INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION P15-0624

PROJECT NAME: Guajome Park Academy Expansion Project

PROJECT LOCATION: The property is located at 1132 North Melrose Drive, on the east side of North Melrose Drive between North Avenue to the north and Los Angeles Drive to the south. The property is located in San Diego County at 33°12' 46.80" N; 117°15' 18.71" W

APNS: 161-111-02, 161-111-25-01, -02, & -03, 161-081-10-00, 161-111-01-00

PROJECT APPLICANT:
Mr. Kellen Slack, Applicant Representative
Guajome Schools, LLC
2000 North Santa Fe Avenue
Vista, California 92083
(760) 631-8500 x1044

LEAD AGENCY:
City of Vista
Community Development Department
Planning Division
200 Civic Center Drive
Vista, California 92084
Chris Winters, Associate Planner
(760) 643-5394
cwinters@cityofvista.com

PUBLIC REVIEW PERIOD: September 28, 2016 – October 17, 2016

This Initial Study/Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000, et seq.) and the State CEQA Guidelines (California Code of Regulations Section, 15000, et seq.). It is available for a 20-day public review period as shown above.

Comments regarding this document must be made **in writing** to Mr. John Hamilton, Environmental Planner, c/o Planning Division, 200 Civic Center Drive, Vista, California 92084, and mailed to this address or sent via e-mail to jhamilton@cityofvista.com. All comments must be received in the Planning Division office no later than 5:00 P.M. on the last day of the public review period noted above.

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INTRODUCTION

Overview

The City of Vista (City) Planning Division has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) to evaluate the potential environmental consequences associated with the proposed Guajome Park Academy (GPA) Expansion Project (project). As part of the permitting process, the project is required to undergo an environmental review pursuant to the California Environmental Quality Act (CEQA). One of the main objectives of CEQA is to disclose to the public and decision makers the potential environmental effects of proposed activities. CEQA requires that the lead agency prepare an Initial Study to determine whether an Environmental Impact Report, Negative Declaration, or a Mitigated Negative Declaration is needed. The City's Planning Division is the lead agency for the proposed project under CEQA.

Authority

The preparation of this IS/MND is governed by two principal sets of documents: CEQA (Public Resources Code Section 21000, et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Specifically, the preparation of an IS and an MND is guided by the State CEQA Guidelines; Section 15063 describes the requirements for an IS, and Sections 15070–15073 describe the process and requirements for the preparation of an MND. Where appropriate and supportive to an understanding of the issues, reference will be made either to the CEQA statute or State CEQA Guidelines. This IS/MND contains all of the contents required by CEQA, including a project description, a description of the environmental setting, potential environmental impacts, mitigation measures for any potentially significant effects, consistency with plans and policies, and names of preparers.

Scope

This IS/MND evaluates the proposed project's effects on the following resource topics:

- aesthetics
- agriculture and forestry resources
- air quality
- biological resources
- cultural resources
- geology and soils
- greenhouse gas emissions
- hazards and hazardous materials
- hydrology and water quality
- land use planning
- mineral resources
- noise
- population and housing
- public services
- recreation
- transportation/traffic
- utilities and service systems
- mandatory findings of significance

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ENVIRONMENTAL SETTING AND PROJECT DESCRIPTION

Project Overview

Guajome Schools, LLC (project applicant) seeks approval of an amendment to a Special Use Permit (SUP) to allow the Guajome Park Academy (GPA) kindergarten through 5th grade (K-5) Elementary Charter School to share an existing 36,408 square foot (sf) building with a church that currently uses the building. If approved, this would be the fifth amendment to the SUP, which was originally approved in 1992. At full operating capacity, the proposed K-5 elementary school would serve up to 200 students and employ up to 30 staff members. The hours of operation of the proposed school would be Monday through Friday from 7 a.m. to 3 p.m., with staggered start and dismissal times depending on grade level. The current tenant on the property, Life Christian Church, would continue to operate in the building on Saturdays and Sundays when school is not in session. The church is estimated to have between 160 to 185 members. Church services are offered from 8 a.m. to 1 p.m. on the weekend.

The project would involve façade improvements to the exterior of the building, partial interior tenant improvements, and a new outdoor playground and parking area.

Existing Environmental Setting

CITY OF VISTA

Vista is a largely built-out, predominantly low-density residential community located seven miles inland from the Pacific Ocean in northern San Diego County. Clusters of urbanizing higher density areas are scattered throughout its central portion. The city is located in rolling topography of the western foothills of the San Marcos Mountains, with elevations ranging from approximately 200 feet to about 750 feet above mean sea level (AMSL). Pleasant views are found from various points throughout Vista with some higher elevations offering captivating vistas of the Pacific Ocean to the west. In addition to the pleasing topography of the mountains and hills, the city is lushly vegetated from the low level creek beds to the steep slopes of the foothills, which also contributes to the overall beauty of the community. The city has two major creeks that flow through its boundaries, Buena Vista Creek and Agua Hedionda Creek.

PROJECT SITE

The project site is located at 1132 North Melrose Drive in the northeastern portion of the City of Vista in San Diego County (see Figure 1 – Regional Location in Attachment A). The project site consists of an existing 36,408 sf, one-story building (with a mezzanine) currently occupied by Life Christian Church and 88 parking spaces immediately adjacent to the building on the north, east and west. To the north of the building is an approximately 50-space overflow parking lot accessed through a separate driveway off North Melrose Drive (see Figure 2 – Aerial Map of Existing Property in Attachment A). The project site consists of six APNs (161-111-02, 161-111-25-01, -02, & -03, 161-081-10-00, 161-111-01-00) and is approximately 2.3 acres (100,723 sf).

The project site is part of a larger industrial/commercial business park (Park 1200) and has a city land use designation of Industrial General (IG) and a zoning designation of Industrial-Commercial (I-C). The majority of the project site has impervious cover (building and asphalt parking). There is existing landscaping along the existing building and the west side of the project site, associated with the existing parking.

Potable water is currently provided to the site by the Vista Irrigation District (VID) and sewer services are provided by the City of Vista Sanitation District (VSD). Gas and electrical service is provided by the San Diego Gas & Electric Company (SDG&E); telephone by AT&T; fire service by City of Vista; and the project site is located in the Vista Unified School District. Additional information on public services and utilities can be found in Sections XIV, Public Services and XVII, Utilities and Service Systems in Chapter 3.

According to the Vista General Plan 2030 Update (the General Plan or GP 2030) (Vista GP 2030 2011a), there are no vegetation communities located on or adjacent to the project site. The project site is completely disturbed and ground cover consists of paved surfaces.

According to the General Plan, no portion of the project site, or adjacent properties, are located within a Fire Hazard Severity Zone.

Surrounding Land Uses

The project site is located along North Melrose Drive within an existing industrial/commercial business park (Park 1200) currently occupied by commercial and industrial tenants. Tenants include North County Trade Tech High School, UFO Upholstery Fabric Outlet, North County Automotive Specialists, Rob's Auto Repair, S & R Towing, Autotyme Automotive, and New Haven Center. Single-family residential uses are located across North Melrose Drive, on the west side of the street, and south of the project site, separated from Park 1200 by a block wall. Figure 2 in Attachment A shows an aerial view of the project site and surrounding land uses. Between Olive Avenue and Oceanside Boulevard, North Melrose Drive is a four-lane roadway divided by a two-way left-turn lane. On-street parking is generally permitted on both sides of the street, and there are Class II bicycle lanes and sidewalks on both sides of the street.

The North County Transit District's (NCTD) Breeze bus service operates the 334/335 Vista Circulator route on North Melrose Drive. There is a Route 334 bus stop located on North Melrose Drive, at the south end of the site. The Vista Transit Center, which has a SPRINTER light rail station at its location, is located approximately 1.7 miles to the southeast. The Melrose Drive SPRINTER station in Oceanside is about 0.5 mile to the northwest of the project site. The SPRINTER light rail line, operated by NCTD, is located approximately 350 feet east of the project site.

The closest fire station to the site is Vista Fire Station No. 1 located at 175 North Melrose Drive, approximately one mile to the south. The closest police station is the San Diego County Sheriff's Department Vista Station located at 325 South Melrose Drive approximately 1.4 miles to the south. In addition to the North County Trade Tech School, which is located adjacent to the project site, the closest existing public school is Maryland Elementary School, located at 700 North Avenue, approximately 0.2 mile northwest of the project site. Loma Alta Creek is located approximately 0.75 mile to the west, which is adjacent to and north of the SPRINTER train tracks. The Oceanside Municipal Airport is located approximately 5.5 miles to the west of the site. The project site is located within the Airport's Influence Area (AIA) Review Area 2 (San Diego County Airport Land Use Commission 2010).

Proposed Project Description

The project applicant seeks approval of an amendment to a Special Use Permit (SUP) to allow the Guajome Park Academy (GPA) kindergarten through 5th grade (K-5) Elementary Charter School to share an existing 36,408 square foot (sf) building with a church that currently uses the building. The proposed project would also restripe the existing adjacent surface parking lot to the east and convert the existing overflow parking area to the north of the building into a new outdoor playground and parking lot.

At full operating capacity, the proposed K-5 elementary school would serve up to 200 students and employ up to 30 staff members. The hours of operation of the proposed school are Monday through Friday from 7 a.m. to 3 p.m., with staggered start and dismissal times depending on grade level. There would also be an after-school program with up to approximately 12 students who would be picked up between 3 p.m. and 6

p.m.[1] There could also be infrequent evening use of the church's assembly hall for special events typically commencing at 7 p.m. Office hours for staff would be from 6:00 a.m. to 6:00 p.m., Monday through Friday.

The current tenant on the property, Life Christian Church, would continue to offer church services on Saturday and Sunday from 8 a.m. to 1 p.m. when school is not in session. The church is estimated to have between 160 to 185 members. Approximately 7 to 10 office staff work at the church Monday through Friday from 9 a.m. to 5 p.m.

To accommodate the elementary school, the project would involve partial interior tenant improvements, a modified parking lot with up to 110 surface parking spaces, modifications to internal traffic circulation, and development of a new 9,831 sf outdoor playground.

Tenant Improvements

The project would involve interior tenant improvements necessary to repurpose the building for joint use as a K-5 school and church. The project would also involve improvements to the exterior façade of the building to enhance its appearance, as shown in Figure 5 of Attachment A. The project would not result in any physical changes to the footprint of the existing building.

Playground and New Parking Area

The project would include construction of a new playground and parking area at the north end of the project site. The approximately 20,365 sf lot (0.45 acres) would include a 9,831 sf playground located between an existing building and a new 8,780 sf parking area. A chain-link fence would be installed along the east and north boundary of the playground. The fence would also extend west, along the northern edge of the new parking area. A short retaining wall and a concrete sidewalk ramp would be constructed in accordance with the American Disabilities Act (ADA) at the south end of the playground for pedestrian access. New, minimal-intensity lighting would be installed in the parking area. Two dual-head light poles would be installed between the playground and parking area and two single-head light poles would be installed along the west side of the parking area.

Parking and Internal Circulation

Parking and circulation improvements would be implemented to facilitate improved vehicle drop-off and pick-up. Vehicles would enter the project site from the existing driveway located at the southern end of the building. From here, drivers could either continue straight (east) to access parking in the rear of the building and surrounding industrial uses or turn left (north) to access parking along the west side of the building. At the north end of the building, vehicles would either continue straight (north) into a new parking area, or turn left (west) to exit the parking lot via the existing driveway at the northern end of the building. There would also be a third driveway to exit the modified 8,780 sf parking area at the north end of the project site. The project would re-stripe all existing parking to be consistent with City of Vista standards and provide a total of 110 parking spaces, including five accessible spaces on the north side of the building (two adjacent to the building and three on the opposite side of the drive aisle). A 5-foot high retaining wall would be located adjacent to and east of the three new accessible parking spaces. The project would include loading and unloading access aisles with restricted parking and an accessible path of travel for pedestrians from the public sidewalk on North Melrose Drive to the building. Figure 3 in Attachment A shows the proposed parking area and internal circulation plan. Weekday use of the building requires 37 parking spaces.[2] Weekend and evening use of the building requires 110 parking spaces, including five accessible spaces.

[1] Based on GPA's current after-school program, it is anticipated that an average of 3 students would be picked up between 3 p.m. and 4 p.m., 4 students would be picked up between 4 p.m. and 5 p.m., and 5 students would be picked up between 5 p.m. and 6 p.m.

[2] (16 classrooms x 1.5 stalls/classroom + 6 additional stalls) + (1,230 sf church space x 1 stall/250 sf) + (2,433 sf storage space x 1 stall/1,000 sf) = 37 stalls.

As described above, the project would include staggered start and dismissal times depending on grade level. As such, a staggered drop-off/pick-up circulation plan would be implemented. The circulation plan would include the following features:

- Drop-off/pick-up schedules would be staggered
- School staff would monitor and direct traffic at key locations during arrival and dismissal
- School staff would ensure that traffic entering from businesses/leaving the site receives priority during the school drop-off/pick-up hours by stopping school traffic and allowing business traffic to pass through
- School staff, using a megaphone, would call and escort individual students to waiting vehicles
- Administrative staff would ensure that students do not leave the main entrance of the school without authorization or supervision
- The rear entrance/exit to the school would be alarmed during school hours, except during school drop-off/dismissal
- Students travelling to and from the playground would be escorted by staff
- Staff would ensure that students cross the northern driveway only when safe and give the right-of-way to vehicles entering/leaving the site
- A designated parking area would be provided for school staff
- Adequate parking spaces for parents during arrival and dismissal would be provided, as needed
- Information regarding proper school drop-off/pick-up procedures would be displayed on the school's website and provided as part of the parent's information package during registration/orientation
- GPA would support the City's Safe Routes-to-School program
- GPA would promote transportation demand management (TDM) by encouraging students to walk or bike to school

Landscaping

There is existing landscaping associated with the existing parking located around the building and along North Melrose Drive. This landscaping would be maintained and there would be no changes as a result of the project. The project would include landscaping within the new parking area and playground to the north of the building. Landscaping consisting of trees, shrubs, and ground cover would be located along the perimeter of the new parking area. Shrubs and ground cover would be located along the east side of the playground. Ground cover would be located along the south side of the playground. Four queen palms interspersed with shrubs would be located between the parking area and the playground. Plants would consist of a variety of native and non-native evergreen and deciduous trees, shrubs, and groundcovers and vines (see Figure 4 - Landscape Concept Plan in Attachment A). Plant selection would be based on the Water Efficient Landscaping Ordinance in the City's Development Code, Chapter 18.56. All of the proposed plant species would be drought tolerant and require low to moderate water use.

SITE DEVELOPMENT

Overall, the project would be developed in three main phases: grading, paving, and architectural coatings. Construction is expected to take up to four months, beginning in December 2016. Construction activities would occur from 8 a.m. to 4 p.m. and there would be up to approximately eight construction workers on the site per day. As part of the project specifications, the Project contractor would be required to prepare and implement a Traffic Management Plan, which would include notification of emergency service providers of construction activities and retaining emergency access at all times. Construction would involve internal tenant improvements and construction of a new parking area and playground. Because the internal improvements would not involve any construction activities such as ground-disturbance or changes in the building footprint, the internal tenant improvements are not described further.

Approximately 0.45 acres (20,365 sf) would be disturbed to construct the new parking area and playground. These features would be located at the north end of the project site, between North Melrose Drive and an

existing building. The surface of the playground is proposed to consist of decomposed granite, permeable artificial turf, and/or permeable poured rubber surfacing. The parking area (approximately 8,780 sf) would be constructed partially with concrete pavement (4,380 sf) and partially with permeable pavers (4,400 sf). The parking area would be graded towards a low point at the southeastern corner of the parking area. A vegetated swale would convey storm water runoff from the low point in the parking area to an existing drainage inlet in the southeast corner of parking area. Approximately 1,200 cubic yards (cy) of cut would be exported from the project site.

Additional Approvals

Besides review under CEQA, the applicant and/or contractor of the proposed project would be required to obtain the following additional approvals and/or permits from the City: Right-of-Way Permit, Grading Permit, Building Permit, Certificate of Occupancy, and Landscape Construction Plan. These approvals require meeting certain Conditions of Approval prior to obtaining the required permits. Other public agency approvals are cited on page 3-1.

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INITIAL STUDY
ENVIRONMENTAL CHECKLIST

Project Information

PROJECT TITLE:	Guajome Park Academy Expansion Project
LEAD AGENCY NAME AND ADDRESS:	City of Vista Community Development Department Planning Division 200 Civic Center Drive Vista, California 92084
CONTACT PERSON:	Chris Winters, Associate Planner (760) 643-5394 cwinters@cityofvista.com
PROJECT LOCATION:	The property is located at 1132 North Melrose Drive, on the east side of North Melrose Drive between North Avenue to the north and Los Angeles Drive to the south.
PROJECT APPLICANT:	Mr. Kellen Slack, Director of Business Services Guajome Schools 2000 North Santa Fe Avenue Vista, California 92083 (760) 631-8500 x1044
GENERAL PLAN DESIGNATION:	IG (Industrial General)
ZONING DESIGNATION:	I-C (Industrial-Commercial)
DESCRIPTION OF PROJECT:	See Chapter 2, Project Description.
SURROUNDING LAND USES AND SETTING:	See Chapter 2, Project Description.
OTHER PUBLIC AGENCY APPROVALS:	Notice of Intent to the State Water Resources Control Board (SWRCB) and preparation of a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the requirements of the most recent National Pollutant Discharge Elimination System (NPDES) General Construction Activities Permit.

Environmental Factors Potentially Affected

Based upon the initial evaluation presented in the following IS, it is concluded that the proposed project would not result in significant adverse environmental impacts.

Environmental Determination

On the basis of the initial evaluation of the attached Initial Study:

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

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

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

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

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

John Hamilton, AICP Environmental Planner — 9/20/16 Date

The signature below signifies that the applicant has read and accepts the mitigation measures detailed in the final Mitigated Negative Declaration.

Kellen Slack, Applicant Representative — 9/20/16 Date

Evaluation of Environmental Impacts

The following IS checklist provides analysis of the proposed project's potential to result in significant adverse environmental impacts. Section 15063(c) of the Guidelines indicates that the purpose of an IS is to:

1. Provide the Lead Agency (City of Vista) with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or Negative Declaration;
2. Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a Negative Declaration;
3. Assist the preparation of an EIR, if one is required, by:
   a) Focusing the EIR on the effects determined to be significant;
   b) Identifying the effects determined not to be significant;
   c) Explaining the reasons why potentially significant effects would not be significant; and,
   d) Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.
4. Facilitate environmental assessment early in the design of a project.
5. Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment.
6. Eliminate unnecessary EIRs.
7. Determine whether a previously prepared EIR could be used with the project.

IMPACT TERMINOLOGY

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

- A finding of *no impact* is appropriate if the analysis concludes that the project would not affect the particular topic area in any way.
- An impact is considered *less than significant* if the analysis concludes that it would not cause substantial adverse change to the environment and requires no mitigation.
- An impact is considered *less than significant with mitigation incorporated* if the analysis concludes that it would not cause substantial adverse change to the environment with the inclusion of environmental commitments that have been agreed to by the applicant.
- An impact is considered *potentially significant* if the analysis concludes that it could have a substantial adverse effect on the environment.

I. Aesthetics *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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 source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

DISCUSSION

a - b. NO IMPACT. Visual resources can be valued both objectively and subjectively based on their uniqueness, prominence, quality, relationship to community identity, and economic contributions, such as to land values and tourism. Visual resources are important from an aesthetic perspective when, based on these characteristics, they are identified as containing significant scenic value. Within this understanding, a scenic vista can be defined as the view of an area that is visually or aesthetically unique, such as a valley or a mountain range.

A review of the Vista GP 2030 Program EIR (PEIR) (Vista GP 2030 PEIR 2011b) did not identify a scenic vista from which the project site could be viewed or a scenic vista that could be viewed from the project area (i.e., on or adjacent to the project site). As a result, construction of the proposed project would not result in significant impacts on a scenic vista.

There are no officially designated state scenic highways within Vista. State Route (SR) 76, located approximately 1.5 miles north of the city's northernmost boundary, is an eligible state scenic highway. However, there are no significant views from SR 76 to Vista due to topography and the existing built environment (Vista GP 2030 PEIR 2011b). Furthermore, the proposed project would not substantially damage scenic resources within a state scenic highway because the site is not located on or near a designated state scenic highway. Consequently, project implementation would not substantially damage scenic resources, and significant impacts would not occur.

c. LESS THAN SIGNIFICANT IMPACT. The proposed project would not substantially degrade the existing visual character or quality of the project site or surroundings. The existing character of the project site is an industrial/commercial business park (Park 1200) with rows of one and two story buildings, surrounded by parking spaces and minimal landscaping. The proposed project and surrounding area are zoned Industrial-Commercial (I-C), which is intended to accommodate, "business or professional training centers or schools" (Vista 1987) as well as various light manufacturing uses. The proposed project would be consistent with uses in the surrounding area including a school, North County Trade Tech High School, which currently occupies space in the Park 1200 where the proposed project would be located.

The project does not propose any physical changes to the footprint of the existing building or the immediately adjacent parking lot. The project would convert an existing parking lot into a new playground and parking area and would modify the exterior façade of the existing building. The project would also involve interior tenant improvements; however, these improvements would not be visible to the public. The project also

requires implementation of traffic mitigation measures, including the construction of a median in North Melrose Drive.

The new parking area would not introduce a new land use because it would replace an existing parking lot. The raised median proposed to be constructed in North Melrose Drive to address traffic impacts from the project, as required by Mitigation Measure TT-1, also would not introduce a new land use that would substantially change the site's visual character because it would be consistent with features of an existing roadway.

The new playground would be located in the northern portion of the project site, between an existing building and the new parking area. Landscaping, including a row of palms, would be located between the parking area and the playground which would provide an additional buffer of views from the roadway and from within Park 1200. The proposed playground would be small relative to the existing surrounding buildings and would be largely concealed from the view of passing motorists, existing employees and business patrons. Motorists would have fleeting views of the playground as it would be set back from North Melrose Drive, with the proposed new parking area and a row of trees separating it from motorists' views. The height of the playground would be less than that of surrounding buildings, which would prevent it from substantially standing out against the outline of the adjacent building and business park area. Employees and customers of the surrounding businesses would have minimal views of the playground as they pass between existing buildings. For these reasons, the playground would have a less than significant impact on the existing visual character of the site.

