring: The District shall verify compliance with these measures.

b. **Less than Significant with Mitigation Incorporated.** Similar to most projects within the Los Angeles Basin, implementation of the Proposed Project may result in potential impacts related to air quality that are individually limited, but cumulatively considerable. Implementation of Mitigation Measure AIR-1 would ensure that the Proposed Project's individual impacts to air quality within the region would be reduced to a less than significant level. All of the related projects included in Table 1-1 would also be required to comply with existing regulations and undergo CEQA review to assure that any impacts are appropriately evaluated and, if necessary, mitigated. The Proposed Project would not result in any other impacts which would be individually limited, but cumulatively considerable. Implementation of Mitigation Measure AIR-1 would reduce project-related impacts to a less than significant level and no additional mitigation is required.

Mitigation Measures: Implement Measure AIR-1.

Significance after Mitigation: Less than significant.

Monitoring: The District's Facilities Development and Planning shall verify compliance with this measure.

c. **Less than Significant with Mitigation Incorporated.** The analysis presented throughout this IS/MND identifies some potentially significant impacts that could result from implementation of the Proposed Project. Appropriate mitigation measures have been identified and incorporated into construction and operational activities associated with the Proposed Project in order to reduce these respective impacts to less than significant levels. Specifically, implementation of Mitigation Measures GEO-1, HAZ-1, HAZ-2, HAZ-3, HAZ-4, NOI-1 and TRA-1 would reduce potential impacts from geological hazards, hazardous materials, noise and traffic to a less than significant level. All other impacts associated with the Proposed Project have also been reduced to a less than significant level with the incorporation of mitigation. Therefore, project implementation would not cause environmental effects that would result in substantial adverse effects on human beings, either directly or indirectly. Impacts are considered less than significant and no additional mitigation is required.

Mitigation Measures: Implement Mitigation Measures GEO-1, HAZ-1, HAZ-2, HAZ-3, HAZ-4, NOI-1, and TRA-1.

Significance after Mitigation: Less than significant.

Monitoring: The District's Facilities Development and Planning Branch shall verify compliance with appropriate measures.