The project would involve improvements to the façade of the building to enhance its appearance. As shown in Figure 5 in Attachment A, the project would alter the building's exterior color and texture. It would also change the signage to reflect the addition of the elementary school. These minimal exterior improvements would not substantially alter the visual character of the site. The exterior colors would be muted and blend with the existing, surrounding palate, and the new signage would be similar to existing, on-site signs and in compliance with General Condition G-14, Signs, of the North Melrose Industrial Area Specific Plan No. 8. Accordingly, project implementation would result in less than significant impacts.

d. LESS THAN SIGNIFICANT IMPACT. The proposed project would add exterior lighting to the playground and new parking area for safety reasons. Two lamp posts would be located in the new parking area, adjacent to North Melrose Drive and two lamp posts would be located in the playground area. These new light sources would not substantially alter existing lighting conditions at the site. The new lighting would be in compliance with General Condition G-10, Lighting, of the North Melrose Industrial Area Specific Plan No. 8. General Condition G-10 requires lighting be appropriately shielded and directed to reflect away from adjoining street and properties. The playground/parking area lighting would have minimal-intensity and would be muted at night. Existing sources of light in the area around the project site include exterior building lights to illuminate the parking areas around the Park 1200 buildings, and lamppost lighting in the parking lot on the south end of Park 1200. Headlamps from cars travelling on North Melrose Drive and in the parking area, as well as street lamps on North Melrose Drive, add to the current amount of light. The residences across North Melrose Drive from the proposed project are already exposed to these existing light sources. The addition of minimal-intensity lights at the playground and new parking area would be not add substantially more nighttime light than what currently exists.

The proposed exterior façade improvements would not alter existing windows or add new sources of glare. However, the playground equipment may generate a new source of glare on sunny days. This potential new source of glare would only be visible for a few seconds to members of the public travelling on North Melrose Drive and in the Park 1200 parking lot. Additionally, a row of trees between the playground and parking area would help to block potential glare for motorists on North Melrose Drive. In addition, architectural plans would be reviewed by the Building Department and City Planner prior to the issuance of the amendment to

the SUP, including whether the playground materials or exterior lights would produce substantial glare. Conformance with the Development Code, permit plan checks, and approvals by city staff would ensure that substantial lighting and glare impacts from site development would not be created. Therefore, impacts from project implementation would be less than significant.

II. Agriculture and Forestry Resources *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Convert Prime Farmland as defined in the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, or Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Department of Conservation, to nonagricultural 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)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the 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?	☐	☐	☐	☒

DISCUSSION

a - e. NO IMPACT. Based on a review of the California Department of Conservation's Farmland Mapping and Monitoring Program geographic data (2012), the project site is classified as Developed and Built-Up Land. It does not have lands designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. Therefore, development of the proposed project would not result in significant impacts in converting Prime Farmland, Farmland of Statewide Importance, or Unique Farmland to a non-agricultural use.

The proposed project site is zoned as Industrial-Commercial (I-C) in the North Melrose Industrial Area Specific Plan No. 8, Project Area "B" (Vista 1987). In general, the I-C zone does not serve to protect and preserve agricultural land uses; rather it is intended to attract industrial uses where relatively low employee-to-land ratios and a harmonious existence between industrial park land activities and residential development are encouraged. Agricultural production is not one of the permitted uses in the Specific Plan. Furthermore, the proposed project site is not under a Williamson Act Contract, and there are no known properties in the project area under this contract. Therefore, construction of the project would not create conflicts with existing zoning for agricultural use or property under a Williamson Act Contract, resulting in no significant impacts.

The project site does not contain any forested lands and is not zoned for forest land, timberland, or timberland zoned Timberland Production. Therefore, development of the project would not result in the conversion of forest land to non-forest use.

Implementation of the proposed project would not 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.

III. Air Quality *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality 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 which exceed qualitative thresholds for ozone precursors?)	☐	☐	☒	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

The discussion below is based on the modeling prepared by Harris & Associates in June 2016 for the proposed project. The details of the calculations are in Attachment B.

DISCUSSION

a. NO IMPACT. Projects that are consistent with existing General Plan documents, which are used to develop air emissions budgets for the purpose of air quality planning and attainment demonstrations, would be consistent with the San Diego Air Pollution Control District's (SDAPCD) air quality plans, including the San Diego Regional Air Quality Strategy (RAQS) and the State Implementation Plan (SIP). Both of these air quality plans contain strategies for the region to attain and maintain the ambient air quality standards. Provided a project proposes the same or less development as accounted for in a General Plan document, and provided the project is in compliance with applicable Rules and Regulations adopted by the SDAPCD through its air quality planning process, the project would not conflict with or obstruct implementation of the RAQS or SIP.

The applicant seeks approval of an amendment to a Special Use Permit for a K-5 school to share the use of an existing building that is currently used by a church. As a part of the proposed project, the applicant would also modify an existing parking lot. The project site has an existing land use designation of Industrial General (IG) (Vista GP 2030 2011a) and zoning designation of Industrial-Commercial (I-C). The I-C zone is intended to accommodate, "business or professional training centers or schools" (Vista 1987). A school, North County Trade Tech High School, occupies space in the industrial/commercial business park (Park 1200) where the proposed project would be located. The project would be compatible with the existing land use and zoning designations. Operation of the proposed project would therefore be consistent with the General Plan. As a result, the project would be in compliance with applicable Rules and Regulations adopted by the SDAPCD, and would not conflict with or obstruct implementation of the RAQS or SIP. Consequently, the project would not result in a significant impact.

b - e. LESS THAN SIGNIFICANT IMPACT. Neither construction nor long-term operation of the project would contribute substantially to air quality problems currently experienced in the San Diego air basin, as discussed below. Existing climate and air quality conditions, as well as the applicable air quality significance criteria and project impacts are also summarized below.

EXISTING CLIMATE AND AIR QUALITY LEVELS

The climate of the San Diego air basin is dominated by a semi-permanent high pressure cell located over the Pacific Ocean. This cell influences the direction of prevailing winds (westerly to northwesterly) and maintains clear skies for much of the year. The high pressure cell also creates two types of temperature inversions that may act to degrade local air quality.

The climate of the Vista area is characterized by a repetitive pattern of frequent early morning cloudiness, hazy afternoon sunshine, clean daytime onshore breezes and little temperature change throughout the year. Most of the annual rainfall occurs in the winter while summers are often completely dry. An average of 13.09 inches of rain falls each year, mainly occurring from mid-November to early April. The average maximum temperature is 74 degrees Fahrenheit (F), while the average minimum temperature is 51.9 degrees F (Western Regional Climate Center 2016).

However, the same atmospheric conditions that create a desirable living climate combine to limit the ability of the atmosphere to disperse the air pollution generated by the large population attracted by the climate.

The onshore winds across the coastline diminish quickly when they reach the foothill communities east of San Diego, and the sinking air within the offshore high pressure system forms a massive temperature inversion that traps all air pollutants near the ground. The resulting horizontal and vertical stagnation, in conjunction with ample sunshine, cause a number of reactive pollutants to undergo photochemical reactions and form smog that degrades visibility and irritates tear ducts and nasal membranes. High smog levels in coastal communities occasionally occur when polluted air from the South Coast (Los Angeles) Air Basin drifts seaward and southward at night, and then blows onshore the next day. Such weather patterns are particularly frustrating because no matter what San Diego County does to achieve clean air, such inter-basin transport will occasionally cause unhealthy air over much of the County despite its best air pollution control efforts.

The SDAPCD operates a network of ambient air monitoring stations throughout San Diego County. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the California Ambient Air Quality Standards (CAAQS) and the National Ambient Air Quality Standards (NAAQS). The closest monitoring station to the city is the Escondido–East Valley Parkway Monitoring Station, which measures Ozone (O_3), Carbon Monoxide (CO), Nitrogen Dioxide (NO_2), Particulate Matter less than 10 microns (PM_{10}), and Particulate matter less than 2.5 microns ($PM_{2.5}$) concentrations. Concentrations of pollutants from the station over the last five years (2011–2015) are presented in Table AQ-1.

Concentrations of 1-hour O_3 exceeded NAAQS or CAAQS in two years from 2011–2015, and 8-hour O_3 CAAQS were exceeded all five years. The NAAQS were not exceeded in any of the years for PM_{10}, but CAAQS were exceeded multiple times in 2013. The monitored 24-hour $PM_{2.5}$ values exceeded NAAQS in three of the five years between 2011 and 2015. Neither the 8- nor 1-hour CO NAAQS and CAAQS were exceeded any of the years. Likewise, the 1-hour and annual NAAQS and CAAQS for NO_2 were not exceeded.

TABLE AQ-1
AMBIENT BACKGROUND CONCENTRATIONS AT ESCONDIDO-EAST VALLEY PARKWAY MONITORING STATION
(ppm unless otherwise indicated)

Pollutant	Averaging Time	2011	2012	2013	2014	2015	CAAQS Threshold	NAAQS Threshold
Ozone (O_3)	1 hour	0.098	0.084	0.084	0.099	0.079	0.09	--
	8 hour	0.089	0.074	0.075	0.080	0.071	0.070	0.070
PM_{10} (ug/m^3)	State maximum 24-hour concentration	40.0	33.0	82.0	44.0	31.0	50	--
	Federal maximum 24-hour concentration	40.0	33.0	80.0	43.0	30.0	--	150
$PM_{2.5}$ (ug/m^3)	Maximum 24-hour concentration	27.4	70.7	56.3	77.5	29.4	--	35
	Annual average concentration	10.4	*	10.5	9.5	*	12	12.0
NO_2 (ppb)	Max. 1-hour concentration	49	51	51	55	46	0.18 ppm	100
	Annual avg concentration	13.32	12.94	12.15	11.2	10.06	0.030 ppm	0.053 ppm
CO	Maximum 8-hour concentration	2.3	1.9	2.6	3.1	2	9	9
	Maximum 1-hour concentration	3.5	4.4	3.2	3.8	3.1	20	35

* indicates insufficient data were available to determine the value
Sources: CARB 2016, EPA 2016

CRITERIA THRESHOLDS AND ANALYSIS METHODOLOGY

The State CEQA Guidelines Appendix G states that significance criteria established by the applicable air quality management or air pollution control district may be relied on to make determinations of impact. SDAPCD Rule 20.2 presents Air Quality Impact Analysis Trigger Levels that can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality. Because SDAPCD does not have AQIA thresholds for emissions of $PM_{2.5}$ and VOCs, it is appropriate to use the County of San Diego's Guidelines for Determining Significance (County of San Diego 2007) as thresholds for these pollutants. The screening thresholds are listed in Table AQ-2.

TABLE AQ-2
SCREENING LEVEL CRITERIA THRESHOLDS FOR AIR QUALITY IMPACTS

Pollutant	Emission Rate		
	(pounds/hour)	(pounds/day)	(tons/year)
PM_{10}	--	100	15
$PM_{2.5}$		55	10
NO_X	25	250	40
SO_X	25	250	40
CO	100	550	100
Pb	--	3.2	0.6
VOC		75	13.7

Sources: SDAPCD Regulation II, Rule 20.2; County of San Diego 2007.

PM_{10} – Particulate Matter less than 10 microns
$PM_{2.5}$ – Particulate matter less than 2.5 microns
NO_X – Oxides of Nitrogen
SO_X – Oxides of Sulfur
CO – Carbon Monoxide
Pb – Lead and lead compounds
VOC – Volatile organic compounds

The thresholds listed in Table AQ-2 represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. In the event that emissions exceed these thresholds, modeling is required to demonstrate that the project's total air quality impacts result in ground-

level concentrations that are below the NAAQS and CAAQS, including appropriate background levels. For nonattainment pollutants (O_3, with ozone precursors NO_X and VOCs, and PM_{10}), if emissions exceed the thresholds shown in Table AQ-2, the proposed project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the State and federal government as toxic air contaminants (TACs) or Hazardous Air Pollutants (HAPs). SDAPCD Regulation XII establishes acceptable risk levels and emission control requirements for new and modified facilities that may emit additional TACs. Under Rule 1210, emissions of TACs that result in a cancer risk of 10 in 1 million or less and a health hazard index of one or less would not be required to notify the public of potential health risks. If a project has the potential to result in emissions of any TAC or HAP which result in a cancer risk of greater than 10 in 1 million, the project would be deemed to have a potentially significant impact.

With regard to evaluating whether a project would have a significant impact on sensitive receptors, air quality regulators typically define sensitive receptors as schools (preschool-12th grade), hospitals, resident care facilities, or day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. Any project which has the potential to directly impact a sensitive receptor located within one mile and results in a health risk greater than 10 in 1 million would be deemed to have a potentially significant impact.

SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health or safety of any person. A project that proposes a use which would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

CONSTRUCTION EMISSION IMPACTS

Project construction emissions were estimated using the CalEEMod Model, version 2013.2.2 (ENVIRON et al. 2013) based on construction information provided by the project applicant. Construction of the playground, parking and circulation improvements, and interior building tenant improvements associated with the proposed project are anticipated to require up to four months to complete. It is assumed that project construction would commence in December 2016. Construction phases consist of grading, paving, and architectural coating. During grading, there would be an estimated 1,200 cubic yards (cy) of cut, which would be exported from the site. The total disturbance area would be approximately 0.45 acres. Up to eight construction workers would be onsite each day. CalEEMod defaults were used for construction equipment, haul and vendor vehicle trips, and architectural coating surface area. Detailed assumptions and modeling output are in Attachment B. Emission levels associated with construction of the proposed project are shown in Table AQ-3.

TABLE AQ-3
ESTIMATED CONSTRUCTION DAILY MAXIMUM AIR POLLUTANT EMISSIONS

Construction Phase	VOC	NO_x	CO	SO_X	PM_{10}	$PM_{2.5}$
lbs./day						
Grading	2	13	12	<1	2	1
Paving	1	11	9	<1	1	1
Architectural Coating	43	3	3	<1	<1	<1
Maximum Daily Emissions	**46**	**27**	**24**	**<1**	**3**	**2**
Significance Threshold	75	250	550	250	100	55
Significant?	*No*	*No*	*No*	*No*	*No*	*No*

Emission quantities are rounded to the nearest whole number. Exact values are provided in Attachment B.
PM_{10} – Particulate Matter less than 10 microns
$PM_{2.5}$ – Particulate matter less than 2.5 microns
NO_X – Oxides of Nitrogen
SO_X – Oxides of Sulfur
CO – Carbon Monoxide
Pb – Lead and lead compounds
VOC – Volatile organic compounds
Source: Harris & Associates 2016a.

Construction of the project would be short-term and temporary, and, as shown in Table AQ-3, emissions associated with construction would be below the significance thresholds for all construction phases and pollutants. Furthermore, the project would comply with SDAPCD Rule 55, which is designed to control fugitive dust emissions. Thus, the emissions associated with construction would result in a less than significant impact on the ambient air quality.

OPERATION EMISSION IMPACTS

The main operational air quality emissions from the project would be associated with traffic. Minor impacts would be associated with energy use and landscaping. To address whether the project would result in emissions that would violate any air quality standard or contribute substantially to an existing or proposed air quality violation, the operational emissions associated with the project were compared with the significance thresholds.

The CalEEMod Model, version 2013.2.2, was used to estimate emissions associated with project-generated traffic. The trip generation rate from the project-specific traffic analysis was used to estimate vehicle emissions (Chen Ryan 2016). Emission factors representing the vehicle mix for 2017 were used to estimate emissions, as 2017 was assumed to be the first year of full operation. Emissions associated with energy use and landscaping activities were also estimated using the default assumptions in the CalEEMod model. The results of the modeling are shown in Table AQ-4.

TABLE AQ-4
ESTIMATED OPERATIONAL DAILY MAXIMUM AIR POLLUTANT EMISSIONS

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
			lbs./day			
Natural Gas	<1	<1	<1	<1	<1	<1
Landscaping	<1	<1	<1	<1	<1	<1
Consumer products	<1	--	--	--	--	--
Architectural coatings	<1	--	--	--	--	--
Vehicular sources	2	5	22	<1	3	1
TOTAL	**3**	**5**	**22**	**<1**	**3**	**1**
Significance Threshold	75	250	550	250	100	55
Significant?	*No*	*No*	*No*	*No*	*No*	*No*

Emission quantities are rounded to the nearest whole number. Exact values are provided in Attachment B. "--" indicates a negligible level of emissions.
PM_{10} – Particulate Matter less than 10 microns
$PM_{2.5}$ – Particulate matter less than 2.5 microns
NO_X – Oxides of Nitrogen
SO_X – Oxides of Sulfur
CO – Carbon Monoxide
Pb – Lead and lead compounds
VOC – Volatile organic compounds
Source: Harris & Associates 2016a.

Based on the estimates of the emissions associated with project operations shown Table AQ-4, the operational emissions would be below the significance thresholds for all pollutants. Project operation would result in a less than significant air quality impact.

CUMULATIVE IMPACTS

A project could result in a cumulatively significant impact if it would generate emissions that constitute a cumulatively considerable net increase of PM_{10} or exceed quantitative thresholds for O_3 precursors, oxides of nitrogen (NO_X) and volatile organic compounds (VOCs). The project site is in an area that is largely developed, and emissions from existing projects are part of the air quality background.

A localized pollutant concentration analysis is applicable to the analysis of the cumulative impacts of construction emissions because construction emissions would be temporary. Pollutant emissions would disperse or settle out following construction and would not contribute to long-term concentrations of emissions in the SDAB. Short-term emissions from construction would present a localized health concern if multiple construction projects would take place at the same time and would exceed the significance thresholds. Therefore, construction projects that do not take place at the same time do not contribute to the same short-term cumulative impact. Six additional projects were identified in the vicinity of the proposed project that are likely to be constructed simultaneously with the project (Chen Ryan 2016). Four of the projects are apartment buildings, one is a single-family residential development, and one is an energy storage facility. The nearest cumulative project to the proposed project site is the North Melrose Apartment project, which proposes 410 apartment units on North Melrose Drive, approximately 500 feet north of the project construction area.

The City has not adopted specific emission thresholds by which to evaluate the significance of air quality impacts of projects within its jurisdiction. Additionally, the SDAPCD has not established screening thresholds for localized impacts. In lieu of any set quantitative air quality significance thresholds for localized impacts, the Localized Significance Thresholds established by the SCAQMD (SCAQMD 2008) are used to determine potential cumulative impacts. Based on the dispersion rates estimated from the Localized Significance Thresholds, at 250 feet, the halfway point between the project and the North Melrose Apartments, project construction emissions of NO_x, PM_{10}, and $PM_{2.5}$ would be reduced to 10 percent or less of the applicable significance threshold. VOCs would be reduced to less than half of the significance threshold, which is

conservative because most project VOC emissions would be emitted indoors. Therefore, due to the minimal worst-case emissions from the proposed project, combined emissions with the North Melrose Apartments project would not be expected to exceed the significance thresholds and a cumulative impact would not occur.

As stated above, the project would be consistent with applicable Rules and Regulations adopted by the SDAPCD, and would not conflict with or obstruct implementation of the RAQS or SIP. Furthermore, operation emissions associated with the project would be below the significance thresholds, which account for a specific project's operational contribution to cumulative impacts to air quality. Therefore, the project's emissions during operation would result in a cumulatively less than considerable impact to air quality.

IMPACTS TO SENSITIVE RECEPTORS

Projects involving traffic impacts may result in the formation of locally high concentrations of CO, known as CO "hot spots." As explained in greater detail in Section XVI, Transportation/Traffic, with the implementation of Mitigation Measures TT-1 and TT-2 the project would not generate substantial traffic that would result in degradation in LOS at nearby intersections. It is therefore anticipated that no CO "hot spots" would result from project-related traffic.

Single-family residential uses are considered potentially sensitive receptors for air quality purposes because some residents, such as the very young, the elderly, and those suffering from certain illnesses or disabilities, are particularly sensitive to air pollution. Residences are located near the project site, across North Melrose Drive to the west, and approximately 150 feet south of the project site along West Los Angeles Drive. However, as discussed above, air emissions that could occur from both construction and operation of the project would be well below significance thresholds; therefore, impacts to sensitive receptors would be less than significant, and mitigation measures are not required.

The project would introduce an elementary school, which is considered a sensitive receptor, into an area that is zoned Industrial-Commercial. Properties surrounding the site within the Industrial-Commercial zone are North County Trade Tech High School, UFO Upholstery Fabric Outlet, North County Automotive Specialists, Rob's Auto Repair, Rainbow International Restoration, S & R Towing, Autotyme Automotive, and New Haven Center. The California Air Resource Board's Air Quality and Land Use Handbook (CARB 2005) provides recommendations regarding siting sensitive land uses, such as schools, next to facilities that could pose a significant health risk, including autobody shops and furniture repair shops. The Handbook recommends facility-specific information be obtained where there are questions about siting a sensitive land use close to one of these facilities.

The proposed school would be sited approximately 150 feet from UFO Fabric Outlet, 150 feet from Autotyme Automotive, and approximately 400 feet from Rob's Auto Repair and North County Automotive. As explained in Section X, Land Use and Planning, the General Plan states that development in land designated Industrial General (IG) must be designed to ensure it is compatible with uses in surrounding areas, including adequate screening and other mitigation measures to reduce nuisances such as glare, noise, dust, and vibrations. The project would comply with SDAPCD Rule 55, which is designed to control fugitive dust emissions. Furthermore, the North Melrose Industrial Area Specific Plan No. 8, which describes the zoning guidelines for the area surrounding the project site, states, "all uses shall meet the air quality standards of the San Diego County Air Quality Control Board (AQCB)" and, "all manufacturing, assembling, compounding, fabrication, packaging, processing and treating operations, and refrigeration equipment (except air conditioning), shall be conducted entirely within an enclosed building (except when the Uniform Building Code requires otherwise)." For these reasons, project exposure levels would be less than significant.

ODOR IMPACTS

During construction of the playground and new parking area, diesel equipment operating at the site could generate some nuisance odors. However, surrounding sensitive land uses, including Trade Tech High School and the residences across North Melrose Drive to the west of the project, would be separated from the

construction by either a major arterial road or existing buildings. Due to the distance of sensitive receptors from the project site and the temporary and short-term nature of construction, odors associated with project construction would be less than significant.

According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations. The project is a school without any anticipated sources of objectionable odors that would affect a substantial number of people. Therefore, odor impacts would not be significant.

IV. Biological Resources *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b. 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 U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. 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?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f. Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

DISCUSSION

a - f. NO IMPACT. As stated in Chapter 2, Project Description, the project site is located in an existing industrial/commercial business park (Park 1200) in the northwest portion of the City of Vista. It is surrounded by commercial and industrial uses, as well as residential development. The SPRINTER rail line is located to the east of the proposed project site. North Melrose Drive, to the west of the site, is considered a major arterial road. As shown in Figure 2 in Attachment A, the site consists of an existing 36,408 sf building and parking area. Strips of landscaping vegetation are located on the western edge of the property along North Melrose Drive, and along the existing building associated with the parking area.

There are no vegetation communities located on or adjacent to the project site (Vista GP 2030 2011a). The project site is completely disturbed and ground cover consists of paved, impervious surfaces and ornamental landscaping. Riparian habitat or other sensitive natural communities do not occur on the project site. Likewise, wetlands do not occur on the site as defined by the ACOE or CDFW.

The project site does not contain any regional wildlife corridors, nor does it provide any habitat linkages. Native resident or migratory wildlife corridors do not exist on or adjacent to the project site, and the property does not contain any biological resources that are protected by local policies.

Sensitive or “special status” plants are those typically listed as "Rare", "Endangered", "Threatened", "of Special Concern", or otherwise noteworthy by California Department of Fish and Wildlife (CDFW), the US Fish and Wildlife Service (USFWS), the California Native Plant Society, or other conservation agencies, organizations, or local botanists. Sensitive wildlife are those typically listed as "Rare", "Endangered", "Threatened", "of Special Concern" or otherwise noteworthy by CDFW, USFWS, the National Audubon Society, or other conservation agencies, organizations, or local zoologists. There are no sensitive biological resources on or adjacent to the project site (Vista GP 2030 PEIR 2011b).

The proposed project is not within a Focused Planning Area in the North County Multiple Habitat Conservation Plan (MHCP) (SANDAG 2003). Focused Planning Areas were identified to dedicate certain lands to open space and habitat preservation. The Biological Core and Linkage Areas identify all large contiguous areas of habitat, all areas supporting major and critical species populations or habitat areas, and all important functional linkages and movement corridors between them. The proposed project site is also not within one of the MHCP’s Biological Core and Linkage Areas.

To implement the provisions of the MHCP within Vista, a Biological Preserve Overlay (BPO) has been created and identified as the city’s regional habitat preservation system in the General Plan. The project site is not within or adjacent to any land that has a BPO designation. Therefore, the development of the proposed project would not create any significant impacts to the provisions of the MHCP. Additionally, the city does not have a tree protection ordinance. Consequently, implementation of the proposed project would not conflict with any local policies or ordinances protecting biological resources, and no impacts would occur with the development of the proposed project.

Implementation of the proposed project would not result in direct or indirect significant impacts to any sensitive species, sensitive natural communities, riparian habitat, federally protected wetlands, wildlife corridors, or other sensitive natural communities. Therefore, no significant impacts would occur and mitigation is not required.

V. Cultural Resources *Would the project*:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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. Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074?	☐	☒	☐	☐
d. Disturb any human remains, including those interred outside of dedicated cemeteries (see Public Resources Code, Ch. 1.75, § 5097.98, and Health and Safety Code § 7050.5(b))?	☐	☒	☐	☐

DISCUSSION

a. NO IMPACT. The project would not cause a substantial adverse change to a historic resource. As discussed in Chapter 2, Project Description, the project site consists of an existing 36,408 sf building, constructed around 1990 and paved parking lots. There are 12 buildings within Vista and 36 within the city's Sphere of Influence (SOI) listed in the California Historical Resources Information System (CHRIS) Database (Vista GP 2030 2011a and GP 2030 PEIR 2011b). In addition, two resources were recommended as eligible for the CHRIS Database as part of an architectural field survey in support of the Downtown Vista Specific Plan. Additional databases held by South Coastal Information Center (SCIC) at San Diego State University list another 21 structures located within the city noted as historic. Vista is also home to two cultural resources included on the National Register of Historic Places (NRHP): the Charles A. Braun House and the Guajome Ranch House.

None of the historic structures identified in the General Plan PEIR (Vista GP 2030 PEIR 2011b) are within one mile of the project site. The closest historic building to the project is 952 N. Citrus Avenue, which is just over one mile east of the project site. No significant historic resource under CEQA has been identified at the project site. Due to its age, the existing building and surrounding industrial/commercial business park (Park 1200) do not meet the criteria for listing on the California Register of Historical Resources (CRHR) (California State Parks 2016) and are not considered historic resources under CEQA. Therefore, impacts to the existing site would not constitute a significant effect.

b - d. LESS THAN SIGNIFICANT WITH MITIGATION. Archeological resources have been documented in the area in and around Vista (Vista GP 2030 PEIR 2011b). Paleoindian sites, dating from 12,000 to 8,000 years ago and representing generalized hunter-gatherers have been documented in inland and coastal locations in northern San Diego County. A number of Archaic period (approximately 9,000 – 2,000 years ago) sites with artifact assemblages have been identified in the inland area of northern San Diego County as well. These sites, termed the Pauma complex, were typically on small saddles and hills overlooking drainages, and were distinct from the coastal Archaic assemblages. Around 2,000 years ago, during the Late Prehistoric period, inland semi-sedentary villages were established along major water courses, and mountain areas were seasonally occupied to exploit acorns and piñon nuts, where settlements are associated with milling stations at bedrock outcrops.

According to a site records and literature search of the California Historical Resources Information System (CHRIS) conducted at the South Coastal Information Center (SCIC) for the City's GP 2030 PEIR (2011), the project site does not contain and is not adjacent to a previously recorded prehistoric/historic archaeological resource. The closest known archaeological resource is approximately 0.50 mile to the north-northeast. In addition there are three additional known archaeological resources within one mile of the project site to the north. City staff conducted notification and consultation with California Native American Tribes per the requirements of AB 52 (CEQA Statute § 21080.3.1). During consultation with tribal representatives on the potential impacts of the project, it was acknowledged that there were no known Tribal Cultural Resources on the site. However, there are no known geotechnical reports for the parcel where the playground is to be constructed (APN: 161-081-10-00). Therefore, it is assumed that the underlying fill is "undocumented fill." Soils are often categorized as "undocumented fill" because, among other reasons, they often can contain imported soils from unknown areas, and these soils could contain "unknown" ("displaced resources") Tribal Cultural Resources. Further, as noted above, the surrounding area is rich in archaeological resources, Therefore, it was agreed that there could be impacts to unknown tribal cultural resources during project construction on APN: 161-081-10-00 (an "inadvertent discovery"), which would be a potentially significant impact under CEQA. As a result, it is recommended that a monitoring program by a Qualified Archaeologist and Native American monitor during grading be implemented for the above noted parcel during any ground disturbing activities, as noted below in Mitigation Measures CR-1 to CR-6. With the implementation of these measures, significant impacts to cultural resources would be reduced to less than significant levels.

Mitigation Measures

CR-1 Tribal cultural resource mitigation monitoring shall be conducted to provide for the identification, evaluation, treatment, and protection of any tribal cultural resources that are affected by or may be discovered during the construction of the proposed project. The monitoring shall consist of the full-time presence of a Traditionally and Culturally Affiliated (TCA) Native American Monitor for, but not limited to, any clearing or grubbing of vegetation, tree removal, demolition and/or removal of remnant foundations, pavements, abandonment and/or installation of infrastructure; grading or any other ground disturbing or altering activities, including the placement of imported fill materials (note: all fill materials shall be absent of any and all cultural resources); and related off-site road improvements or utility installations in adjacent streets. Other tasks of the monitoring program shall include the following:

- The requirement for tribal cultural resource mitigation monitoring shall be noted on all applicable construction documents, including demolition plans, grading plans, etc.
- The TCA Native American Monitor shall attend all applicable pre-construction meetings with the Contractor and/or associated Subcontractors.
- The TCA Native American Monitor may halt ground disturbing activities if tribal artifact deposits or cultural features are discovered. In general, ground disturbing activities shall be directed away from these deposits for a short time to allow a determination of potential significance, the subject of which shall be determined by the TCA Native American Monitor, in consultation with the San Luis Rey Band. Ground disturbing activities shall not resume until TCA Native American Monitor, deems the tribal cultural resource or feature has been appropriately documented and/or protected. At the TCA Native American Monitor's discretion, the location of ground disturbing activities may be relocated elsewhere on the project site to avoid further disturbance of cultural resources.
- The avoidance and protection of discovered unknown and significant tribal cultural resources and/or unique tribal resources is the preferable mitigation for the proposed project. If avoidance is not feasible a Data Recovery Plan may be authorized by the City as the Lead Agency under CEQA. If data recovery is required, then the San Luis Rey Band shall be notified and consulted in drafting and finalizing any such recovery plan.

CR-2 Prior to the issuance of a Grading Permit, and subject to approval of terms by the City, the Applicant or Owner, and/or Contractor shall enter into a Pre-Excavation Agreement with the San Luis Rey Band, a California Native American Tribe that is Traditionally and Culturally Affiliated with the project area. A copy of the signed Agreement shall be forwarded to the City Planner. The purpose of this agreement shall be to formalize protocols and procedures between the Applicant or Owner, and/or Contractor, and the San Luis Rey Band for the protection and treatment of, but not limited to, such items as Native American human remains, funerary objects, cultural and religious landscapes, ceremonial items, traditional gathering areas and cultural items, located and/or discovered through the cultural resource mitigation monitoring program in conjunction with the construction of the proposed project, including additional archaeological surveys and/or studies, excavations, geotechnical investigations, soil surveys, grading, or any other ground disturbing activities.

CR-3 Prior to the issuance of a Grading Permit, the Applicant or Owner, and/or Contractor shall provide a written and signed letter to the City's Director of Community Development, stating that a TCA Native American Monitor has been retained at the Applicant or Owner and/or Contractor's expense to implement the monitoring program, as described above and/or in the pre-excavation agreement. A copy of the letter shall be included in the Grading Plan Submittals for the Grading Permit.

CR-4 Prior to the release of the Grading Bond, the TCA Native American Monitor's notes and comments, which describes the results, analysis and conclusions of the tribal cultural resource mitigation monitoring efforts (such as, but not limited to, a Research Design, Data Recovery Program, etc.) shall be submitted by the TCA Native American Monitor to the City's Director of Community Development for approval, if necessary and/or required.

CR-5 The landowner shall relinquish ownership of all tribal cultural resources collected during the cultural resource mitigation monitoring conducted during all ground disturbing activities, and from any previous archaeological studies or excavations on the project site to the San Luis Rey Band for respectful and dignified treatment and disposition in accordance with the Tribe's cultural and spiritual traditions. All tribal cultural materials that are associated with burial and/or funerary goods will be repatriated to the Most Likely Descendant as determined by the Native American Heritage Commission per California Public Resources Code Section 5097.98.

The project site has not been used as a formal cemetery and does not contain any known human remains. Although disturbance of human remains is unlikely, it is possible that construction activity could unearth previously unknown vestiges. This would be considered a potentially significant impact. However, implementation of Mitigation Measure CR-6 would ensure that human remains were treated with dignity and as specified by law, and would reduce impacts to less than significant levels.

Mitigation Measure

CR-6 As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Coroner's office by telephone. No further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains (as determined by the TCA Native American Monitor) shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected (as determined by the TCA Native American Monitor), and consultation and treatment could occur as prescribed by law. As further defined by State law, the Coroner would determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would make a determination as to the Most Likely Descendent. If Native American remains are discovered, the remains shall be kept *in situ* ("in place"),

or in a secure location in close proximity to where they were found, and the analysis of the remains shall only occur on-site in the presence of a TCA Native American Monitor.

VI. Geology and Soils *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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 known fault? Refer to Division of Mines and Geology Special Pub 42.	☐	☐	☐	☒
2. Strong seismic ground shaking?	☐	☐	☒	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
4. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion, or the loss of topsoil?	☐	☐	☒	☐
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 waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☐	☒

DISCUSSION

a1. NO IMPACT. The purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to mitigate the hazard of surface faulting by preventing the construction of buildings used for human occupancy over an area with known faults. Unlike damage from ground shaking, which can occur at great distances from the fault, impacts from fault rupture are limited to the immediate area of the fault zone where the fault breaks along the grounds surface. The project site does not contain, nor is it adjacent to, an Alquist-Priolo Earthquake Fault Zone (Vista GP 2030 PEIR 2011b). Therefore, impacts from fault rupture would not be expected to occur within the project area, and no impacts would arise from implementing the project.

a2 – a4. LESS THAN SIGNIFICANT IMPACT. The project area, like most of southern California, is subject to strong ground shaking from seismic events. Consequently, the project site exposes people and/or structures to potential impacts associated with seismic ground shaking. The ground motion characteristics of any future earthquakes in the region would depend on the characteristics of the generating fault, the distance to the epicenter, the magnitude of the earthquake, and the site-specific geologic conditions. Major faults in the

region could be a source of a strong seismic-related movement at the project site. The nearest active fault to the City of Vista is the Rose Canyon Fault, located approximately 12 miles west of the city (Vista GP 2030 PEIR 2011b). The proposed project would not physically alter the footprint of the existing building, which currently is occupied by staff and members of the church, or construct a new habitable structure. Rather, the project proposes to bring students, staff and teachers to the existing building. The existing building, built in 1990, was constructed in compliance with seismic safety standards set forth in the California Building Code (CBC) at the time of construction.

The proposed project would not expose people or structures to potential seismic-related ground failure, including liquefaction. Liquefaction is a phenomenon in which a saturated cohesionless soil causes a temporary transformation of the soil to a fluid mass, resulting in a loss of support. Seeps, springs or other indications of a high regional groundwater level have not been noted on the site. The project would not construct any new habitable structures that could expose people to seismic-related ground failure.

The proposed project would not expose people or structures to landslide hazards. Slopes within the city near the proposed project are fairly gentle (less than 15 percent) (Vista GP 2030 PEIR 2011b), and have minimal risk of landslide. Further, the project would not construct any new structures that would expose people to landslide hazards. Therefore, impacts related to landslides would be less than significant.

b - d. LESS THAN SIGNIFICANT IMPACT. The site is currently occupied by a 36,408 sf building, surrounded by parking lots and similar industrial/commercial buildings. Any topsoil that may still exist at the project site has already been substantially disturbed or potentially removed due to the mass grading that occurred when the existing buildings were originally constructed. The project site would not be located in the areas of the city that were identified as having a risk of unstable soil conditions, which occur along the city's west, south and east edges and along drainages and valley bottoms (Vista GP 2030 PEIR 2011b). Since the site was originally constructed, it has not been subject to issues associated with unstable or expansive soils. The grading proposed by the project is minimal and, therefore, would not increase the potential for on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. These hazards are considered negligible as a result of site location, soil characteristics, current development at the site area, and site development procedures (e.g., minimal grading). Additionally, the project would require implementation of standard erosion control measures and storm water construction Best Management Practices (BMPs). Further, the project would not construct any habitable structures that would expose people to any potential risks. Therefore, less than significant impacts are anticipated regarding soil erosion or loss of topsoil, unstable soils and geology, and expansive soils.

e. NO IMPACT. The proposed project would use existing sewer system hook-ups and avoid the need to use septic tanks or alternative wastewater disposal systems. Therefore, impacts would not occur from development of the project.

f. NO IMPACT. The probability of discovering paleontological resources depends on the geologic formation being excavated and the depth and volume of the excavation. Sedimentary rocks, such as those found in coastal areas, usually contain fossils. Granite rocks, such as those found in inland areas, including Vista, usually will not contain fossils. Further, the amount of grading proposed by the project to convert the existing parking lot into a playground and parking area would be to a minimal depth of approximately one foot below ground surface and would not encounter underlying formations. Consequently, no impacts to paleontological resources are anticipated to occur with project implementation.

VII. Greenhouse Gas Emissions *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

The discussion below is based on the findings of the greenhouse gas modeling completed by Harris & Associates in June 2016 for the proposed project. Modeling results are shown in Attachment B.

DISCUSSION

a - b. LESS THAN SIGNIFICANT IMPACT.

EXISTING CONDITIONS AT PROJECT SITE

The project site currently consists of a 36,408 square foot building used by a church in an existing industrial/commercial business park. The site is surrounded by single-family dwellings to the west and south, and by industrial-commercial uses to the northwest, north, and east. As it currently exists, the site is a source of GHG emissions from the church. Emissions from the proposed school would be in addition to the existing use. GHG emissions from the existing church use were not calculated.

THRESHOLD OF SIGNIFICANCE AND METHODOLOGY

Threshold of Significance

The City has not established a long-term GHG significance threshold to date. Several lead agencies in California have adopted a screening threshold as recommended by the California Air Pollution Control Officers Association (CAPCOA) Report, *CEQA and Climate Change – Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act,* which proposes a screening-level threshold of 900 metric tons of CO_2e to evaluate whether a project must conduct further analysis (CAPCOA 2008).

However, in light of a recent State Supreme Court ruling[3] the city has developed an Interim Policy on Greenhouse Gas Emissions Significance Thresholds (Vista 2016) that consists of a two-tier threshold: a Numerical (or "Bright Line") Threshold and an Efficiency Threshold.[4] The Numerical Threshold is based on a review of projects within the city over several years, where the GHG emissions were quantified and where it was determined that a level of 1,185 metric tons of CO_2e annually would capture 90 percent of likely future discretionary developments. Therefore, a bright line threshold of 1,185 metric tons of CO_2e is an appropriate significance threshold for the city, and the proposed project's emissions were evaluated based on this threshold.

[3] The Court ruling in *Center for Biological Diversity v. California Department of Fish and Wildlife* (11/30/2015, Case No. S217763) overturned an EIR due in part to the inadequate application of the GHG emissions methodology used in the analysis of project emissions; see Best Best & Krieger, LLP - December 2, 2015 Legal Alerts; http://www.bbklaw.com/?t=40&an=47262 or other similar websites for additional information.

[4] The Numerical (or Bright Line) Threshold is intended to initially be used for all land use development projects (except for stationary source projects of which there are would be very few if any in the city). This threshold was developed to provide small development projects (which are the bulk of projects submitted for approval) with a clear threshold that is easily applied.

Construction Methodology
Construction emissions from project construction were calculated using the CalEEMod Model, version 2013.2.2, using construction assumptions consistent with the air quality modeling (see Section III, Air Quality).

Operation Methodology
GHG emissions associated with the operation of the proposed project were estimated for five categories of emissions: (1) vehicles; (2) energy use, including electricity and natural gas usage; (3) water consumption, use, and treatment; (4) solid waste management, and (5) landscaping. The complete emissions inventory is summarized below and included in Attachment B.

Vehicle Emissions - Based on the traffic impact analysis (Chen Ryan 2016), the proposed project will generate 700 average daily trips (ADT). Emissions were calculated based on the CalEEMod Model, which is based on the EMFAC2011 emission factors.

Energy Use – Energy usage was based on the CalEEMod default assumptions for a 200-student elementary school. The CalEEMod Model assumes a baseline of 2008 Title 24 standards.

Solid Waste - The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, transportation of waste, and disposal. Solid waste generation rates were estimated using CalEEMod defaults.

Water Usage - Water usage was estimated based on the CalEEMod model defaults. The GHG emissions associated with water include usage, conveyance, treatment, and wastewater disposal.

Landscaping - The CalEEMod model assumes that emissions associated with schools would include minor use of landscaping equipment.

GHG EMISSIONS IMPACTS

Construction Impacts
Construction GHG emissions shown in Table GE-1 include emissions from heavy construction equipment, truck traffic, and worker trips.

TABLE GE-1
ESTIMATED MAXIMUM ANNUAL CONSTRUCTION-RELATED GHG EMISSIONS

Phase	CO_2e Emissions (metric tons)
Grading	20
Paving	13
Architectural Coating	5
Total Emissions	**38**

Note: Emission quantities are rounded to the nearest whole number. Exact values are provided in Attachment B.
Source: Harris & Associates 2016a.

Project construction would occur over, at most, four months. Therefore, the total emissions equate to an estimated maximum annual contribution which would all be realized in the first year of project operation. Accordingly, construction-related GHG emissions were not amortized over the lifetime of the project. Construction-related GHG emissions in the first year of implementation of the proposed project are shown in Table GE-2 along with operational emissions during that year.

Operation Impacts

The predicted results of the inventory of operational emissions are presented in Table GE-2. These include GHG emissions associated with buildings (natural gas, purchased electricity), water consumption (energy embodied in potable water), solid waste management (including transport and landfill gas generation), and vehicles.

TABLE GE-2
ESTIMATED ANNUAL OPERATIONAL GREENHOUSE GAS EMISSIONS

Emissions Source	CO_2e Emissions (metric tons) in first year of operation	CO_2e Emissions (metric tons) post-year one
Construction	38	--
Vehicular Use	466	466
Electricity Use	71	71
Natural Gas Use	12	12
Solid Waste	17	17
Water Use	7	7
Landscaping	4	4
Total Emissions	**615**	**577**
Significance Threshold	*1,185*	*1,185*
Significant?	No	No

Note: Emission quantities and percentages are rounded to the nearest whole number. Exact values are provided in Attachment B.
Source: Harris & Associates 2016a.

As shown in Table GE-2, emissions of GHGs were quantified for both construction and operation of the proposed project. Operational emissions were calculated for an elementary school with approximately 200 students. The project's emissions are below the city's Interim "Bright Line" threshold of 1,185 metric tons of CO2e. As a result, the proposed project would not result in cumulatively considerable global climate change impact.

VIII. Hazards and Hazardous Materials *Would the project*:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
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 or on other state environmental databases 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?	☐	☐	☐	☒

DISCUSSION

a. – c. LESS THAN SIGNIFICANT IMPACT. The project itself is an elementary school. The next closest existing public school is the North County Trade Tech High School located adjacent the project site. Project construction would not include substances listed in 40 CFR 355 Appendix A: Extremely Hazardous Substances and Their Threshold Planning Quantities. However, project construction would involve routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and caulking. Such

transport, use, and disposal must comply with applicable regulations such as the Resource Conservation and Recovery Act (RCRA), Department of Transportation (DOT) Hazardous Materials Regulations, and the local Certified Unified Program Agency (CUPA) regulations. Although small amounts of solvents, paints, oils, grease, and caulking would be transported, used, and disposed of during project construction, these materials are typically used in construction projects, are not considered acutely hazardous and, thus, would not represent the transport, use, and disposal of acutely hazardous materials. Additionally, spill or upset of these materials could have the potential to significantly impact surrounding land uses; however, federal, state, and local controls have been enacted to reduce the effects of such potential hazardous materials spills. The Vista Fire Department (VFD) enforces city, state, and federal hazardous materials regulations for the City. City regulations include spill mitigation, and containment and securing of hazardous materials containers to prevent spills. In addition, the State Fire Marshall enforces oil and gas pipeline safety regulations, and the federal government enforces hazardous materials transport pursuant to its interstate commerce regulation authority. Because the proposed project would not include 40 CFR 355 Appendix A-listed substances, and because compliance with existing regulations is mandatory, the project is not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or the potential for the accidental release or upset of hazardous materials, thus ensuring public safety.

It is anticipated that the project would use hazardous materials typical of educational and office uses (solvents, cleaning agents, paints, petroleum fuels, propane, batteries, etc.) in small, localized amounts. These hazardous material products are generally used in small amounts, and the project would not substantially increase use. In the quantities used, these materials are generally non-toxic. Any spills that might occur would be limited in scope and spill area. The project would not require additional hazardous materials use and would not result in a substantial increase in amounts of common types of hazardous materials or normal routine use of these products. Therefore, it would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous waste during operation of the project. This impact would be less than significant. Further, the project would be required to comply with applicable federal, state, and local regulations related to the accidental release of hazardous materials. Compliance with such regulations would minimize the potential for a release and provide planning mechanisms for prompt and effective cleanup in the event of an accidental release. Therefore, compliance with the above referenced requirements would result in less than significant impacts with respect to the creation of significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Compliance with all of the requirements described above is mandatory as standard permitting conditions, and would minimize the potential for the accidental release or upset of hazardous materials thus ensuring public safety for the nearby high school or the elementary school itself. Therefore, neither construction nor operation of the proposed project would result in a release of any significant amounts of hazardous substances that could cause a public health hazard to a school.

d - f. NO IMPACT. The Cortese List database identifies facilities designated by State Water Resources Control Board (SWRCB), the Integrated Waste Board, and the Department of Toxic Substances Control. The project site is not listed on a search of the Cortese List database (www.envirostor.dtsc.ca.gov), and there are no active or open cases found in the database search of properties within a one-half mile range of the project site. Other databases were searched through SWRCB's GeoTracker web site, such as LUST (Leaking Underground Storage Tanks) and no active or open cases were found on the GeoTracker site. There would be no impact.

As stated in the Surrounding Land Use section in Chapter 2 of this report, the Oceanside Municipal Airport is located approximately 5.5 miles to the west of the site. Although the project site is located within the Airport's Influence Area (AIA) Review Area 2 (San Diego County Airport Land Use Commission 2010), the airport is far enough away from the subject site such that implementation of the proposed project would not result in a safety risk for people working in the project area, or to air traffic from this airport. There would be no impact.

g. LESS THAN SIGNIFICANT IMPACT. During project construction, a construction traffic management plan would be implemented to minimize obstruction on North Melrose Drive, which would help ensure continued emergency access to the project site and nearby properties. The plan would include construction truck marshaling to prevent construction traffic congestion to and from the project site. Therefore, the proposed project would not impair or physically impact any adopted emergency response plan or evacuation plan during project construction. Further, the project does not include any characteristics (e.g., permanent street closures) that would physically impair or otherwise interfere with emergency response or evacuation in the project vicinity. As required by Mitigation Measure TT-1, the project would install a new median barrier along North Melrose Drive which would increase safety at the entrance and exit of the project site. Additionally, the project has been designed to incorporate all required VFD standards to ensure that its implementation would not result in hazardous design features, or inadequate emergency access to the site or areas surrounding the site. Therefore, impacts to emergency response would be less than significant.

h. NO IMPACT. The project site is located in an urban area and is not located within a Fire Severity Zone, as designated in the City's General Plan (Figure PSFS-5 of the General Plan) (Vista GP 2030 2011a). Therefore, potential impacts associated with exposure of 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, would not occur.

IX. Hydrology and Water Quality *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements, including but not limited to increasing pollutant discharges to receiving waters?	☐	☐	☒	☐
b. Substantially deplete groundwater supplies or interfere substantially 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 which would result in flooding on- or off-site?	☐	☐	☒	☐
e. Create or contribute runoff water, which would exceed the capacity of existing or planned storm water 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, which 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. Contribute to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

The discussion below is summarized and based on the findings contained within the *Water Quality Technical Report* (*WQTR*) and the *Drainage Study & Hydrology Report* (*Drainage Study*) both prepared by Civil Engineering Design Group and dated February 2016 for the proposed project. The reports are on file and available for review in the City's Planning Division office.

DISCUSSION

a., c - f. LESS THAN SIGNIFICANT IMPACT. The project applicant seeks an amendment to a Special Use Permit that would allow GPA K-5 Elementary Charter School to share an existing 36,408 sf building with a church that currently uses the building. The project would not result in any physical changes to the footprint of the

existing building or the immediately adjacent parking lot. However, the project also proposes the conversion of an existing 20,365 sf (0.45 acre) parking lot into a new playground and parking area to the north of the existing building. The following analysis focuses on potential impacts to hydrology and water quality from the development of this parking area.

Hydrologically, the project site is situated in the Vista Sub-Area (904.22) of the Buena Vista Creek Hydrologic Area (904.20) within the Carlsbad Hydrologic Unit (904.00). The Buena Vista Creek Hydrologic Area is on the local 303(d) list of impairments for selenium sediment toxicity, indicator bacteria, nutrients, and sedimentation/siltation.

POTENTIAL WATER QUALITY IMPACTS

To address potential water quality impacts due to project development, Best Management Practices (BMPs) would be implemented during construction and post-construction activities. Selected BMPs from the City's Standard Urban Stormwater Mitigation Plan (SUSMP) (City of Vista Stormwater Standards Manual, updated June 2015), would be applied to reduce pollutants to maximum levels.

Construction Activities

Short-term erosion impacts during the construction phase of the project would be prevented through implementation of an erosion control plan. A grading and erosion control plan is required in accordance with the City's Grading Ordinance (Development Code Chapter 17.56) and the State General Permit to Discharge Storm Water Associated with Construction Activities (NPDES No. CAS000002) and must be submitted for plan check and approval by the City Engineer, as well as the Planning Division, prior to final approval of the project. In addition, a Notice of Intent filed with the SWRCB, and preparation of a Stormwater Pollution Prevention Plan (SWPPP) would also be required before project construction commences. The erosion control plan would include construction BMPs such as:

- Silt Fence, Fiber Rolls, or Gravel Bag
- Street Sweeping and Vacuuming
- Storm Drain Inlet Protection
- Stabilized Construction Entrance/Exit
- Vehicle and Equipment Maintenance, Cleaning, and Fueling
- Hydroseeding
- Material Delivery and Storage
- Stockpile Management
- Spill Prevention and Control
- Solid Waste Management
- Concrete Waste Management

With plan checks and approvals by staff with the Engineering Department and Planning Division of a grading and erosion control plan, filing a Notice of Intent with the SWRCB, and the preparation of a SWPPP, construction of the proposed project would result in less than significant impacts.

Post-Construction Activities

In accordance with the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 13.18), all new and significant redevelopment projects that fall into one of 11 categories would be considered "priority" projects. Priority projects are required to incorporate post-construction (or permanent) Low Impact Development (LID) site design, source control, and treatment control BMPs and

Hydromodification measures into the project's design. The project is considered a standard project as it is a redevelopment project that would create or redevelop less than 5,000 sf of impervious surface.[5]

Standard projects are required to implement LID Site Design BMPs and Source Control BMPs. LID site design BMPs are intended to minimize impervious surfaces and promote infiltration and evaporation of runoff before it can leave the location of origination by mimicking the natural hydrologic function of the site. Source control BMPs are intended to minimize, to the maximum extent practicable, the introduction of pollutants and conditions of concern that may result in significant impacts generated from site runoff to off-site drain systems.

As described in Chapter 2, Project Description, the majority of the existing 20,365 sf overflow parking lot that would be converted into a parking area and playground is currently impervious surface. Storm water runoff currently flows untreated to an inlet in the east corner of the lot. The project would reduce the amount of impervious surface on the overflow parking lot by approximately 78 percent to less than 5,000 sf. The existing drainage pattern and Point of Compliance would remain after the new playground and parking area are complete. The project would introduce new LID BMPs that would provide water quality treatment of the runoff through pervious pavement and through a vegetated swale before final discharge. The vegetated swale and permeable pavers would provide first flush treatment[6] of runoff before final discharge.

The implementation of all proposed construction and post-construction BMPs would reduce, to the maximum extent feasible, all expected pollutants of concern and other anticipated pollutants. Therefore, development of the proposed project would have a less than significant impact on water quality standards or waste discharge requirements.

Hydrology/Drainage Impacts

As described in Chapter 2, Project Description, runoff on the northern parking area currently sheet flows to a low point at the southeastern corner of the lot, into an inlet located on an adjacent property. The runoff is collected and discharged without being controlled and/or treated. The project would include a vegetative swale and permeable pavement which would reduce and treat surface runoff prior to discharge into the storm drain system. The existing drainage pattern and Point of Compliance for the parking area would remain the same after construction is complete. During project construction, implementing the BMPs required in the SWPPP would ensure that drainage patterns are not significantly altered because any small amount of sheet flow on the construction site would be captured and infiltrated into the ground so as not to increase offsite runoff. There would be no changes to drainage on the southern portion of the project site. Therefore, the proposed project would result in less than significant impacts to the drainage system.

b. NO IMPACT. There are no major groundwater basins within the city of Vista (Vista GP 2030 2011a). Therefore, it is unlikely that the project would impact groundwater resources. As a benefit, the project would reduce the overall impervious area of the northern parking lot from 20,400 sf to approximately 4,300 sf, a 78 percent reduction. The addition of pervious surface would slightly increase groundwater recharge. The project would not substantially deplete groundwater supplies or interfere with groundwater recharge; therefore it would not have a substantial effect on groundwater recharge. Further, the project would not be groundwater dependent and would be served by the Vista Irrigation District (VID). Therefore, impacts would be less than significant.

g - j. NO IMPACT. The project site is not identified in Vista's General Plan as an area within a 100-year flood plain. Development of the project site would not affect any area mapped as a flood hazard zone by the Federal Emergency Management Agency, or within a flood control basin or a potential inundation area. In

[5] Although the existing parking area is approximately 20,365 sf, the project would reduce the amount of impervious surface to approximately 4,300 sf, which is less than 5,000 sf, thereby allowing it to qualify as a standard project.
[6] Storm water that initially runs off an area is usually more polluted than storm water that runs off later, after the rainfall has done a first cleansing of the area. The storm water containing the high initial pollutant load is called the "first flush."

addition, the site does not have the potential to produce mudflows due to the minimal slope of the site, and it is not in proximity to the ocean or other water bodies to be affected by a tsunami or seiche. Consequently, significant impacts would not occur.

X. Land Use and Planning *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Disrupt or divide the physical arrangement of 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 Comprehensive Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c. Be incompatible with existing land use in the vicinity?	☐	☐	☒	☐

DISCUSSION

a. NO IMPACT. The proposed project would not disrupt or divide the physical arrangement of an established community. The applicant seeks approval of an amendment to a Special Use Permit (SUP) to allow the GPA K-5 elementary charter school to share an existing 36,408 sf building with a church that presently uses the facility. The project would replace an existing parking lot with a playground and new parking area to the north of the building. Mitigation Measure TT-1 also requires the construction of a new median in North Melrose Drive.

As shown in Figure 1 in Attachment A, the subject property is currently located within the city of Vista. In general, the surrounding land uses consist of industrial/commercial and residential uses. Properties immediately adjacent to the site include North County Trade Tech High School, UFO Upholstery Fabric Outlet, North County Automotive Specialists, Rob's Auto Repair, S & R Towing, Autotyme Automotive, and New Haven Center. Residences are located south of the site, divided from the industrial/commercial business park (Park 1200) by a block wall. As shown in Figure 2 in Attachment A, additional residential and commercial land uses exist to the west of the site, across North Melrose Drive. Railroad tracks to the east separate Park 1200, including the proposed project site, from a residential community. See Table LU-1, Surrounding Land Uses, for additional information on surrounding land use and zoning designations.

As noted above, the proposed project would modify the use of an existing building and parking lot; it would not introduce new structures or roadways that would act as barriers to an established community. Although it would construct a raised median in North Melrose Drive, as required by Mitigation Measure TT-1, this new construction would not add a physical barrier to the surrounding community. The median would be approximately 400 feet long, low to the ground, and would not prevent vehicles from entering surrounding residential areas or Park 1200. As a result, construction of the proposed project would not physically divide an established community in this part of the city, and significant impacts would not occur.

b - c. LESS THAN SIGNIFICANT IMPACT. As stated above, the applicant seeks approval of an amendment to a SUP to allow a school to share an existing building with a church. The applicant also proposes to construct a new playground. An evaluation of the proposed project's consistency with the General Plan, Specific Plan, other land use plans and policies, and surrounding land uses is discussed below.

GENERAL PLAN 2030 UPDATE

Land Use and Community Identity Element

The existing land use designation of the project site is Industrial General (IG), which generally allows for manufacturing uses. The proposed project does not propose any changes to this land use designation. Goals

and policies from the Land Use and Community Identity (LUCI) Element that apply to the proposed project are as follows:

> LUCI Goal 6: Revitalize or redevelop aging or underutilized uses, properties, districts, and corridors.
>
> > LUCI Policy 6.1: Facilitate revitalization or redevelopment of underutilized commercial properties, districts, and corridors through promotion of compact and sustainable development patterns that allow flexibility to meet local needs and respond to market demands.

The General Plan states that development in land designated IG must be designed to ensure it is compatible with uses in surrounding areas, including adequate screening and other mitigation measures to reduce nuisances such as glare, noise, dust, and vibrations. As described in Sections I. Aesthetics, III. Air Quality, and XII. Noise, the proposed project would not introduce substantial nuisances. Additionally, the project involves approval of an amendment to the Special Use Permit (SUP) to allow for the school to share an existing building with a church. With approval of the amendment, the school would be an allowable use on the project site.

As identified in Section XVI, Transportation/Traffic, the proposed project would construct a median in North Melrose Drive, as required by Mitigation Measure TT-1, to improve the level of service (LOS) at nearby affected intersections. In addition to improving LOS, the median would improve traffic safety and circulation, thereby benefiting the surrounding residential, commercial, and school uses. Additionally, the proposed project would repurpose an existing building to increase its current level of utilization. The project would be compatible and consistent with the LUCI Element of the General Plan as it would not substantially introduce any nuisances such as glare, noise, dust, or vibration.

Circulation Element

As discussed in Section XVI, Transportation/Traffic, the proposed project would generate approximately 700 trips per day at full buildout, which includes 273 AM peak hour trips, 280 school dismissal peak hour[7] trips and 21 PM peak hour trips. With the implementation of mitigation measure TT-1, project traffic would have a less than significant impact on intersections in the project area. As a result, the proposed project would not be incompatible with the Circulation Element.

Other General Plan Elements

The proposed project would be conditioned to comply with all applicable noise standards, would be adequately served by existing public services, and would require compliance with the city's building and fire codes, and with the seismic regulations within the CBC. Consequently, no inconsistencies with the City's Noise Element, Public Safety Element, and Healthy Vista Element are anticipated as a result of project implementation, and significant impacts would not occur.

Habitat Conservation Plan or Natural Community Preservation Plan

As discussed in Section IV, Biological Resources, although the city is currently developing a Habitat Conservation Plan/Natural Community Conservation Planning Subarea Plan as required by the MHCP, it has not been adopted. A key to protecting biological resources is to preserve the open spaces in which they exist. To implement the provisions of the MHCP within Vista, a Biological Preserve Overlay (BPO) has been created and identified as the city's regional habitat preservation system in the General Plan. The project site is not included in the MHCP regional conservation mapping as a Biological Core and Linkage Area or a Focused Planning Area for conservation planning. Therefore, implementation of the proposed project would not conflict with the provisions of the MHCP.

[7] Trips during the school dismissal period is included to capture all potential traffic impacts. It was determined that the project's dismissal peak would occur between 2:30 and 3:30 PM and the arrival peak would be concurrent with the AM commute peak period.

ZONING ORDINANCE

The site's zoning designation, as described in the North Melrose Industrial Area Specific Plan No. 8, Project Area "B," is Industrial-Commercial (I-C). The I-C zone permits business or professional training centers or schools, as well as other commercial and industrial businesses such as manufacturing, storage, laundries, printing, and warehousing. The proposed project would be consistent with existing uses in the industrial/commercial business park (Park 1200), as one other school, North County Trade Tech High School, is currently located in adjacent buildings within Park 1200. The Specific Plan identifies the limitations on permitted uses in the I-C zone, including building line setbacks (ten percent of the average depth of the lots in each block of the industrial area when an industrial area fronts on or sides upon a thoroughfare, the opposite side of which is classified for residential purposes); hours of operation (18 hours in a 24 hour day); and where uses shall be located (wholly within a completely enclosed building). The proposed SUP amendment to allow a school with an outdoor playground to share an existing building with a church that currently uses the building would meet the standards for permitted uses. As a result, project implementation would be consistent with the existing zoning designation, and impacts would be less than significant.

Zoning designations surrounding the site include Single-Family Residential (R-1-B) to the south and west, Single Family Residential (R-1) to the southwest, and Industrial-Commercial (I-C) to the east, north and northwest. Land uses surrounding the project site, including their respective General Plan land use and zoning designations, are shown in Table LU-1.

TABLE LU-1
SURROUNDING LAND USES

Direction	Land Use	General Plan Land Use Designation	Zoning
North	Commercial / Industrial	Industrial General	I-C (Industrial Commercial)
South	Single-family residential	Medium Density Residential, MD (10 du/ac)	R-1-B (Single-Family Residential)
East	Commercial / Industrial / School	Industrial General	I-C (Industrial Commercial)
West	Single-family Residential	Medium Density Residential MD (10 du/ac) Medium Low Density Residential MLD (5 du/ac)	R-1-B (Single-Family Residential) R-1 (Single-Family Residential)
Source: City of Vista General Plan; Specific Plan No. 8; Zoning Map.			

As shown in Table LU-1, existing land use designations and zoning to the east and north are similar to the project site's land use designation and zoning. Notably, the proposed project would share a space in Park 1200 with another school: North County Trade Tech High School. With compliance with the applicable standards, policies and designations in the General Plan and the Zoning Ordinance, the proposed project would be compatible with the existing residential uses in the vicinity. For example, the project would comply with goals in the General Plan that state development in land designated IG must be designed to ensure it is compatible with uses in surrounding areas, including adequate screening and other mitigation measures to reduce nuisances such as glare, noise, dust, and vibrations. As described above, the project would not generate substantial nuisances. As a result, potential land use impacts would be less than significant.

XI. Mineral Resources *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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 Comprehensive Plan, specific plan or other land use plan?	☐	☐	☐	☒

DISCUSSION

a - b. NO IMPACT. The California Department of Conservation's Division of Mines and Geology (1993) does not identify the project site as an area with high potential for aggregate or mineral resources. In addition, Vista's General Plan does not identify the project site as a locally important mineral resource recovery site. As a result, implementation of the proposed project would not result in the loss of availability of a regionally or locally known mineral resource. Therefore, impacts would not occur.

XII.Noise *Would the project result in:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. 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 groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. 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. 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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
f. For a project in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

The discussion below is summarized and based on the findings contained within the *Noise Compatibility Analysis Letter Report* (*Noise Letter*) prepared for the proposed project by Harris & Associates on July 18, 2016 (Harris & Associates 2016b). The report is on file and available for review in the City's Planning Division office.

DISCUSSION

a & c. LESS THAN SIGNIFICANT IMPACT. Potential noise impacts associated with the proposed project would be related to short-term (i.e., temporary) noise during construction, and long-term noise resulting from project-related traffic trips, and on-site school-related noise (e.g., students during recess, bells, whistle blowing). Noise sensitive receptors (i.e., land uses associated with indoor and/or outdoor activities that may be subject to stress and/or significant interference from noise) typically include residential dwellings, hotels, motels, hospitals, nursing homes, educational facilities and libraries. As previously noted, the project site is located along North Melrose Drive in an area zoned Industrial General. Nearby noise sensitive receptors include single-family residences across North Melrose Drive, and a school, North County Trade Tech High School, to the east of the site.

The proposed project would result in a significant impact if it would expose persons to or generate noise levels in excess of standards established in the City's Noise Ordinance,[8] or permanently increase ambient noise levels above General Plan Noise Element compatibility standards.[9] For traffic related noise increases, a significant impact would occur if the proposed project would result in a project-related noise increase of 3

[8] One-hour average noise level of 70 A-weighted decibels (dBA) for industrial uses or 50 dBA during daytime hours and 45 dBA during nighttime hours for single-family residential. There are no noise level limits specific to schools.
[9] Noise levels up to 70 dBA community noise equivalent level (CNEL) for school and industrial uses.

dBA CNEL or more. Additionally, a significant land use impact related to noise would occur if the proposed project would expose sensitive receptors to noise levels in excess of City standards.

EXISTING NOISE LEVELS AND FUTURE NOISE PREDICTION MODELING

Existing Noise Environment

The project site is located within an existing industrial/commercial business park (Park 1200). The site and surrounding area are zoned Industrial-General. Existing uses include a media production facility, a fabric reupholster service and a retail store, North County Trade Tech High School, a tow service, and several automotive service centers. Machinery operates at different businesses at various times throughout the day. A community noise survey conducted for the County of San Diego General Plan Noise Update included several noise measurements in two industrial areas in the Spring Valley planning area. Average measured industrial noise levels were 61-62 dBA Leq for the 15 minute measurements (County of San Diego 2009). Machinery in operation during the measurements included an automobile crusher and medium-duty trucks. As such, noise levels represent the heavier pieces of machinery that could operate around the project site. There are no open work bays or doors oriented toward the proposed project from any surrounding industrial use.

The existing noise environment consists of traffic noise from North Melrose Drive, Oceanside Boulevard, and other surrounding roadways. Existing traffic volume noise levels on seven segments of North Melrose Drive and one segment of Oceanside Boulevard in the project study area are provided in Table N-1.

Future Noise Prediction Modeling

As described in the Noise Letter (Harris & Associates 2016b), noise levels for area roadways were calculated using standard noise modeling equations adapted from the Federal Highway Administration (FHWA) noise prediction model. Noise levels were estimated at locations 50 feet from the roadway centerline. Generally, noise from heavily traveled roadways would decrease at approximately 3 dBA for every doubling of distance from the roadway.

ROADWAY NOISE IMPACTS

Existing traffic volume noise levels, with and without the proposed project, are provided in Table N-1. As shown in the table, project-related traffic noise would not result in an increase in noise level of more than 1 dBA CNEL on any roadway segment. Therefore, impacts in the existing plus project scenario would be less than significant.

TABLE N-1
EXISTING AND EXISTING PLUS PROJECT TRAFFIC NOISE LEVELS

Roadway	Segment	Existing dBA (CNEL)	Existing + Project dBA (CNEL)	Increase in Noise Level (dBA)	Significant Impact?
Oceanside Boulevard	North Melrose Drive to Sports Park Way	71	71	0	No
North Melrose Drive	North of Oceanside Boulevard	69	69	0	No
	Oceanside/Vista city limit to North Avenue	71	71	0	No
	North Avenue to North Project Driveway	71	72	+1	No
	North Project Driveway to South Project Driveway	71	72	+1	No
	South Project Driveway to W. Los Angeles Drive/Highland Drive	72	72	0	No
	Highland Drive to Olive Avenue	71	71	0	No
	Olive Avenue to Ascot Drive	71	71	0	No
Source: Harris & Associates 2016b.					

Near-term Year 2017 traffic noise levels, with and without the proposed project, are provided in Table N-2. As shown, implementation of the proposed project would not result in an increase in noise levels of more than 1 dBA on any roadway segment. Therefore, impacts would be less than significant.

TABLE N-2
NEAR-TERM YEAR 2017 TRAFFIC NOISE LEVELS

Roadway	Segment	2017 Without Project dBA (CNEL)	2017 + Project dBA (CNEL)	Increase in Noise Level (dBA)	Significant Impact?
Oceanside Boulevard	North Melrose Drive to Sports Park Way	71	72	+1	No
North Melrose Drive	North of Oceanside Boulevard	70	70	0	No
	Oceanside/Vista city limit to North Avenue	71	71	0	No
	North Avenue to North Project Driveway	72	72	0	No
	North Project Driveway to South Project Driveway	72	72	0	No
	South Project Driveway to W. Los Angeles Drive/Highland Drive	72	72	0	No
	Highland Drive to Olive Avenue	71	71	0	No
	Olive Avenue to Ascot Drive	71	72	+1	No
Source: Harris & Associates 2016b.					

The Cumulative Year 2030 scenario includes anticipated buildout of the Vista's and Oceanside's General Plans by Year 2030. Cumulative Year 2030 traffic noise levels, with and without the project, are provided in Table N-3. As shown, impacts would be less than significant because the proposed project would not result in an increase in noise level on any roadway segment.

TABLE N-3
CUMULATIVE YEAR 2030 TRAFFIC NOISE LEVELS

Roadway	Segment	2030 Without Project dBA (CNEL)	2030 + Project dBA (CNEL)	Increase in Noise Level (dBA)	Significant Impact?
Oceanside Boulevard	North Melrose Drive to Sports Park Way	73	73	0	No
North Melrose Drive	North of Oceanside Boulevard	74	74	0	No
	Oceanside/Vista city limit to North Avenue	74	74	0	No
	North Avenue to North Project Driveway	74	74	0	No
	North Project Driveway to South Project Driveway	74	74	0	No
	South Project Driveway to W. Los Angeles Drive/Highland Drive	74	74	0	No
	Highland Drive to Olive Avenue	73	73	0	No
	Olive Avenue to Ascot Drive	73	73	0	No
Source: Harris & Associates 2016b.					

ON-SITE OPERATIONAL NOISE

New sources of operational noise would occur due to the new playground, bell and announcement systems, and student drop-off and pick-up. Individual events, such as a whistle blow or announcement, would have the potential to exceed the 70 dBA threshold. However, because recess times would be limited and individual events would be intermittent, it is unlikely that use of the playground would exceed the 1-hour average 70 dBA noise level limit for areas zoned for industrial use established in the City's Noise Ordinance. Additionally, the proposed playground would be located adjacent to the back side of an existing building and north of the school building, each of which would provide noise shielding to the other buildings in Park 1200. The drop-off/pick-up areas would be located on the front side of the existing building, which would provide noise shielding to the other buildings in Park 1200. Noise levels would attenuate to below 50 dBA at North County Trade Tech School, which is located approximately 350 feet from the project site. All residences surrounding the proposed project are more than 200 feet from the site, partially protected by noise barriers, and already subject to dominant roadway noise from North Melrose Drive, as well as noise from existing machinery in Park 1200. As such, outdoor noise from the project would not be in excess of allowable standards.

Announcements made inside the building would be at a sound level appropriate for classrooms and are not expected to be audible outside the building. Operation of indoor classroom activities, including assemblies in the existing sanctuary, would not generate exterior noise and, because the proposed project would renovate an existing operational building, parking lot and building mechanical noise would be similar to existing conditions. Operation of the proposed project would not generate noise levels in excess of standards established in the City's Noise Ordinance and impacts would be less than significant.

b. LESS THAN SIGNIFICANT IMPACT. Information from Caltrans indicates that continuous vibrations with a peak particle velocity of approximately 0.1 inch/second begin to annoy people. The criteria for potential damage to structures of non-engineered timber or masonry structures is 0.2 inch/second. Groundborne vibration is typically attenuated over short distances.

An existing rail line is located east of the project site, adjacent to Park 1200. The rail line is used by the SPRINTER light-rail commuter service. The City's General Plan Noise Element includes existing and future noise contours for this rail line in Figures NE-1 and NE-2 of the General Plan (Vista GP 2030 2011a). The

project site is not located in the 70 dBA CNEL noise contour for the rail line. Therefore, a significant land use impact related to noise compatibility with the rail line would not occur.

Furthermore, the project itself would involve activities that generally do not generate groundborne vibrations, including children playing at recess, school drop-offs and pick-ups, and indoor classroom instruction. As such, the proposed project would not generate an excessive level of operational groundborne vibration or noise.

d. LESS THAN SIGNIFICANT IMPACT. Potential noise impacts associated with the proposed project would be related to short-term (i.e., temporary) noise during construction. The proposed project would result in a significant impact if it would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Thresholds in the City's Noise Ordinance (i.e., one-hour average noise level of 70 dBA for industrial uses, and 50 dBA during daytime hours and 45 dBA during nighttime hours for single-family residential; there are no noise level limits specific to schools) and General Plan Noise Element (i.e., noise levels up to 70 dBA CNEL for school and industrial uses, or a project-related noise increase of 3 dBA CNEL or more) were relied on to determine significance.

Existing noise levels in the project vicinity are described in the previous section. Although the *Noise Letter* did not analyze construction noise because the project would be required to comply with the City's Noise Ordinance with respect to construction activities, construction noise is discussed briefly here.

Construction Noise Impacts

Construction of the project would involve converting an existing parking lot into a proposed playground and parking area. Construction noise impacts would result from the use of motorized construction equipment during excavation and grading of the site. Other short-term impacts from construction noise could result from construction traffic, including workers' trips and materials delivery. Noise levels would vary depending on the type of equipment used, how it is operated, and how well it is maintained. The type of construction equipment to be used for this work at the project has not been determined.

The proposed construction window is up to four months and the nearest sensitive receptors are located approximately 200 to 350 feet from the construction site. Nearby residences would be partially shielded from the construction noise by existing sound walls. The sensitive receptor within the industrial park, North County Trade Tech High School, would be shielded from construction noise by existing buildings in Park 1200. Furthermore, the project would comply with the City's Noise Ordinance with respect to construction activities. For these reasons, construction noise impacts would be less than significant.

When complete, the proposed project is not anticipated to result in the exposure of people to noise levels above City-limits, or cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity. Noise related to construction and operation of the proposed project would be less than significant.

e. LESS THAN SIGNIFICANT IMPACT / f. NO IMPACT. The project site is located approximately 5.5 miles east of Oceanside Municipal Airport. According to the airport's land use compatibility plan, the project site is located outside of the 60 dB CNEL noise contour for the airport. The project site is within Review Area 2 of the airport influence area; however, it is not within the overflight notification area and is outside of the existing and future noise contours (San Diego County Regional Airport Authority 2010). Furthermore, no private airstrips are located within the project vicinity. Therefore, impacts from airfield operations on the proposed project would be minimal.

XIII. Population and Housing *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through an extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

DISCUSSION

a. LESS THAN SIGNIFICANT IMPACT. The applicant seeks approval of an amendment to a SUP to allow an elementary school to share an existing 36,408 sf building with a church that currently uses the site. The project would not directly generate population growth by creating new homes or businesses. The project would introduce a new school program into an existing building with up to 200 new students within the city. This could result in indirect population growth by attracting new families to live in the city so that their students could attend the school. Based on the City's student generation rate, the addition of 200 students could equate to approximately 98 households in the area.[10] The city currently has approximately 30,986 housing units and a goal of constructing 1,374 additional residential units between 2013 and 2021 (Vista GP 2030 2011a). If households relocate to Vista to attend the new school, housing demand, if any, could be accommodated by the existing and planned housing in the city. Additionally, housing could be accommodated elsewhere in San Diego County.

In addition, the project would not result in indirect population growth by extending utilities or services into an undeveloped area. Consequently, direct or indirect population growth as a result of the project would be less than significant.

b - c. NO IMPACT. The proposed project would not displace substantial numbers of existing housing or substantial numbers of people. It would not demolish any existing housing and there would be no need for the construction of replacement housing. Thus, no impacts related to the construction of replacement housing would occur.

[10] On average, the student generation rate in Vista Unified School District is 0.4903 per residential unit (Vista GP 2030 PEIR 2011b).

XIV. Public Services *a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or 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 following public services:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
1. Fire protection?	☐	☐	☒	☐
2. Police protection?	☐	☐	☒	☐
3. Schools?	☐	☐	☐	☒
4. Maintenance of public facilities including roads?	☐	☐	☒	☐
5. Other public facilities?	☐	☐	☐	☒

DISCUSSION

a1, a2, a4. LESS THAN SIGNIFICANT IMPACT. The applicant seeks approval of an amendment to a SUP, which does not involve the construction of new homes or buildings. The project site is in an area of the city that is already developed, connected to public services, and served by existing emergency services.

Regarding emergency fire services, the Vista Fire Department (VFD) currently serves the project site. The closest VFD fire station is Vista Fire Station No. 1 located at 175 North Melrose Drive, approximately 1 mile south of the project site. Repurposing the existing building would not place additional needs on the VFD such that the construction of a new or altered facility would be required. The project would be implemented in accordance with all applicable and required fire codes set forth by the State Fire Marshal, VFD, and the City's building code. Furthermore, the project site is not in a fire hazard classification zone (Vista GP 2030 PEIR 2011b) and therefore is a low risk of impacts from wildland fires. Implementation of the proposed project could result in a slight incremental increase in the demand for fire services; however, the size and location of the project would not place an undue hardship on the fire department. Therefore, implementation of the proposed project would not exceed the capacity of the VFD to serve the site with existing fire protection services and resources.

The closest police station is the Vista Village Sheriff's Office located in the Vista Village Storefront at 30 Main Street approximately 1.5 miles southeast of the project site. Police currently serve the project site, so increased demand for police protection is not expected. Therefore, the elementary school with up to 200 students and approximately 30 staff would not result in an exceedance of the Vista Sheriff's Department capacity to provide police protective services such that new or altered facilities would be required. Implementation of the proposed project could result in a slight incremental increase in the demand for emergency services; however, the size and location of the project would not place an undue hardship on the police department. Impacts related to the construction of new government facilities to provide adequate fire and police protection would be less than significant.

Maintenance of North Melrose Drive, which is the main public access road, would be provided by the City, along with the other nearby roads within the city. North Melrose Drive is an existing arterial that is currently maintained by the City. Due to the size and scope of the proposed project and the associated vehicular traffic, roadway maintenance activities on these roads are not anticipated to increase above normal levels. As a result, new or physically altered government facilities would not be needed and impacts would be less than significant.

a3, a5. NO IMPACT. The proposed project involves introducing a K-5 charter school into an existing building; it would not generate a significant amount of population growth (see Section XIII, Population and Housing) that would require attendance at other schools. Therefore, the project would not place an incremental demand on Vista Unified School District (VUSD) schools or school operations that would require additional school facilities. No significant impact to VUSD facilities would occur. Due to the relatively small size of the proposed project, and the fact that it would not increase the population of the area, no impacts on libraries, senior centers, or other public facilities are anticipated. Consequently, significant impacts to other public facilities would not occur.

XV. Recreation *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☒	☐

DISCUSSION

a - b. LESS THAN SIGNIFICANT IMPACT. Vista has 340 acres of parks and public recreation lands (Vista GP 2030 2011a). The project would not significantly affect any property currently used or zoned for recreational or open space use within Vista. The project consists of approval of an amendment to an SUP for a school to share the use of an existing building with a church in an industrial/commercial business park (Park 1200). The closest park is the Vista Sports Park, located approximately one mile to the north. Students could use the park during after school activities. However, it is anticipated that students would mostly use the on-site playground during and after school, rather than other city parks. Additionally, the project would not result in substantial population growth (see Section XIII, Population and Housing) that would generate new demand on existing recreational facilities in Vista. Therefore, the project would not lead to a substantial physical deterioration of recreational facilities and, as a result, impacts to existing neighborhood and regional parks or other recreational facilities are anticipated to be less than significant.

The project would construct a playground associated with the elementary school. The playground would be constructed in an area that is currently occupied by a former parking lot and would not have an adverse physical effect on the environment. Impacts associated with construction of the playground are evaluated in this Initial Study. Implementation of the project would not require the expansion of other recreational facilities or the construction of new recreational facilities that might adversely affect the environment. As a result, less than significant impacts to recreational facilities would occur with project implementation.

XVI. Transportation/Traffic *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards 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. Conflict with adopted policies plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

The discussion below is summarized and based on the findings contained in the Traffic Impact Study (TIS) prepared for the project by Chen Ryan in September 2016 (Chen Ryan 2016). This report is on file and available for review with the City's Planning Division.

DISCUSSION

a - b. LESS THAN SIGNIFICANT WITH MITIGATION. The project applicant seeks an amendment to a Special Use Permit that would allow GPA K-5 Elementary Charter School to share an existing building with the Life Christian Church, located at 1132 North Melrose Drive in Vista. Access to and from the site would be via the three existing driveways along North Melrose Drive (see Figure 3 in Attachment A). A discussion of existing conditions, thresholds of significance, and potential impacts related to project-generated traffic is provided below.

As described in the TIS, traffic generated by the project would have the potential to impact intersections and roadway segments in both the city of Vista and the city of Oceanside. Therefore, both cities' traffic thresholds are used in this analysis.

Existing Conditions

Because the project is a school project, this analysis considers the typical daily and morning (AM)/evening (PM) commute peak hours as well as the school dismissal (SD) period to capture all potential traffic impacts. It was determined that the project's dismissal peak would occur between 2:30 and 3:30 PM and the arrival peak would be concurrent with the AM commute peak period.

Existing Roadway Network

Several regionally and locally significant roadways traverse the study area. The key roadways in the city of Oceanside and the key intersections in Oceanside and Vista are listed below. Consistent with the City of Vista's guidelines, significant project-related impacts are defined by impacts to peak hour intersection operations. Therefore, impacts to roadway segments in the City of Vista are not described further.

Oceanside Roadway Segments

The key roadway segments in Oceanside and their existing levels of service (LOS) are listed below.

- North Melrose Drive from Meadowbrook Drive to Oceanside Boulevard (LOS F[11])
- North Melrose Drive from Oceanside Boulevard to the Oceanside/Vista city limit (LOS A)
- Oceanside Boulevard from Temple Height Drive to North Melrose Drive (LOS B)

Key Intersections

The key intersections in Oceanside and Vista are listed below.

- North Melrose Drive and Oceanside Boulevard
- North Melrose Drive and North Avenue
- North Melrose Drive and West Los Angeles Drive and Highland Drive
- North Melrose Drive and Olive Avenue
- North Melrose Drive at Northern Project Driveway
- North Melrose Drive at Southern Project Driveway

All of the study area intersections currently operate at an acceptable LOS D or better during the AM, School Dismissal, and PM peak hours, with the exception of the two project driveway intersections:

- North Melrose Drive at Northern Project Driveway – LOS F during the AM, School Dismissal, and PM peak hours; and
- North Melrose Drive at Southern Project Driveway – LOS E during the AM peak hour, and LOS F during the School Dismissal & PM peak hours.

Proposed Project Trip Generation

Table TT-1 summarizes the daily project trip generation rates as well as AM, School Dismissal, and PM peak hour project trip generation.[12] Project trip distribution was developed based on current enrollment (by zip code) provided by the GPA located at 2000 N. Santa Fe Avenue in Vista. As summarized in Table TT-1, the project is forecast to generate approximately 700 trips per day, including 273 (164 in/109 out) AM peak hour trips, 280 (140 in/140 out) School Dismissal trips, and 26 (7 in/19 out) PM peak hour trips.

[11] In Oceanside, an LOS E or F is considered substandard.

[12] Evening use of the church's assembly hall would be infrequent and would commence no earlier than 7 p.m., after the PM peak hour for traffic. Therefore, potential traffic impacts related to periodic evening use are not anticipated and are not evaluated further.

TABLE TT-1
PROPOSED PROJECT TRIP GENERATION

Land Use	Units	Trip Rate	ADT	AM Peak				SD Peak				PM Peak			
				%	Trips	Split	In: Out	%	Trips	Split	In: Out	%	Trips	Split	In: Out
Elementary School - Charter	200 Students	3.5/ Student	700	39	273	6:4	164:109	40	280	5:5	140:140	3	26	3:9	7:19

Source: Chen Ryan 2016.
SD – School Dismissal

CONSTRUCTION IMPACTS

Short-term construction traffic impacts are anticipated from vehicles hauling material away from the project site, delivering construction materials and supplies, and transporting construction personnel to and from the site. Construction traffic would arrive at/depart from the project site via North Melrose Drive. During peak hauling periods associated with exporting soil offsite and bringing building materials to the site, there is the potential for significant impacts to roadway segments and intersections along the truck route from the project site if substantial truck trips occur during the AM and PM peak hours. As part of the Conditions of Project Approval, the applicant (or contractor) would also be required to prepare and implement a Construction Traffic Management Plan to the satisfaction of the City Traffic Engineer to avoid significant construction-related impacts to nearby streets and intersections, especially during peak hour times. Therefore, impacts to traffic during the construction period of the project are anticipated to be less than significant.

OPERATIONAL IMPACTS

Roadway Segments: Existing Plus Project

As shown in Table TT-2, all study area roadway segments within the City of Oceanside would operate at acceptable LOS D or better, with the exception of North Melrose Drive between Meadowbrook Drive and Oceanside Boulevard which is projected to continue operating at LOS F. However, consistent with Oceanside's thresholds, because the change in volume to capacity (V/C) would be less than 0.02 with the addition of project traffic, the project would not result in a significant impact to this roadway segment.

TABLE TT-2
ROADWAY SEGMENT LEVEL OF SERVICE – CITY OF OCEANSIDE EXISTING PLUS PROJECT CONDITIONS

Roadway	From	To	Cross-Section	ADT	Capacity (LOS E)	LOS w/ Project	V/C w/Project	LOS w/o Project	V/C w/o Project	Δ V/C	SI?
North Melrose Dr	Meadowbrook Dr	Oceanside Blvd	2-Lane w/ RM	19,402	15,000	**F**	1.303	**F**	1.293	0.009	No
	Oceanside Blvd	Oceanside/ Vista city limit	4-Lane w/ TWLTL	23,947	40,000	B	0.608	A	0.599	0.010	No
Oceanside Blvd	Temple Height Dr	North Melrose Dr	4-Lane w/ RM	19,210	40,000	B	0.482	B	0.480	0.002	No
	North Melrose Dr	Sports Park Way		19,461	40,000	B	0.490	B	0.487	0.004	No

Source: Chen Ryan 2016.

Numbers may be off due to rounding.
TWLTL – Two-way left-turn lane
RM – Raised median
Bold letters indicate substandard LOS E or F
SI? – Significant Impact?

Intersections: Existing Plus Project

As shown in Table TT-3, all of the study area intersections would operate at acceptable LOS D or better under Existing Plus Project Conditions, with exceptions at the project driveways:[13]

[13] The TIS prepared for the project analyzed 2 driveways, instead of 3 driveways for a conservative analysis (high volume of vehicles accessing a single entrance/exit).

- North Melrose Drive at Northern Project Driveway – LOS F during the AM, School Dismissal, and PM peak hours; and
- North Melrose Drive at Southern Project Driveway – LOS F during the AM peak hour, School Dismissal, and PM peak hours

TABLE TT-3
PEAK HOUR INTERSECTION LOS – EXISTING PLUS PROJECT

Intersection	AM Peak Hour		SD Peak Hour		PM Peak Hour		Existing		Change in Delay (sec)	SI?
	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Delay w/o Project (sec) AM/SD/PM	LOS w/o Project AM/SD/PM		
1. North Melrose Dr/Oceanside Blvd (Signal)	46.4	D	31.4	C	39.9	D	45.9/30.7/39.8	D/C/D	0.5/0.7/0.1	No
2. North Melrose Dr/North Ave (Signal)	54.9	D	36.3	D	38.9	D	51.8/35.5/38.3	D/D/D	3.1/0.8/0.6	No
3. North Melrose Dr/ W. Los Angeles Dr/ Highland Dr (Signal)	36.9	D	32.5	C	27.3	C	32.5/28.8/27.2	C/C/C	4.4/3.7/0.1	No
4. North Melrose Dr/ Olive Ave (Signal)	35.2	D	28.7	C	37.2	D	34.2/26.9/37.0	C/C/D	1.0/1.8/0.2	No
5. North Melrose Dr @Northern Project Driveway (SSSC)	672.3	**F**	495.4	**F**	208.9	**F**	140.9/100.9/92.4	**F/F/F**	531.4/394.5/116.5	Yes
6. North Melrose Dr @ Southern Project Driveway (SSSC)	70.9	**F**	105.1	**F**	232.0	**F**	38.2/80.0/232.0	**E/F/F**	32.7/25.1/0.0	Yes

Source: Chen Ryan 2016.

Bold letters indicate substandard LOS E or F
SD – School Dismissal
SSSC – Side Street Stop Control; the delay shown is the worst delay experience by any of the approaches.
SI? – Significant Impact?

Project traffic would have a significant impact at the North Melrose Drive at Northern Project Driveway and at the North Melrose Drive at Southern Project Driveway intersections under the Existing Plus Project condition. However, implementation of Mitigation Measure TT-1 would reduce these impacts to less-than-significant levels.

Near Term Year 2017 Plus Project

Near-term year 2017 traffic volumes were obtained by estimating trip generation for a list of approved but not yet constructed projects provided by City staff (Chen Ryan 2016). All trip generation rates for the Near Term projects were derived from SANDAG's *Guide to Vehicular Traffic Generation Rates for the San Diego Region*. Traffic from the Near Term projects was distributed based on the nature of the project land uses and their proximity to nearby attractions and the local freeway system. Refer to the TIS (Chen Ryan 2016) for more information regarding the Near Term projects.

Roadway Segments

As shown in Table TT-4, all study area roadway segments within Oceanside would operate at acceptable LOS D or better, with the exception of North Melrose Drive between Meadowbrook Drive and Oceanside Boulevard which is projected to continue operating at LOS F. However, consistent with Oceanside's thresholds, because the change in V/C would be less than 0.02 with the addition of the project traffic, the project would not result in a significant impact to this roadway segment under Near-Term conditions.

TABLE TT-4
CITY OF OCEANSIDE ROADWAY SEGMENT LEVEL OF SERVICE –NEAR TERM 2017 PLUS PROJECT CONDITIONS

Roadway	From	To	Cross-Section	ADT	Capacity (LOS E)	LOS w/ Project	V/C w/Project	LOS w/o Project	V/C w/o Project	Δ V/C	SI?
North Melrose Dr	Meadowbrook Dr	Oceanside Blvd	2-Lane w/ RM	22,840	15,000	**F**	1.523	**F**	1.513	0.009	No
	Oceanside Blvd	Oceanside/ Vista city limit	4-Lane w/ TWLTL	27,185	40,000	B	0.680	B	0.670	0.010	No
Oceanside Blvd	Temple Height Dr	North Melrose Dr	4-Lane w/ RM	20,070	40,000	B	0.502	B	0.500	0.002	No
	North Melrose Dr	Sports Park Way		22,140	40,000	C	0.554	C	0.550	0.003	No

Source: Chen Ryan 2016.

Numbers may be off due to rounding.
TWLTL – Two-way left-turn lane
RM – Raised median
Bold letters indicate substandard LOS E or F
SI? – Significant Impact?

Intersections

As shown in Table TT-5, all of the study area intersections would operate at acceptable LOS D or better under Near Term 2017 Plus Project Conditions, with the following exceptions:

- North Melrose Drive/North Avenue – LOS E during the AM peak hour;
- North Melrose Drive @ Northern Project Driveway – LOS F during the AM, School Dismissal, and PM peak hours; and
- North Melrose Drive @ Southern Project Driveway – LOS F during the AM peak hour, School Dismissal, and PM peak hours

TABLE TT-5
PEAK HOUR INTERSECTION LOS – NEAR TERM 2017 PLUS PROJECT

Intersection	AM Peak Hour		SD Peak Hour		PM Peak Hour		Base		Change in Delay (sec)	SI?
	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Delay w/o Project (sec) AM/SD/PM	Los w/o Project AM/SD/PM		
1. North Melrose Dr/Oceanside Blvd (Signal)	54.2	D	33.0	C	52.1	D	52.9/32.6/508	D/C/D	1.3/0.4/1.3	No
2. North Melrose Dr/North Ave (Signal)	56.2	**E**	39.1	D	40.7	D	55.8/38.4/39.2	**E**/D/D	0.4/0.7/1.5	No
3. North Melrose Dr/ W. Los Angeles Dr/ Highland Dr (Signal)	36.5	D	33.6	C	31.2	C	36.5/30.6/31.1	D/C/C	0.0/3.0/0.1	No
4. North Melrose Dr/ Olive Ave (Signal)	34.3	C	29.7	C	40.6	D	32.7/29.7/40.2	C/C/D	1.6/0.0/0.3	No
5. North Melrose Dr @Northern Project Driveway (SSSC)	391.1	**F**	540.2	**F**	150.7	**F**	202.2/128.0/119.4	**F/F/F**	188.9/412.2/31.3	Yes
6. North Melrose Dr @ Southern Project Driveway (SSSC)	91.4	**F**	232.1	**F**	307.2	**F**	46.5/97.4/294.2	**E/F/F**	44.9/134.7/13.0	Yes

Source: Chen Ryan 2016.

Notes: **Bold** letters indicated LOS E or F
SD – School Dismissal
SSSC – Side Street Stop Control; the delay shown is the worst delay experience by any of the approaches.
SI? – Significant Impact?

Project traffic would have a significant impact at the North Melrose Drive at Northern Project Driveway and at North Melrose Drive at Southern Project Driveway intersections under the Near Term Plus Project conditions. Implementation of Mitigation Measure TT-1 would reduce impacts to less-than-significant levels.

Cumulative Impacts

Roadway and intersection geometrics under Cumulative Year 2030 Base Conditions were assumed to reflect the buildout of the City of Vista and the City of Oceanside General Plan 2030 Circulation Element. Peak hour intersection turning movements were derived from the Cities' Circulation Element by applying a growth factor and manual adjustments to existing and forecasted Year 2030 ADTs and peak hour approach and departure volumes. Daily traffic volumes were obtained from the SANDAG 2030 Combined North County Model. Refer to the TIS (Chen Ryan 2016) for more details.

Roadway Segments

As shown in Table TT-6, all study area roadway segments within the City of Oceanside are projected to operate at acceptable LOS C in the Cumulative Plus Project Scenario. Therefore, impacts would be less than significant.

TABLE TT-6
CITY OF OCEANSIDE ROADWAY SEGMENT LEVEL OF SERVICE–CUMULATIVE PLUS PROJECT CONDITIONS

Roadway	From	To	Classification	ADT	Capacity (LOS E)	LOS w/ Project	LOS w/o Project
North Melrose Dr	Meadowbrook Dr	Oceanside Blvd	6-Lane Prime Arterial	36,740	60,000	C	C
	Oceanside Blvd	North Avenue		38,790		C	C
Oceanside Blvd	Temple Heights Dr	North Melrose Dr	4-Lane Major Arterial	29,570	40,000	C	C
	North Melrose Dr	Sports Park Way		28,140		C	C

Source: Chen Ryan 2016.

Intersections
As shown in Table TT-7, the following study area intersections would operate at substandard LOS E or F under Cumulative Plus Project Conditions:

- North Melrose Drive/W. Los Angeles Drive/Highland Drive – LOS E during AM and PM peak hours;
- North Melrose Drive/Olive Avenue – LOS F during the SD peak hours, and LOS E during the PM peak hour;
- North Melrose Drive @ Northern Project Driveway – LOS F during the SD peak hours and LOS E during PM peak hours; and
- North Melrose Drive @ Southern Project Driveway – LOS E during the PM peak hours

As shown in Table TT-7, project traffic would have a significant impact at the following intersections under the Cumulative Plus Project conditions.

- North Melrose Drive/W. Los Angeles Drive/Highland Drive
- North Melrose Drive/Olive Avenue
- North Melrose Drive @ Northern Project Driveway
- North Melrose Drive @ Southern Project Driveway

However, implementation of Mitigation Measure TT-2 would reduce these impacts to less-than-significant levels.

TABLE TT-7
PEAK HOUR INTERSECTION LOS – CUMULATIVE PLUS PROJECT

Intersection	AM Peak Hour		SD Peak Hour		PM Peak Hour		Base		Change in Delay (sec)	SI?
	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Delay w/o Project (sec) AM/SD/PM	LOS w/o Project AM/SD/PM		
1. North Melrose Dr/Oceanside Blvd (Signal)	50.5	D	37.5	D	52.4	D	45.5/36.9/52.1	D/D/D	5.0/0.6/0.3	No
2. North Melrose Dr/North Ave (Signal)	47.9	D	32.2	C	42.7	D	42.1/29.9/42.3	D/C/D	5.8/2.3/0.4	No
3. North Melrose Dr/ W. Los Angeles Dr/ Highland Dr (Signal)	70.8	**E**	38.6	D	67.6	**E**	27.2/37.6/66.8	D/D/**E**	43.6/1.0/0.8	Yes
4. North Melrose Dr/ Olive Ave (Signal)	53.1	D	69.4	**E**	48.9	D	51.5/65.7/48.7	D/**E**/D	1.6/3.7/0.2	Yes
5. North Melrose Dr @Northern Project Driveway (SSSC)	24.7	C	87.8	**F**	38.8	**E**	16.9/26.3/33.5	C/D/D	7.8/61.5/5.3	Yes
6. North Melrose Dr @ Southern Project Driveway (SSSC)	18.2	C	25.9	D	37.2	**E**	16.3/25.9/37.0	C/D/**E**	1.9/0.0/0.2	Yes

Source: Chen Ryan 2016.

Bold letter indicate substandard LOS E or F
SD – School Dismissal
SSSC – Side Street Stop Control; the delay shown is the worst delay experience by any of the approaches.
SI? – Significant Impact?

MITIGATION MEASURES

TT-1 Prior to obtaining a Certificate of Occupancy, the project applicant shall design and construct a raised median along North Melrose Drive (based on specifications by the City Engineer) to prohibit left-turn movements in and out of all three project driveways off of North Melrose Drive. As a result, all project driveways along North Melrose Drive will be converted into right-in/right-out access only.

With implementation of Mitigation Measure TT-1, southbound and westbound left-turn traffic at both project driveways would be required to make U-turns at the nearby signalized intersections at North Avenue and at W. Los Angeles Drive.

The North Melrose Drive at Northern Project Driveway and North Melrose Drive at Southern Project Driveway intersections would operate at LOS D or better under the Existing Plus Project and Near Term 2017 Plus Project Scenarios. Under the Mitigated Near Term 2017 Plus Project Scenario, due to the added U-turns as a result of the raised median along the project frontage, the AM peak hour delay at the intersection of North Melrose Drive/North Avenue would increase by 1.6 seconds when compared with the Near Term Base Conditions, however, this increase would be less than 2 seconds. Therefore, the project's significant impact would be reduced to a less-than-significant level.

TT-2 Prior to obtaining a Building Permit, the project applicant shall be required to participate in the City of Vista's Impact Fees for Arterials Streets and Traffic Signals Program.

With implementation of Mitigation Measure TT-2, the project's contribution to significant cumulative impacts would be less than considerable.

c. NO IMPACT. Development of the project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, which would result in substantial safety risks. The Oceanside Municipal Airport is located approximately 5.5 miles to the west of the site. Project traffic would not cause an increase in air traffic levels, or create a physical impediment that would necessitate an alteration of flight patterns, and as a result, significant impacts would not occur with project development.

d. LESS THAN SIGNIFICANT IMPACT. The project site is controlled by two Side Street Stop Controlled (SSSC) driveways located on North Melrose Drive that currently allow full access to the existing businesses located at this site. As required by Mitigation Measure TT-1, the project would construct a raised median along project frontage, North Melrose Drive, to mitigate the project's significant traffic impact. This proposed mitigation measure would prohibit left-turn movements in and out of both driveways to minimize traffic delay, improve circulation, and increase safety at the entrance and exit.

Additionally, as an effort to improve site access and on-site traffic circulation, the project includes a staggered drop-off/pick-up schedule to ensure minimal disruptions to nearby businesses associated with school arrival and dismissal. Refer to Chapter 2, Project Description, for a list of the key features in the circulation plan.

Based on the trip generation provided in Table TT-1 and the trip generation study conducted for a similar site (The Classical Academy), it was determined that school dismissal period would generate the highest entering/exiting volumes (140-in/140-out trips). In addition, per recent discussions with City of Vista staff, the school dismissal period was selected as the worst case scenario because the school dismissal period would generate a waiting queue as parents arrive early and wait to pick up students versus the drop-off period which would have a moving queue as parents drop-off students and immediately leave the site. The GPA has proposed a staggered drop-off/pick-up schedule depending on grade, which is shown in Chapter 2, Project Description.

Table TT-8 shows the breakdown of anticipated number of vehicles by school grade entering/exiting the project site during school dismissal. The number of vehicles by grade was derived using the current number of students by grade at the existing Guajome Park Academy, the percent of total student distribution by grade, and the total trip generation of 140 vehicles during school dismissal (as shown in Table TT-1, 140-in/140-out).

TABLE TT-8
ESTIMATED STUDENT ENROLLMENT PER GRADE

Grade	# of Students Per Grade at Existing GPA	% of Total Student by Grade	# of Vehicles by Grade at Proposed GPA Expansion
Kindergarten	27	14	19
1st	27	14	19
2nd	27	14	19
3rd	29	15	21
4th	29	15	21
5th	58	29	41
Total	**197**	**100**	**140***

Source: Chen Ryan 2016.

GPA – Guajome Park Academy
*# of vehicles generated during school dismissal

As shown in Table TT-8, K-4 grades would generate between 19 and 21 vehicles per grade and 5th grade would generate 41 vehicles during school dismissal. Based on data collected from The Classical Academy Trip Generation Study, approximately 60 percent of the parents would arrive 15 minutes before school dismissal, and 40 percent would arrive by school dismissal.

It is assumed that the proposed GPA would have similar pick-up behavior as The Classical Academy. Therefore, the percentages of parents arriving 15 minutes before dismissal time and at dismissal time were applied to the 3rd, 4th, and 5th grades dismissal because the combined dismissal for these three grades would represent the highest volume of projected vehicles arriving to the project site. By applying 60 percent arriving 15 minutes before dismissal and 40 percent arriving at dismissal time, the following was derived:

- 3rd & 4th grade – 60 percent arriving 15 minutes before dismissal time equals 25 vehicles at 2:45 PM and 40 percent arriving at dismissal time equals 42 (25+17) vehicles at 3:00 PM.
- 5th grade – 60 percent arriving 15 minutes before dismissal time equals 24 vehicles at 3:15 PM and 40 percent arriving at dismissal time equals 41 (24+17) vehicles at 3:30 PM.

It was assumed that approximately 50 percent of the total arrival vehicles from the 3rd and 4th grade dismissal period would remain on-site 15 minutes after the scheduled dismissal time of 3:00 PM, which would add 21 vehicles to the estimated 24 vehicles arriving 15 minutes before dismissal of the 5th grade, making 3:15 PM the highest dismissal point with a total of 45 vehicles associated with student pick-up.

Figure 9-1 of the Traffic Impact Study (Chen Ryan 2016) display the proposed queueing and parking diagram, as well as the locations where staff would be standing during school dismissal to ensure that school traffic does not create a major impact to nearby businesses. As shown, seven queue storage lanes are proposed. This includes one lane in the rear of the building to accommodate potential overflow traffic from North Melrose Drive. The capacity of the queue storage lanes was calculated by assuming 25 feet per vehicle requirement, yielding a total maximum capacity of 49 vehicles, which would be adequate to absorb the projected 45 vehicles on-site during the highest point of school dismissal.

Therefore, development of the project would not increase traffic hazards due to a design feature or to incompatible uses that could affect existing traffic or circulation in the project area. Mitigation Measure TT-1 requires improvements to North Melrose Drive that would increase safety and decrease potential traffic hazards. As addressed in the Section X, Land Use and Planning, the proposed project would be compatible

with the existing surrounding land use and zoning designations. As a result, impacts would be less than significant.

e. LESS THAN SIGNIFICANT IMPACT. The proposed project would not result in impacts to emergency access. The project has been designed to incorporate all required VFD standards to ensure that its implementation would not result in hazardous design features, or inadequate emergency access to the site or areas surrounding the site. See, also, Section VIII, Hazards and Hazardous Material, checklist question "g." Consequently, significant impacts would be less than significant.

f. NO IMPACT. The project would not conflict with any adopted policies, plans, or programs supporting alternative transportation, such as bikeways or bus stations. The NCTD Breeze bus service operates the 334/335 Vista Circulator route on North Melrose Drive and there is a bus stop located on North Melrose Drive, at the south end of the site. The project would not result in any changes to the bus service or bus stop. There are also Class II bicycle lanes on North Melrose Drive and on Oceanside Drive. The project would not result in any modifications or changes to any of these facilities. As a result, significant impacts would not occur with project implementation.

XVII. Utilities and Service Systems *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
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 storm water 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?	☐	☐	☐	☒

DISCUSSION

a. NO IMPACT. The project site is currently serviced by the City of Vista Sanitation District (VSD). VSD would continue to provide sanitation/sewer services for the proposed project. Wastewater from VSD is treated at the Encina Water Pollution Control Facility (EWPCF), which is owned by the Encina Wastewater Authority, a wastewater treatment agency based in Carlsbad. The EWPCF is a conventional activated sludge wastewater treatment plant that currently treats about 22 million gallons per day (mgd), and has a rated treatment capacity of approximately 41 mgd (EWA 2014). The VSD (which is one of six member agencies) and the EWPCF operate in accordance with applicable local, regional, State, and federal wastewater treatment requirements (e.g., Chapter 14.02, Vista Municipal Code; State Water Resource Control Board Order No. 2006-0003-DWQ, amended; San Diego Regional Water Quality Control Board Order Nos. R9-2007-0005 and R9-2011-0019; etc.), and the project's wastewater system would comply with these treatment requirements as well. Therefore, the proposed project would adhere to all wastewater treatment requirements specified by local, regional, State and federal regulations so that significant impacts would not occur.

b, d & e. LESS THAN SIGNIFICANT IMPACT. Construction of the proposed project would result in less than significant impacts to water supplies and wastewater capacity. Potential impacts on each utility service are discussed below.

SUFFICIENT WATER SUPPLY

Implementation of the project, which currently consists of a 36,408 sf building that functions as a church, would increase demand for potable water to serve the proposed K-5 grade charter school. Water service for the project would continue to be provided by Vista Irrigation District (VID). VID is a member agency of the San

Diego County Water Authority (SDCWA). Historically, VID has imported approximately 70 percent of its potable water supply from SDCWA. However, in dry years, over 90 percent of VID's water supply can come from imported sources. SDCWA water supplies come from a mix of Metropolitan Water District of Southern California (MWD) imports, transfers from Imperial Irrigation District, conservation from canal lining, seawater desalination, recycled water, groundwater, and other local surface water supplies. The remainder of VID's water supply comes from Lake Henshaw, which is fed through precipitation from the San Luis Rey watershed. The estimated average daily demand of potable water for the proposed project would be approximately 7,700 gallons per day (gpd) (200 students x 38.5 gpd per student) (Pacific Institute 2003).

Water supplies necessary to serve the demands of the proposed project, along with existing and other projected future users, and the actions necessary to develop these supplies (e.g., conservation via Senate Bill 7 of the Seventh Extraordinary Session (or SBX 7-7), efficiency standards, etc.) have been identified in the Urban Water Management Plans (UWMPs) of VID, SDCWA, and MWD. California's urban water suppliers are required to prepare UWMPs in compliance with the Urban Water Management Planning Act (California Water Code §10610 et seq.) and the Water Conservation Bill of 2009 (SBX 7-7). UWMPs are prepared every five years by urban water suppliers to support their long-term resource planning, and ensure adequate water supplies are available to meet existing and future water demands over a 20-year planning horizon, including the consideration of various drought scenarios and Demand Management Measures. The passage of SBX 7-7 in 2009 was enacted to require retail urban water agencies within California to achieve a 20 percent reduction in urban per capita water use by December 31, 2020 (Water Code Section 10608.20). As a result, SBX 7-7 also requires that UWMPs report base daily per capita water use (baseline), urban water use target, interim urban water use target, and compliance daily per capita water use. VID, SDCWA, and MWD calculate future demands within their respective service areas based on population and growth rate projections from regional planning authorities such as SCAG and SANDAG. SANDAG's projections are based on the land use policies in the general plans of the jurisdictions within San Diego County. These projections provide consistency between retail and wholesale agencies' water demand projections, thereby ensuring that adequate supplies are being planned for existing and future water users.

The proposed project is consistent with the General Plan land use designation for the site and does not require a General Plan amendment. Therefore, the project's water usage has been adequately planned for in VID's 2010 UWMP (June 2011), which is the most current plan adopted by VID. The project would not cause VID to exceed its available water supplies. New or expanded water treatment facilities, the construction of which could cause significant environmental effects, would not be needed to meet the additional water demand of the project. Sufficient water supplies are available to serve the project from existing entitlements and resources. Therefore, a less than significant impact would occur.

WASTEWATER CAPACITY

Based on the Vista and Buena Sanitation Districts' Sewer Master Plan Update (January 2008), the proposed project would be expected to generate approximately 1,063 gpd of wastewater (0.85 acres[14] x 1,250 gpd per acre). The project would continue to receive sewer service from VSD and wastewater from the project would be treated at the EWPCF. The VSD system conveys an annual average wastewater flow of 6.53 mgd, which is part of the total approximately 22 mgd wastewater treated at the EWPCF. The additional wastewater contribution from the proposed project would be considered negligible in relation to the current and future treatment capacities at the EWPCF and the conveyance capacity of VSD's system. Wastewater generation from the proposed project would not exceed the capacity of the EWPCF to treat it. Therefore, the project's contribution of wastewater would not require new wastewater facilities to be constructed or existing facilities to expand. Impacts of the project to wastewater capacity would be less than significant.

c. LESS THAN SIGNIFICANT IMPACT. As discussed in Section IX, Hydrology and Water Quality, under the proposed (or post-developed) conditions, the project would reduce the amount of impervious surface on the lot by approximately 78 percent through the modification of an existing parking lot. In accordance with the

[14] The 36,408 sf building was converted into acres (0.85 acres) for the purposes of this calculation.

City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 13.18), the project would be required to implement LID Site Design BMPs and Source Control BMPs. LID site design BMPs are intended to minimize impervious surfaces and promote infiltration and evaporation of runoff before it can leave the location of origination by mimicking the natural hydrologic function of the site. Source control BMPs are intended to minimize, to the maximum extent practicable, the introduction of pollutants and conditions of concern that may result in significant impacts generated from site runoff to off-site drain systems. The project's proposed modifications to the existing parking lot would replace approximately 78 percent of existing impermeable surfaces in the parking area with permeable pavers. The project would also include a vegetative swale which would slow down and treat surface runoff prior to discharge into the storm drain system. With these modifications in place, the total discharge under post-development conditions would be less than the pre-developed condition, and the capacity of existing or planned downstream storm water drainage systems would not be exceeded. Therefore, no significant impacts would result from project development.

f. LESS THAN SIGNIFICANT IMPACT. The project could result in a slight increase in municipal solid waste generation because of the addition of a school use to the site. At most, the project would generate around approximately 300 pounds of solid waste per day (CalRecycle 2016). The project would be conditioned to comply with AB 939, which requires cities to divert 50 percent of solid waste to recycling programs and away from landfills. Solid waste generated by the proposed project would be hauled to Sycamore Landfill in Santee, which has a permitted capacity of 3,965 tons per day (tpd) and an average daily rate of waste receipt of approximately 3,300 tons. Sycamore was scheduled to close in 2031, however, the recently approved master plan for the landfill would add 116.6 million tons to the capacity in the county and increase permitted disposal per day (General Plan Program EIR, City 2011). This solid waste facility is capable of accommodating the solid waste generated by the proposed project. Because the project's contribution would be negligible in terms of the remaining capacity available in the landfill, impacts would be less than significant.

g. NO IMPACT. The proposed project would be conditioned to comply with all regulations related to solid waste such as the California Integrated Waste Management Act and city recycling programs; therefore, significant impacts would not occur.

XVIII. Mandatory Finding of Significance *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Does the project 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 plant or animal community, reduce the number or restrict the range of rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable *("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*	☐	☒	☐	☐
c. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

DISCUSSION

a. LESS THAN SIGNIFICANT IMPACT. The proposed project would not have the potential to degrade the quality of the environment, reduce the habitat of any sensitive plant or animal species, or eliminate important examples of California history or prehistory. Activities associated with the project have been analyzed in accordance with CEQA and the State CEQA Guidelines and found to pose no impact or less-than-significant impacts. Consequently, the project would not result in effects that would substantially degrade valuable wildlife, habitat or cultural resources.

b. LESS THAN SIGNIFICANT WITH MITIGATION. In combination with other past, present, and planned projects in the area, the project would result in potentially significant impacts to two intersections on North Melrose Drive. However, with implementation of Mitigation Measures TT-1 and TT-2 described in Section XVI, Transportation/Traffic, the project's contribution to these impacts would not be cumulatively considerable. No other cumulative impacts would occur. Therefore, impacts would be less than significant with mitigation.

c. LESS THAN SIGNIFICANT IMPACT. The project would not consist of any uses or activities that would negatively affect any persons in the vicinity. In addition, all resource topics associated with the project have been analyzed in accordance with CEQA and the State CEQA Guidelines and found to pose no impact, a less, than-significant impact, or a less than significant impact with mitigation. Consequently, the project would not result in any environmental effects that would cause substantial adverse effects on human beings directly or indirectly.

REFERENCES AND LIST OF PREPARERS

References

Section 15150 of the State CEQA Guidelines permits an environmental document to incorporate by reference other documents that provide relevant data. The documents listed below are hereby incorporated by reference. The pertinent material is summarized throughout this Initial Study where that information is relevant to the analysis of impacts of the proposed project. All referenced documents that are starred * are on file and available for review at the City of Vista Planning Division office located at 200 Civic Center Drive, Vista. Other listed documents may have direct links to web sites, or can usually be found through an on-line search.

Association of Environmental Professionals. 2007. *Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents.* Available online, https://www.califaep.org/images/climate-change/Alternative_Approaches_to_Analyzing_GHG_Emissions.pdf

California Air Resources Board. 2016. *AB 32 Scoping Plan website.* http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm

California Air Pollution Control Officers Association. 2008. *CEQA & Climate Change – Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act.* Available online, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf

California Air Resources Board. 2016. *iAdam: Air Quality Data Statistics.* Available online, http://www.arb.ca.gov/adam/

California Air Resources Board. 2016. *Ambient Air Quality Standards.* May 4. Available online, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf

California Air Resources Board. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. Available online, http://www.arb.ca.gov/ch/landuse.htm

California Department of Conservation, Farmland Mapping and Monitoring Program. 2012. *2012 FMMP GIS Data for San Diego County*. Available on-line, http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx

California Department of Conservation, Division of Mines and Geology. 1996. *Update of Mineral Land Classification: Aggregate Materials in the Western San Diego County Production-Consumption Region*. Available on-line, http://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch3.2.2/2014-12-19_CaliforniaDepartmentofConservation1997.pdf

California State Parks Office of Historic Preservation. 2016. *California Register.* Available online, http://ohp.parks.ca.gov/?page_id=21238

CalRecycle. 2016. *Public Sector and Institutions: Estimated Solid Waste Generation Rates.* Available online, http://www.calrecycle.ca.gov/wastechar/wastegenrates/Institution.htm

Chen Ryan. 2016. *Traffic Impact Study: Guajome Academy Expansion*. Revised Report. September.*

City of Vista. 1987. *North Melrose Industrial Area Specific Plan No. 8.* March 16, 1987. Available on-line, http://www.cityofvista.com/services/city-departments/community-development/building-planning-permits-applications/vista-general-plan-2030/specific-plan

City of Vista. 2016. *City of Vista Interim Policy on Greenhouse Gas Emissions Significance Thresholds*. April 6. *

City of Vista. 2015. *Stormwater Standards Manual.* June. Available on-line. http://www.cityofvista.com/home/showdocument?id=3868

City of Vista. 2012. *City of Vista Climate Action Plan*. Available on-line, http://www.cityofvista.com/home/showdocument?id=84

City of Vista. 2015. *City of Vista Zoning Map.* July 15, 2015. Available on-line, http://www.cityofvista.com/home/showdocument?id=1178

City of Vista. 2011a. *Vista General Plan 2030 Update.* Available on-line, http://www.cityofvista.com/services/city-departments/community-development/building-planning-permits-applications/vista-general-plan-2030

City of Vista. 2011b. *Vista General Plan 2030 Update Program EIR*. Available on-line, http://www.cityofvista.com/services/city-departments/community-development/building-planning-permits-applications/vista-general-plan-2030

City of Vista. 2014. *City of Vista Sheriff and Fire Stations.* Available on-line, http://www.cityofvista.com/home/showdocument?id=1174

City of Vista and Vista Sanitation District. 2016. Sewer Utilities website. Available on-line, http://www.cityofvista.com/services/city-departments/engineering/construction-projects/sewer

City of Vista and Buena Sanitation Districts. 2008**.** *Sewer Master Plan Update*. January 2008. Available on-line, http://www.cityofvista.com/services/city-departments/engineering/construction-projects/sewer

County of San Diego. 2009. *San Diego County General Plan Update, Final Program EIR, Appendix F: Noise Technical Report*. May 21. Available online, http://www.sandiegocounty.gov/pds/gpupdate/environmental.html

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

Encina Wastewater Authority. 2014. *Vision for 2040 (2040 Master Plan)* prepared by Black & Veatch. July 2014. Available online, http://www.encinajpa.com/about-ewa/sound-planning/2040-master-plan

ENVIRON International Corporation, South Coast Air Quality Management District (SCAQMD) and other California Air Districts. 2013. CalEEMod, version 2013.2.2.

Harris & Associates 2016a. Attachment B: Air Quality and Greenhouse Gas Emissions Modeling. June 26.

Harris & Associates. 2016b. Noise Compatibility Analysis, Guajome Park Academy Expansion Project City of Vista, San Diego County, California. July 18.*

Pacific Institute. 2003. *Waste Not, Want Not: The Potential for Urban Water Conservation in California, Appendix E – Details of Commercial Water Use and Potential Savings by Sector.* Available online, http://pacinst.org/publication/waste-not-want-not/

SANDAG. 2003. *North County Multiple Habitat Conservation Program*. Available online, http://www.sandag.org/?projectid=97&fuseaction=projects.detail

San Diego Air Pollution Control District. 1998. *Rule 20.2, New Source Review, Non-Major Stationary Sources.* December 17. Available online, http://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Permits/APCD_R20-2.pdf

San Diego County Airport Land Use Commission. 2010. *Oceanside Municipal Land Use Compatibility Plan*. January 25.

San Diego County Water Authority. 2011. *2010 Urban Water Management Plan.* June 2011. Available online, http://www.water.ca.gov/urbanwatermanagement/UWMP2010.cfm

South Coast Air Quality Management District. 2008. Final Localized Significance Threshold Methodology. July.

United States Environmental Protection Agency. 2016. *Monitor Values Report.* Available online, https://www3.epa.gov/airdata/ad_rep_mon.html

Vista Irrigation District. 2011. *2010 Urban Water Management Plan*. June 28, 2011. Available online, http://www.water.ca.gov/urbanwatermanagement/UWMP2010.cfm

Vista Irrigation District. 2016. Service Area Map. Available online, http://www.vidwater.org/service-area

Vista Sanitation District. 2016. Sewer Service Area Boundaries. Available online, http://www.cityofvista.com/home/showdocument?id=626

Vista Unified School District. 2016. SchoolSite Locator. Available online, http://apps.schoolsitelocator.com/index.html?districtCode=98574

Western Regional Climate Center. 2016. *Cooperative Climatological Data Summaries*. Available online, http://www.wrcc.dri.edu/climatedata/climsum/

Individuals and Organizations Consulted

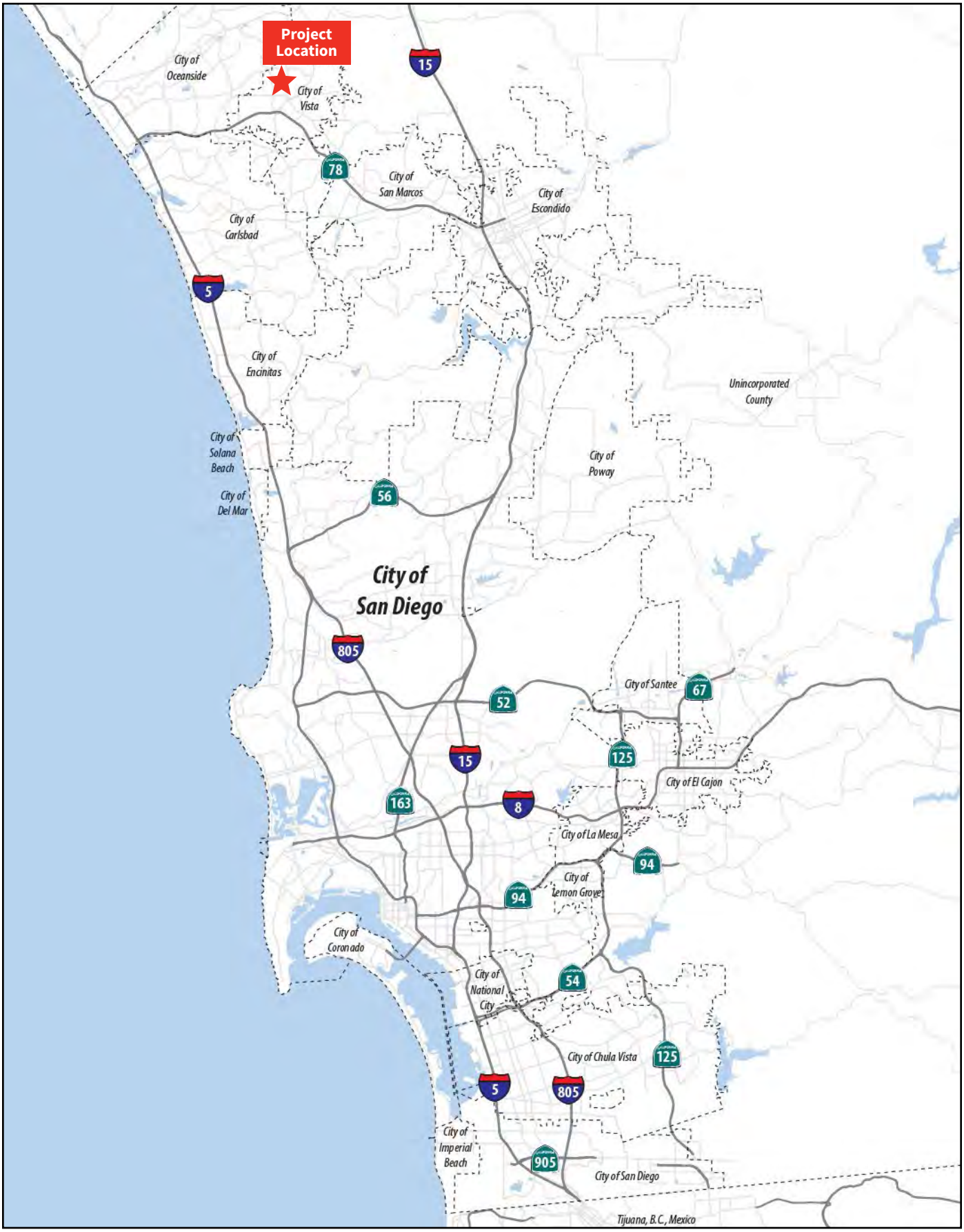
John Conley, AICP - Director of Community Development/Engineering, City of Vista
John Hamilton, AICP - Environmental Planner, City of Vista
Rick Gittings, Hilltop Group, Inc.
Dick Lund, Grupo Pacific
Kellen Slacke, Applicant Representative

Preparers

Diane Sandman, Project Director, Harris & Associates
Elizabeth Antin, Project Manager, Harris & Associates
Haley Johnson, Analyst, Harris & Associates
Sharon Toland, Air Quality and Noise Specialist, Harris & Associates
Susy Bias, Graphic Artist, Harris & Associates

ATTACHMENT A
Figures

Figure 1 – Regional Location
Figure 2 – Aerial View
Figure 3 – Parking and Circulation
Figure 4 – Landscape Plan
Figure 5 – Exterior Improvements



Path: MarCom/_COMMS EXTERNAL/GRAPHICS/ BD Proposals/Guajome Park Academy Figures 160-0580-001

Source: Chen Ryan 2016

Harris & Associates

Not to scale

N

Figure 1
Regional Location

Path: MarCom/_COMMS EXTERNAL/GRAPHICS/ BD Proposals/Guajome Park Academy Figures 160-0580-001

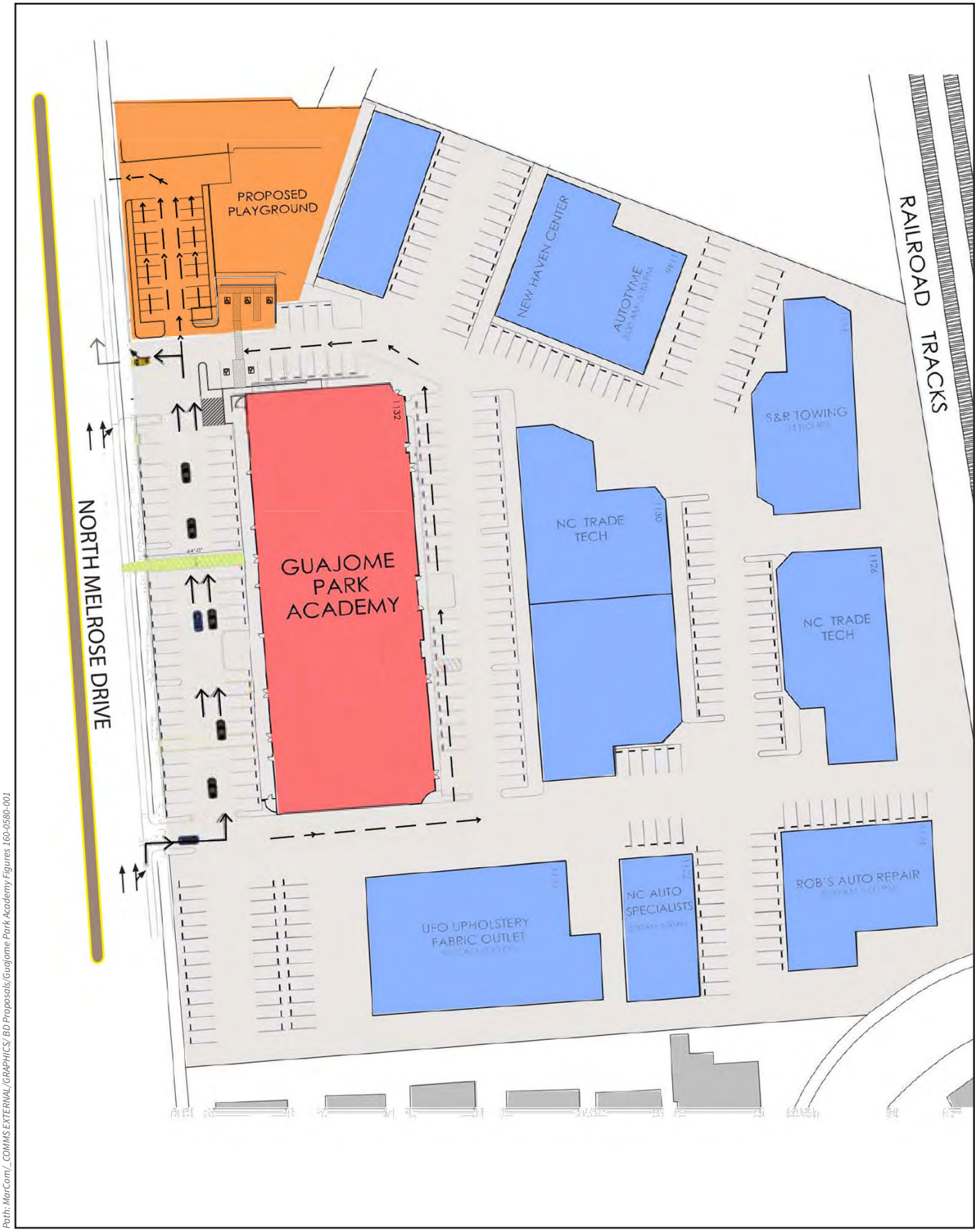
Source: USDA NAIP Imagery and SanGIS 2016

Harris & Associates

0 200 400
Feet

N

Figure 2
Aerial View



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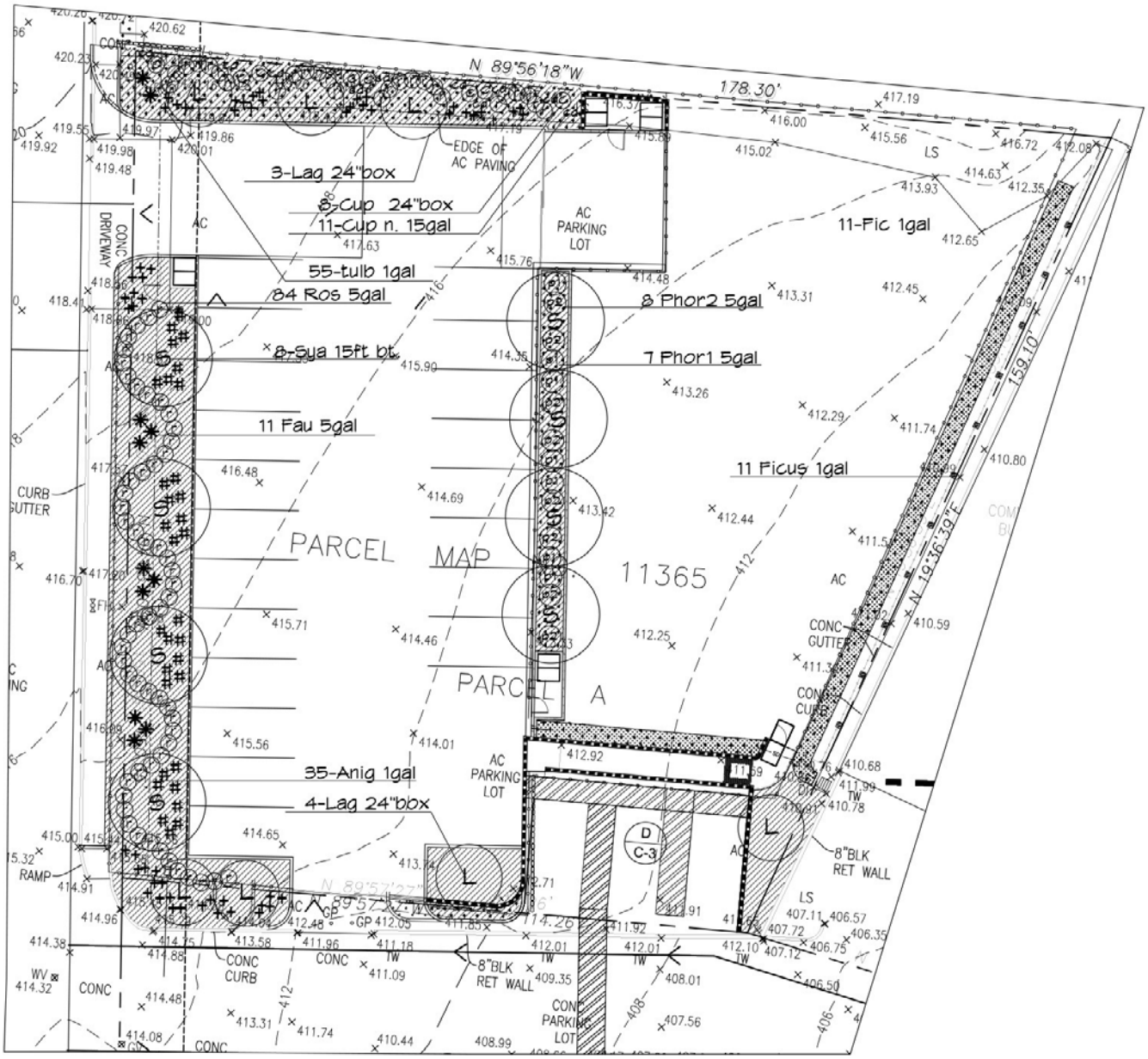
Source: Grupo Pacific 2016

Harris & Associates

Not to scale

N

Figure 3
Parking and Circulation



TREE LEDGEND

SYM	BOTANICAL NAME	COMMON NAME	SIZES	#	COMMENT
CL	Cupressus sempervirens	Italian Cypress 'Stricta'	24"box	12	full
CS	Cupressus sempervirens 'Monshel'	Tiny towers-Cypress	15gallon	17	full growth
L	Lagerstomia fauriei X 'Tuscarora'	Crape Myrtle	24"box	6	multi
S	Syagrus romanzoffiaum	Queen Palm	15 ft bt	8	matched

SHRUB LEDGEND

SYM	BOTANICAL NAME	COMMON NAME	SIZES	#	COMMENT
#	Anigozanthos 'Harmony'	Kangaroo Paw	1 gal		
@	Ficus reptans	Creeping fig	1 gal		
✱	Furcraea foetida 'Medipicta sport'	Mauritius Hemp	5 gal		Max Yellow Foliage
p1	Phormium tenex 'Yellow Way'	Hybrid Flax	5 gal	28	full clump
p2	Phormium tenex ' Wildwood'	Hybrid Flax	5 gal	25	full clump
r	Rosmarinsis 'Tuscan Blue'	Tuscan Blue	5 gal		
+	Tulbaghia violacea	Society Garlic	1 gal		

GROUND COVERS - LIMITED PLANTING

Tif Green Bermuda grass	Sodded
Mulch #1	3 inch cover
Mulch #2	3 inch cover

Path: MarCom/_COMMS EXTERNAL/GRAPHICS/ BD Proposals/Guajome Park Academy Figures 160-0580-001

Source: Wilkinson Design Group 2016

Harris & Associates

0 20 40
Feet

N

Figure 4
Landscape Plan

Source: Google Street View 2016

Source: Grupo Pacific, Exterior Elevations, May 2015

Harris & Associates

Not to scale

Figure 5
Exterior Improvements

Path: MarCom/_COMMS EXTERNAL/GRAPHICS/ BD Proposals/Guajome Park Academy Figures 160-0580-001

ATTACHMENT B
Air Quality and GHG Emissions Modeling

Guajome Park Academy

San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	200.00	Student	0.45	36,408.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2017
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - SF is the same as the existing building, lot acreage is the playground/roadway improvement disturbance area for construction assumptions purposes

Construction Phase - Based on worst-case construction schedule provided by client

Grading - Export provided by applicant

Trips and VMT - Based on worst case 8 person crew. Estimate provide by applicant

Vehicle Trips - 700 ADT provided by traffic study

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	2.00	22.00
tblConstructionPhase	NumDays	5.00	21.00
tblGrading	AcresOfGrading	0.00	0.45
tblGrading	MaterialExported	0.00	1,200.00
tblLandUse	LandUseSquareFeet	16,720.67	36,408.00
tblLandUse	LotAcreage	0.38	0.45
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	WorkerTripNumber	10.00	32.00
tblTripsAndVMT	WorkerTripNumber	18.00	32.00
tblTripsAndVMT	WorkerTripNumber	3.00	32.00
tblVehicleTrips	WD_TR	1.29	3.50

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.4568	0.2853	0.2527	4.3000e-004	0.0180	0.0181	0.0361	7.0900e-003	0.0172	0.0242	0.0000	37.4417	37.4417	5.9400e-003	0.0000	37.5666
Total	**0.4568**	**0.2853**	**0.2527**	**4.3000e-004**	**0.0180**	**0.0181**	**0.0361**	**7.0900e-003**	**0.0172**	**0.0242**	**0.0000**	**37.4417**	**37.4417**	**5.9400e-003**	**0.0000**	**37.5666**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.4568	0.2853	0.2527	4.3000e-004	0.0180	0.0181	0.0361	7.0900e-003	0.0172	0.0242	0.0000	37.4417	37.4417	5.9400e-003	0.0000	37.5665
Total	**0.4568**	**0.2853**	**0.2527**	**4.3000e-004**	**0.0180**	**0.0181**	**0.0361**	**7.0900e-003**	**0.0172**	**0.0242**	**0.0000**	**37.4417**	**37.4417**	**5.9400e-003**	**0.0000**	**37.5665**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1846	2.0000e-005	1.8700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5700e-003	3.5700e-003	1.0000e-005	0.0000	3.7800e-003
Energy	1.2200e-003	0.0111	9.2900e-003	7.0000e-005		8.4000e-004	8.4000e-004		8.4000e-004	8.4000e-004	0.0000	82.9606	82.9606	3.0900e-003	8.1000e-004	83.2769
Mobile	0.2985	0.6277	2.9037	6.0800e-003	0.4146	7.8000e-003	0.4224	0.1109	7.1800e-003	0.1181	0.0000	465.6914	465.6914	0.0198	0.0000	466.1080
Waste						0.0000	0.0000		0.0000	0.0000	7.4092	0.0000	7.4092	0.4379	0.0000	16.6044
Water						0.0000	0.0000		0.0000	0.0000	0.1538	6.5900	6.7438	0.0161	4.3000e-004	7.2138
Total	**0.4842**	**0.6388**	**2.9148**	**6.1500e-003**	**0.4146**	**8.6500e-003**	**0.4232**	**0.1109**	**8.0300e-003**	**0.1189**	**7.5630**	**555.2455**	**562.8085**	**0.4769**	**1.2400e-003**	**573.2069**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1846	2.0000e-005	1.8700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5700e-003	3.5700e-003	1.0000e-005	0.0000	3.7800e-003
Energy	1.2200e-003	0.0111	9.2900e-003	7.0000e-005		8.4000e-004	8.4000e-004		8.4000e-004	8.4000e-004	0.0000	82.9606	82.9606	3.0900e-003	8.1000e-004	83.2769
Mobile	0.2985	0.6277	2.9037	6.0800e-003	0.4146	7.8000e-003	0.4224	0.1109	7.1800e-003	0.1181	0.0000	465.6914	465.6914	0.0198	0.0000	466.1080
Waste						0.0000	0.0000		0.0000	0.0000	7.4092	0.0000	7.4092	0.4379	0.0000	16.6044
Water						0.0000	0.0000		0.0000	0.0000	0.1538	6.5900	6.7438	0.0161	4.3000e-004	7.2136
Total	**0.4842**	**0.6388**	**2.9148**	**6.1500e-003**	**0.4146**	**8.6500e-003**	**0.4232**	**0.1109**	**8.0300e-003**	**0.1189**	**7.5630**	**555.2455**	**562.8085**	**0.4769**	**1.2400e-003**	**573.2067**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/1/2016	9/30/2016	5	22	
2	Paving	Paving	10/1/2016	10/31/2016	5	21	
3	Architectural Coating	Architectural Coating	11/1/2016	11/28/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.45

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,612; Non-Residential Outdoor: 18,204 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	4	32.00	0.00	150.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	32.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.6000e-003	0.0000	8.6000e-003	4.5900e-003	0.0000	4.5900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.1236	0.0958	1.3000e-004		8.8400e-003	8.8400e-003		8.4400e-003	8.4400e-003	0.0000	11.9111	11.9111	2.3800e-003	0.0000	11.9611
Total	**0.0144**	**0.1236**	**0.0958**	**1.3000e-004**	**8.6000e-003**	**8.8400e-003**	**0.0174**	**4.5900e-003**	**8.4400e-003**	**0.0130**	**0.0000**	**11.9111**	**11.9111**	**2.3800e-003**	**0.0000**	**11.9611**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5700e-003	0.0218	0.0179	6.0000e-005	1.2800e-003	2.9000e-004	1.5700e-003	3.5000e-004	2.6000e-004	6.2000e-004	0.0000	5.1229	5.1229	4.0000e-005	0.0000	5.1237
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2100e-003	1.5900e-003	0.0152	3.0000e-005	2.8200e-003	2.0000e-005	2.8400e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	2.6305	2.6305	1.4000e-004	0.0000	2.6335
Total	**2.7800e-003**	**0.0234**	**0.0331**	**9.0000e-005**	**4.1000e-003**	**3.1000e-004**	**4.4100e-003**	**1.1000e-003**	**2.8000e-004**	**1.3900e-003**	**0.0000**	**7.7534**	**7.7534**	**1.8000e-004**	**0.0000**	**7.7571**

3.2 Grading - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.6000e-003	0.0000	8.6000e-003	4.5900e-003	0.0000	4.5900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.1236	0.0958	1.3000e-004		8.8400e-003	8.8400e-003		8.4400e-003	8.4400e-003	0.0000	11.9111	11.9111	2.3800e-003	0.0000	11.9611
Total	**0.0144**	**0.1236**	**0.0958**	**1.3000e-004**	**8.6000e-003**	**8.8400e-003**	**0.0174**	**4.5900e-003**	**8.4400e-003**	**0.0130**	**0.0000**	**11.9111**	**11.9111**	**2.3800e-003**	**0.0000**	**11.9611**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5700e-003	0.0218	0.0179	6.0000e-005	1.2800e-003	2.9000e-004	1.5700e-003	3.5000e-004	2.6000e-004	6.2000e-004	0.0000	5.1229	5.1229	4.0000e-005	0.0000	5.1237
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2100e-003	1.5900e-003	0.0152	3.0000e-005	2.8200e-003	2.0000e-005	2.8400e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	2.6305	2.6305	1.4000e-004	0.0000	2.6335
Total	**2.7800e-003**	**0.0234**	**0.0331**	**9.0000e-005**	**4.1000e-003**	**3.1000e-004**	**4.4100e-003**	**1.1000e-003**	**2.8000e-004**	**1.3900e-003**	**0.0000**	**7.7534**	**7.7534**	**1.8000e-004**	**0.0000**	**7.7571**

3.3 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0118	0.1116	0.0766	1.2000e-004		6.9400e-003	6.9400e-003		6.4200e-003	6.4200e-003	0.0000	10.3216	10.3216	2.8300e-003	0.0000	10.3810
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0118**	**0.1116**	**0.0766**	**1.2000e-004**		**6.9400e-003**	**6.9400e-003**		**6.4200e-003**	**6.4200e-003**	**0.0000**	**10.3216**	**10.3216**	**2.8300e-003**	**0.0000**	**10.3810**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	1.5200e-003	0.0145	3.0000e-005	2.6900e-003	2.0000e-005	2.7200e-003	7.2000e-004	2.0000e-005	7.4000e-004	0.0000	2.5110	2.5110	1.3000e-004	0.0000	2.5138
Total	**1.1500e-003**	**1.5200e-003**	**0.0145**	**3.0000e-005**	**2.6900e-003**	**2.0000e-005**	**2.7200e-003**	**7.2000e-004**	**2.0000e-005**	**7.4000e-004**	**0.0000**	**2.5110**	**2.5110**	**1.3000e-004**	**0.0000**	**2.5138**

3.3 Paving - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0118	0.1116	0.0766	1.2000e-004		6.9400e-003	6.9400e-003		6.4200e-003	6.4200e-003	0.0000	10.3216	10.3216	2.8300e-003	0.0000	10.3810
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0118**	**0.1116**	**0.0766**	**1.2000e-004**		**6.9400e-003**	**6.9400e-003**		**6.4200e-003**	**6.4200e-003**	**0.0000**	**10.3216**	**10.3216**	**2.8300e-003**	**0.0000**	**10.3810**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	1.5200e-003	0.0145	3.0000e-005	2.6900e-003	2.0000e-005	2.7200e-003	7.2000e-004	2.0000e-005	7.4000e-004	0.0000	2.5110	2.5110	1.3000e-004	0.0000	2.5138
Total	**1.1500e-003**	**1.5200e-003**	**0.0145**	**3.0000e-005**	**2.6900e-003**	**2.0000e-005**	**2.7200e-003**	**7.2000e-004**	**2.0000e-005**	**7.4000e-004**	**0.0000**	**2.5110**	**2.5110**	**1.3000e-004**	**0.0000**	**2.5138**

3.4 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4219					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**0.4256**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-003	1.4500e-003	0.0138	3.0000e-005	2.5700e-003	2.0000e-005	2.5900e-003	6.8000e-004	2.0000e-005	7.0000e-004	0.0000	2.3914	2.3914	1.3000e-004	0.0000	2.3941
Total	**1.1000e-003**	**1.4500e-003**	**0.0138**	**3.0000e-005**	**2.5700e-003**	**2.0000e-005**	**2.5900e-003**	**6.8000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**2.3914**	**2.3914**	**1.3000e-004**	**0.0000**	**2.3941**

3.4 Architectural Coating - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4219					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**0.4256**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-003	1.4500e-003	0.0138	3.0000e-005	2.5700e-003	2.0000e-005	2.5900e-003	6.8000e-004	2.0000e-005	7.0000e-004	0.0000	2.3914	2.3914	1.3000e-004	0.0000	2.3941
Total	**1.1000e-003**	**1.4500e-003**	**0.0138**	**3.0000e-005**	**2.5700e-003**	**2.0000e-005**	**2.5900e-003**	**6.8000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**2.3914**	**2.3914**	**1.3000e-004**	**0.0000**	**2.3941**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2985	0.6277	2.9037	6.0800e-003	0.4146	7.8000e-003	0.4224	0.1109	7.1800e-003	0.1181	0.0000	465.6914	465.6914	0.0198	0.0000	466.1080
Unmitigated	0.2985	0.6277	2.9037	6.0800e-003	0.4146	7.8000e-003	0.4224	0.1109	7.1800e-003	0.1181	0.0000	465.6914	465.6914	0.0198	0.0000	466.1080

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	700.00	0.00	0.00	1,102,470	1,102,470
Total	700.00	0.00	0.00	1,102,470	1,102,470

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.510423	0.073380	0.192408	0.132453	0.036550	0.005219	0.012745	0.022253	0.001862	0.002079	0.006550	0.000609	0.003468

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	70.9148	70.9148	2.8500e-003	5.9000e-004	71.1578
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	70.9148	70.9148	2.8500e-003	5.9000e-004	71.1578
NaturalGas Mitigated	1.2200e-003	0.0111	9.2900e-003	7.0000e-005		8.4000e-004	8.4000e-004		8.4000e-004	8.4000e-004	0.0000	12.0458	12.0458	2.3000e-004	2.2000e-004	12.1191
NaturalGas Unmitigated	1.2200e-003	0.0111	9.2900e-003	7.0000e-005		8.4000e-004	8.4000e-004		8.4000e-004	8.4000e-004	0.0000	12.0458	12.0458	2.3000e-004	2.2000e-004	12.1191

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Elementary School	225730	1.2200e-003	0.0111	9.2900e-003	7.0000e-005		8.4000e-004	8.4000e-004		8.4000e-004	8.4000e-004	0.0000	12.0458	12.0458	2.3000e-004	2.2000e-004	12.1191
Total		**1.2200e-003**	**0.0111**	**9.2900e-003**	**7.0000e-005**		**8.4000e-004**	**8.4000e-004**		**8.4000e-004**	**8.4000e-004**	**0.0000**	**12.0458**	**12.0458**	**2.3000e-004**	**2.2000e-004**	**12.1191**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Elementary School	225730	1.2200e-003	0.0111	9.2900e-003	7.0000e-005		8.4000e-004	8.4000e-004		8.4000e-004	8.4000e-004	0.0000	12.0458	12.0458	2.3000e-004	2.2000e-004	12.1191
Total		**1.2200e-003**	**0.0111**	**9.2900e-003**	**7.0000e-005**		**8.4000e-004**	**8.4000e-004**		**8.4000e-004**	**8.4000e-004**	**0.0000**	**12.0458**	**12.0458**	**2.3000e-004**	**2.2000e-004**	**12.1191**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	216992	70.9148	2.8500e-003	5.9000e-004	71.1578
Total		**70.9148**	**2.8500e-003**	**5.9000e-004**	**71.1578**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	216992	70.9148	2.8500e-003	5.9000e-004	71.1578
Total		**70.9148**	**2.8500e-003**	**5.9000e-004**	**71.1578**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1846	2.0000e-005	1.8700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5700e-003	3.5700e-003	1.0000e-005	0.0000	3.7800e-003
Unmitigated	0.1846	2.0000e-005	1.8700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5700e-003	3.5700e-003	1.0000e-005	0.0000	3.7800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.8700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5700e-003	3.5700e-003	1.0000e-005	0.0000	3.7800e-003
Total	**0.1846**	**2.0000e-005**	**1.8700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.5700e-003**	**3.5700e-003**	**1.0000e-005**	**0.0000**	**3.7800e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.8700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5700e-003	3.5700e-003	1.0000e-005	0.0000	3.7800e-003
Total	**0.1846**	**2.0000e-005**	**1.8700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.5700e-003**	**3.5700e-003**	**1.0000e-005**	**0.0000**	**3.7800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.7438	0.0161	4.3000e-004	7.2136
Unmitigated	6.7438	0.0161	4.3000e-004	7.2138

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0.484848 / 1.24675	6.7438	0.0161	4.3000e-004	7.2138
Total		**6.7438**	**0.0161**	**4.3000e-004**	**7.2138**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0.484848 / 1.24675	6.7438	0.0161	4.3000e-004	7.2136
Total		**6.7438**	**0.0161**	**4.3000e-004**	**7.2136**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	7.4092	0.4379	0.0000	16.6044
Unmitigated	7.4092	0.4379	0.0000	16.6044

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	36.5	7.4092	0.4379	0.0000	16.6044
Total		**7.4092**	**0.4379**	**0.0000**	**16.6044**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	36.5	7.4092	0.4379	0.0000	16.6044
Total		**7.4092**	**0.4379**	**0.0000**	**16.6044**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Guajome Park Academy

San Diego Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	200.00	Student	0.45	36,408.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2017
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - SF is the same as the existing building, lot acreage is the playground/roadway improvement disturbance area for construction assumptions purposes

Construction Phase - Based on worst-case construction schedule provided by client

Grading - Export provided by applicant

Trips and VMT - Based on worst case 8 person crew. Estimate provide by applicant

Vehicle Trips - 700 ADT provided by traffic study

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	2.00	22.00
tblConstructionPhase	NumDays	5.00	21.00
tblGrading	AcresOfGrading	0.00	0.45
tblGrading	MaterialExported	0.00	1,200.00
tblLandUse	LandUseSquareFeet	16,720.67	36,408.00
tblLandUse	LotAcreage	0.38	0.45
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	WorkerTripNumber	10.00	32.00
tblTripsAndVMT	WorkerTripNumber	18.00	32.00
tblTripsAndVMT	WorkerTripNumber	3.00	32.00
tblVehicleTrips	WD_TR	1.29	3.50

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	42.6681	13.2804	11.5003	0.0205	1.1638	0.8320	1.9958	0.5195	0.7932	1.3127	0.0000	1,985.4118	1,985.4118	0.3108	0.0000	1,991.9384
Total	**42.6681**	**13.2804**	**11.5003**	**0.0205**	**1.1638**	**0.8320**	**1.9958**	**0.5195**	**0.7932**	**1.3127**	**0.0000**	**1,985.4118**	**1,985.4118**	**0.3108**	**0.0000**	**1,991.9384**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	42.6681	13.2804	11.5003	0.0205	1.1638	0.8320	1.9958	0.5195	0.7932	1.3127	0.0000	1,985.4118	1,985.4118	0.3108	0.0000	1,991.9384
Total	**42.6681**	**13.2804**	**11.5003**	**0.0205**	**1.1638**	**0.8320**	**1.9958**	**0.5195**	**0.7932**	**1.3127**	**0.0000**	**1,985.4118**	**1,985.4118**	**0.3108**	**0.0000**	**1,991.9384**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0123	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463
Energy	6.6700e-003	0.0606	0.0509	3.6000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003		72.7573	72.7573	1.3900e-003	1.3300e-003	73.2001
Mobile	2.2939	4.5680	21.5219	0.0488	3.2659	0.0600	3.3258	0.8718	0.0552	0.9270		4,119.2969	4,119.2969	0.1684		4,122.8324
Total	**3.3129**	**4.6288**	**21.5937**	**0.0492**	**3.2659**	**0.0647**	**3.3305**	**0.8718**	**0.0599**	**0.9317**		**4,192.0980**	**4,192.0980**	**0.1699**	**1.3300e-003**	**4,196.0788**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0123	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463
Energy	6.6700e-003	0.0606	0.0509	3.6000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003		72.7573	72.7573	1.3900e-003	1.3300e-003	73.2001
Mobile	2.2939	4.5680	21.5219	0.0488	3.2659	0.0600	3.3258	0.8718	0.0552	0.9270		4,119.2969	4,119.2969	0.1684		4,122.8324
Total	**3.3129**	**4.6288**	**21.5937**	**0.0492**	**3.2659**	**0.0647**	**3.3305**	**0.8718**	**0.0599**	**0.9317**		**4,192.0980**	**4,192.0980**	**0.1699**	**1.3300e-003**	**4,196.0788**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/1/2016	9/30/2016	5	22	
2	Paving	Paving	10/1/2016	10/31/2016	5	21	
3	Architectural Coating	Architectural Coating	11/1/2016	11/28/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.45

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,612; Non-Residential Outdoor: 18,204 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	4	32.00	0.00	150.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	32.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7821	0.0000	0.7821	0.4173	0.0000	0.4173			0.0000			0.0000
Off-Road	1.3122	11.2385	8.7048	0.0120		0.8039	0.8039		0.7674	0.7674		1,193.6106	1,193.6106	0.2386		1,198.6217
Total	**1.3122**	**11.2385**	**8.7048**	**0.0120**	**0.7821**	**0.8039**	**1.5860**	**0.4173**	**0.7674**	**1.1846**		**1,193.6106**	**1,193.6106**	**0.2386**		**1,198.6217**

3.2 Grading - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1336	1.9107	1.3639	5.1000e-003	0.1188	0.0261	0.1449	0.0325	0.0240	0.0565		513.8709	513.8709	3.6600e-003		513.9477
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1119	0.1313	1.4316	3.3300e-003	0.2629	1.9700e-003	0.2648	0.0697	1.8100e-003	0.0715		277.9302	277.9302	0.0139		278.2227
Total	**0.2455**	**2.0420**	**2.7956**	**8.4300e-003**	**0.3817**	**0.0281**	**0.4098**	**0.1023**	**0.0258**	**0.1281**		**791.8011**	**791.8011**	**0.0176**		**792.1704**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7821	0.0000	0.7821	0.4173	0.0000	0.4173			0.0000			0.0000
Off-Road	1.3122	11.2385	8.7048	0.0120		0.8039	0.8039		0.7674	0.7674	0.0000	1,193.6106	1,193.6106	0.2386		1,198.6217
Total	**1.3122**	**11.2385**	**8.7048**	**0.0120**	**0.7821**	**0.8039**	**1.5860**	**0.4173**	**0.7674**	**1.1846**	**0.0000**	**1,193.6106**	**1,193.6106**	**0.2386**		**1,198.6217**

3.2 Grading - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1336	1.9107	1.3639	5.1000e-003	0.1188	0.0261	0.1449	0.0325	0.0240	0.0565		513.8709	513.8709	3.6600e-003		513.9477
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1119	0.1313	1.4316	3.3300e-003	0.2629	1.9700e-003	0.2648	0.0697	1.8100e-003	0.0715		277.9302	277.9302	0.0139		278.2227
Total	**0.2455**	**2.0420**	**2.7956**	**8.4300e-003**	**0.3817**	**0.0281**	**0.4098**	**0.1023**	**0.0258**	**0.1281**		**791.8011**	**791.8011**	**0.0176**		**792.1704**

3.3 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1203	10.6282	7.2935	0.0111		0.6606	0.6606		0.6113	0.6113		1,083.5832	1,083.5832	0.2969		1,089.8175
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1203**	**10.6282**	**7.2935**	**0.0111**		**0.6606**	**0.6606**		**0.6113**	**0.6113**		**1,083.5832**	**1,083.5832**	**0.2969**		**1,089.8175**

3.3 Paving - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1119	0.1313	1.4316	3.3300e-003	0.2629	1.9700e-003	0.2648	0.0697	1.8100e-003	0.0715		277.9302	277.9302	0.0139		278.2227
Total	**0.1119**	**0.1313**	**1.4316**	**3.3300e-003**	**0.2629**	**1.9700e-003**	**0.2648**	**0.0697**	**1.8100e-003**	**0.0715**		**277.9302**	**277.9302**	**0.0139**		**278.2227**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1203	10.6282	7.2935	0.0111		0.6606	0.6606		0.6113	0.6113	0.0000	1,083.5832	1,083.5832	0.2969		1,089.8175
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1203**	**10.6282**	**7.2935**	**0.0111**		**0.6606**	**0.6606**		**0.6113**	**0.6113**	**0.0000**	**1,083.5832**	**1,083.5832**	**0.2969**		**1,089.8175**

3.3 Paving - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1119	0.1313	1.4316	3.3300e-003	0.2629	1.9700e-003	0.2648	0.0697	1.8100e-003	0.0715		277.9302	277.9302	0.0139		278.2227
Total	**0.1119**	**0.1313**	**1.4316**	**3.3300e-003**	**0.2629**	**1.9700e-003**	**0.2648**	**0.0697**	**1.8100e-003**	**0.0715**		**277.9302**	**277.9302**	**0.0139**		**278.2227**

3.4 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	42.1878					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**42.5562**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

3.4 Architectural Coating - 2016

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1119	0.1313	1.4316	3.3300e-003	0.2629	1.9700e-003	0.2648	0.0697	1.8100e-003	0.0715		277.9302	277.9302	0.0139		278.2227
Total	**0.1119**	**0.1313**	**1.4316**	**3.3300e-003**	**0.2629**	**1.9700e-003**	**0.2648**	**0.0697**	**1.8100e-003**	**0.0715**		**277.9302**	**277.9302**	**0.0139**		**278.2227**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	42.1878					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**42.5562**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

3.4 Architectural Coating - 2016

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1119	0.1313	1.4316	3.3300e-003	0.2629	1.9700e-003	0.2648	0.0697	1.8100e-003	0.0715		277.9302	277.9302	0.0139		278.2227
Total	**0.1119**	**0.1313**	**1.4316**	**3.3300e-003**	**0.2629**	**1.9700e-003**	**0.2648**	**0.0697**	**1.8100e-003**	**0.0715**		**277.9302**	**277.9302**	**0.0139**		**278.2227**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2939	4.5680	21.5219	0.0488	3.2659	0.0600	3.3258	0.8718	0.0552	0.9270		4,119.2969	4,119.2969	0.1684		4,122.8324
Unmitigated	2.2939	4.5680	21.5219	0.0488	3.2659	0.0600	3.3258	0.8718	0.0552	0.9270		4,119.2969	4,119.2969	0.1684		4,122.8324

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	700.00	0.00	0.00	1,102,470	1,102,470
Total	700.00	0.00	0.00	1,102,470	1,102,470

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.510423	0.073380	0.192408	0.132453	0.036550	0.005219	0.012745	0.022253	0.001862	0.002079	0.006550	0.000609	0.003468

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.6700e-003	0.0606	0.0509	3.6000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003		72.7573	72.7573	1.3900e-003	1.3300e-003	73.2001
NaturalGas Unmitigated	6.6700e-003	0.0606	0.0509	3.6000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003		72.7573	72.7573	1.3900e-003	1.3300e-003	73.2001

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Elementary School	618.437	6.6700e-003	0.0606	0.0509	3.6000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003		72.7573	72.7573	1.3900e-003	1.3300e-003	73.2001
Total		**6.6700e-003**	**0.0606**	**0.0509**	**3.6000e-004**		**4.6100e-003**	**4.6100e-003**		**4.6100e-003**	**4.6100e-003**		**72.7573**	**72.7573**	**1.3900e-003**	**1.3300e-003**	**73.2001**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Elementary School	0.618437	6.6700e-003	0.0606	0.0509	3.6000e-004		4.6100e-003	4.6100e-003		4.6100e-003	4.6100e-003		72.7573	72.7573	1.3900e-003	1.3300e-003	73.2001
Total		**6.6700e-003**	**0.0606**	**0.0509**	**3.6000e-004**		**4.6100e-003**	**4.6100e-003**		**4.6100e-003**	**4.6100e-003**		**72.7573**	**72.7573**	**1.3900e-003**	**1.3300e-003**	**73.2001**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0123	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463
Unmitigated	1.0123	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7791					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0100e-003	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463
Total	**1.0123**	**2.0000e-004**	**0.0208**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0438**	**0.0438**	**1.2000e-004**		**0.0463**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2312					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7791					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0100e-003	2.0000e-004	0.0208	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		0.0438	0.0438	1.2000e-004		0.0463
Total	**1.0123**	**2.0000e-004**	**0.0208**	**0.0000**		**8.0000e-005**	**8.0000e-005**		**8.0000e-005**	**8.0000e-005**		**0.0438**	**0.0438**	**1.2000e-004**		**0.0463**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation