



29775 Haun Rd., Menifee, CA 92586 | (951) 672-1851 | www.menifeeusd.org

Superintendent
Steve Kennedy, Ed., D.

**SUBJECT: NOTICE OF INTENT TO ADOPT A DRAFT MITIGATED
NEGATIVE DECLARATION**

**PROJECT TITLE: MENIFEE UNION SCHOOL DISTRICT HARVEST HILL STEAM
PROJECT**

In accordance with the California Environmental Quality Act (CEQA), the Menifee Union School District is the Lead Agency and has prepared a Draft Mitigated Negative Declaration for the project identified above. The purpose of this Notice of Intent (NOI) is to solicit comments on the environmental analysis contained in the Mitigated Negative Declaration.

The Menifee Union School District (MUSD) is proposing to increase the enrollment of Harvest Hill to include K-8th grade educational facilities and increase the capacity of the school by an estimated 450 students (150 for each grade 6-8). The Harvest Hill School site consists of approximately 15.5 acres of land in Winchester, California. The proposed physical modifications to the school site include the construction of a two-story, 28,000 square-foot middle school classroom building addition on the west side of the existing school, a new approximately 120 stall parking lot on the southeast corner of the site, a new playfield on the northeast corner of the site, and an extension to Slough Road on the eastern boundary to provide better access to the school and new parking area.

The new two-story classroom building will be constructed where the existing staff parking lot is currently located, west of the current main school building. The new 120 stall parking lot is expected to be sufficiently large to accommodate both the displaced parking stalls and the increased parking needs from a larger school capacity.

This Notice is not a form requiring a response from you. Its purpose is simply to provide information to you on the above project. If the proposed project has no bearing on you or your organization, no action on your part is necessary. If you wish to receive the Draft Mitigated Negative Declaration, please call Jim Sellers, Director of Facilities at (951) 672-1851. Comments relative to the environmental analysis should be addressed to Menifee Union School District, 29775 Haun Road, Menifee, CA 92586, sent by FAX to (951) 672-1385, or emailed to jsellers@menifeeusd.org. Comments must be received no later than 5:00 p.m. on May 6, 2019. Please include the name and phone number of the contact person for your organization. The Mitigated Negative Declaration is expected to be considered by the Menifee Union School Board at its headquarters located at 29775 Haun Road, Menifee, CA 92586 on May 28, 2019 at 5:00 p.m.

Project Applicant: Menifee Union School District

Date: April 1, 2019

Signature: 

Title: Director of Facilities

Telephone: (951) 672-1851

MENIFEE UNION SCHOOL DISTRICT
29775 Haun Road, Menifee, CA 92586

**NOTICE OF INTENT TO ADOPT A
DRAFT MITIGATED NEGATIVE DECLARATION**

Project Title:

Draft Mitigated Negative Declaration: Menifee Union School District Harvest Hill STEAM Project

Project Location:

The Proposed Project Site is located in western Riverside County at 31600 Pat Road Winchester, California, between Winchester Road and Elliott Road.

Description of Nature, Purpose, and Beneficiaries of Project:

The Menifee Union School District (MUSD) is proposing to increase the enrollment of Harvest Hill to include K-8th grade educational facilities and increase the capacity of the school by an estimated 450 students (150 for each grade 6-8). The proposed physical modifications to the school site include the construction of a two-story, 28,000 square-foot middle school classroom building addition on the west side of the existing school, a new approximately 120 stall parking lot on the southeast corner of the site, a new playfield on the northeast corner of the site, and an extension to Slough Road on the eastern boundary to provide better access to the school and new parking area. The new two-story classroom building will be constructed where the existing staff parking lot is currently located, west of the current main school building.

Lead Agency:

Menifee Union School District

Draft Mitigated Negative Declaration and all Supporting Documentation are Available at:

Menifee Union School District
29775 Haun Road
Menifee, CA 92586

Or by Calling:
(951) 672-1851

or by email:
jsellers@menifeeUSD.org

The Public Notice of Completion is provided through the following:

☒ Newspaper (Riverside Press Enterprise)

Review Period and Public Hearing:

April 5, 2019 through May 6, 2019

The Mitigated Negative Declaration is expected to be considered by the Menifee Union School Board at its headquarters located at 29775 Haun Road, Menifee, CA 92586 on May 28, 2019 at 5:00 p.m.

CEQA Contact Person:

Phone Number:

Jim Sellers

(951) 672-1851

MENIFEE UNION SCHOOL DISTRICT

Draft Mitigated Negative Declaration for Harvest Hill STEAM Academy Project

**Menifee Union School District
29775 Haun Road
Menifee, CA 92586**

**Contact: Jim Sellers
(951) 672-1851**

Prepared by:

**ENVIRONMENTAL AUDIT, INC.
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Placentia, CA 92870
(714) 632-8521**

April 2018

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CHAPTER 1

PROJECT DESCRIPTION

Introduction
Agency Authority
Project Location and Background
Proposed Project Description

1.0 PROJECT DESCRIPTION

1.1 INTRODUCTION

The Menifee Union School District (MUSD) is proposing to expand Harvest Hill Science Technology Engineering Arts and Mathematics (STEAM) Academy (Harvest Hill), located in western Riverside County at 31600 Pat Road Winchester, California, between Winchester Road and Elliott Road (project site) (see Figure 1). The proposed project involves the construction of a new two-story building, parking lot, athletic field, and roadway extension in order to expand the current kindergarten through fifth grade (K-5) elementary school to a kindergarten through eight (K-8) school.

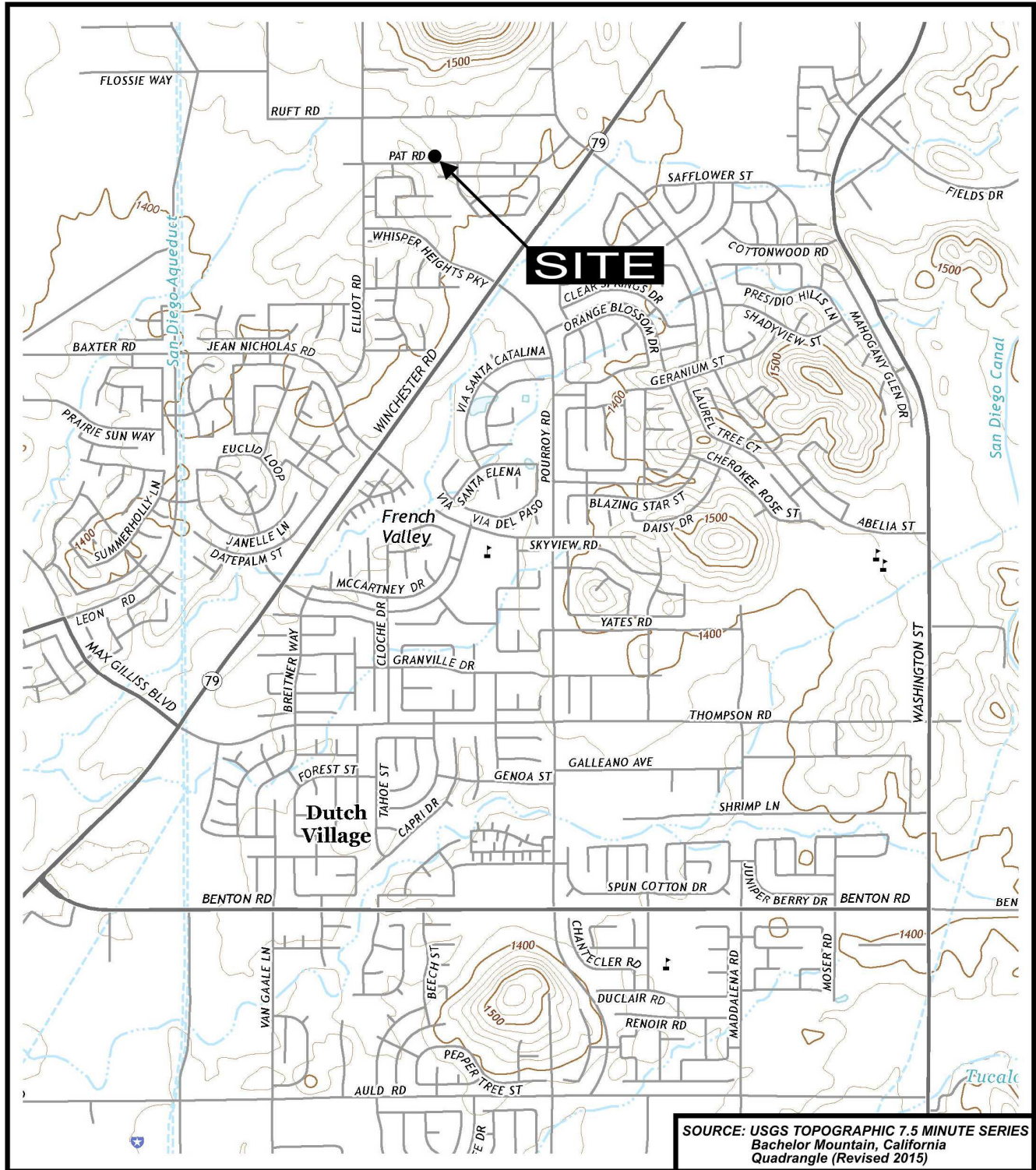
1.2 AGENCY AUTHORITY

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., requires that the environmental impacts of proposed “projects” be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and implemented. The proposed modifications to the existing school site constitutes a “project” as defined by CEQA. To fulfill the purpose and intent of CEQA, the Menifee Union School District (MUSD) is the “lead agency” for this project, and has prepared this Mitigated Negative Declaration to address the potential environmental impacts associated with the proposed modifications to the existing school site in Winchester, an unincorporated area within the County of Riverside, California.

The lead agency is the public agency having the principal responsibility for carrying out or approving a project that may have a significant adverse effect upon the environment (Public Resources Code §21067). Since the MUSD has the greatest responsibility for supervising or approving the project as a whole, it was determined that the MUSD would be the most appropriate public agency to act as lead agency (CEQA Guidelines §15051(b)).

To fulfill the purpose and intent of CEQA, the MUSD has prepared this Mitigated Negative Declaration to address the potential adverse environmental impacts associated with the proposed project. This document, prepared pursuant to the California Environmental Quality Act (CEQA), Public Resources Code 21000 et seq., constitutes a Mitigated Negative Declaration for the MUSD’s Harvest Hill STEAM Academy Project.

Menfies Union School District – Harvest Hill STEAM Academy Project



Environmental Audit, Inc.

SITE LOCATION MAP
31600 Pat Road
Winchester, CA 92596

0 2,000'



1.3 PROJECT LOCATION AND BACKGROUND

Harvest Hill STEAM Academy is located at 31600 Pat Road, between Winchester Road and Elliott Road in Winchester, an unincorporated area of Riverside, California (see Figure 2). The school sits on 15.5 acres of property.

Historical uses of the project site consisted of agricultural, i.e., dry land grain farming, in the late 1970s, early 1980s, and residential dwelling between about 1989 and 2006, as well a barn and horse stables. The property was vacant until construction of the existing Harvest Hill Academy.

Land use south and west of the Harvest Hill Academy site is primarily residential, with scattered commercial development. Land uses to the north and east of the site include open space, agricultural, and residential (see Figure 2).

1.4 PROPOSED PROJECT DESCRIPTION

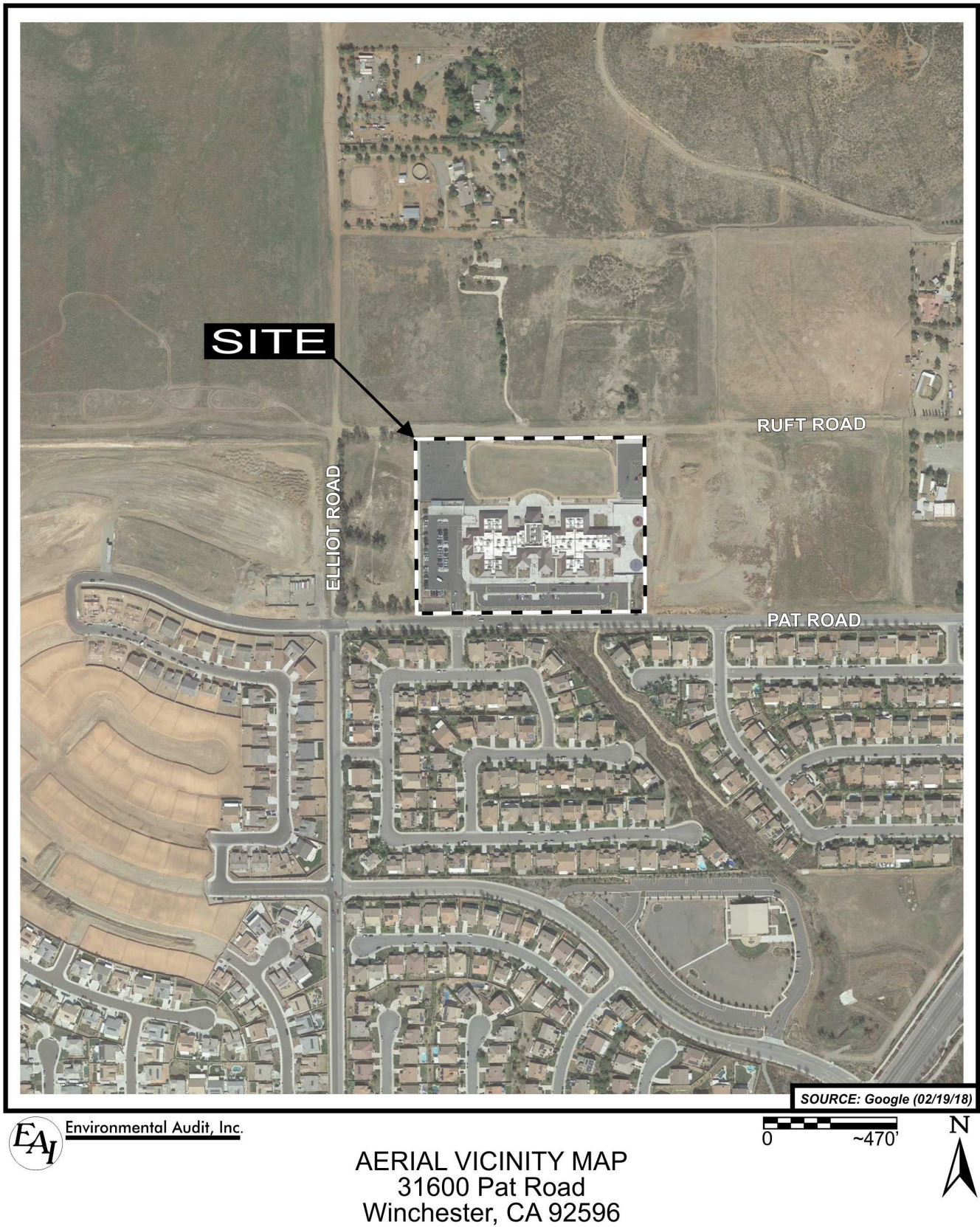
The existing Harvest Hill STEAM Academy has a capacity of about 900 students in K-5th grade. The existing school also contains a staff parking lot with 66 stalls, a visitor parking lot with 40 stalls, a blacktop play area with basketball courts, an athletic field, and a central main school building.

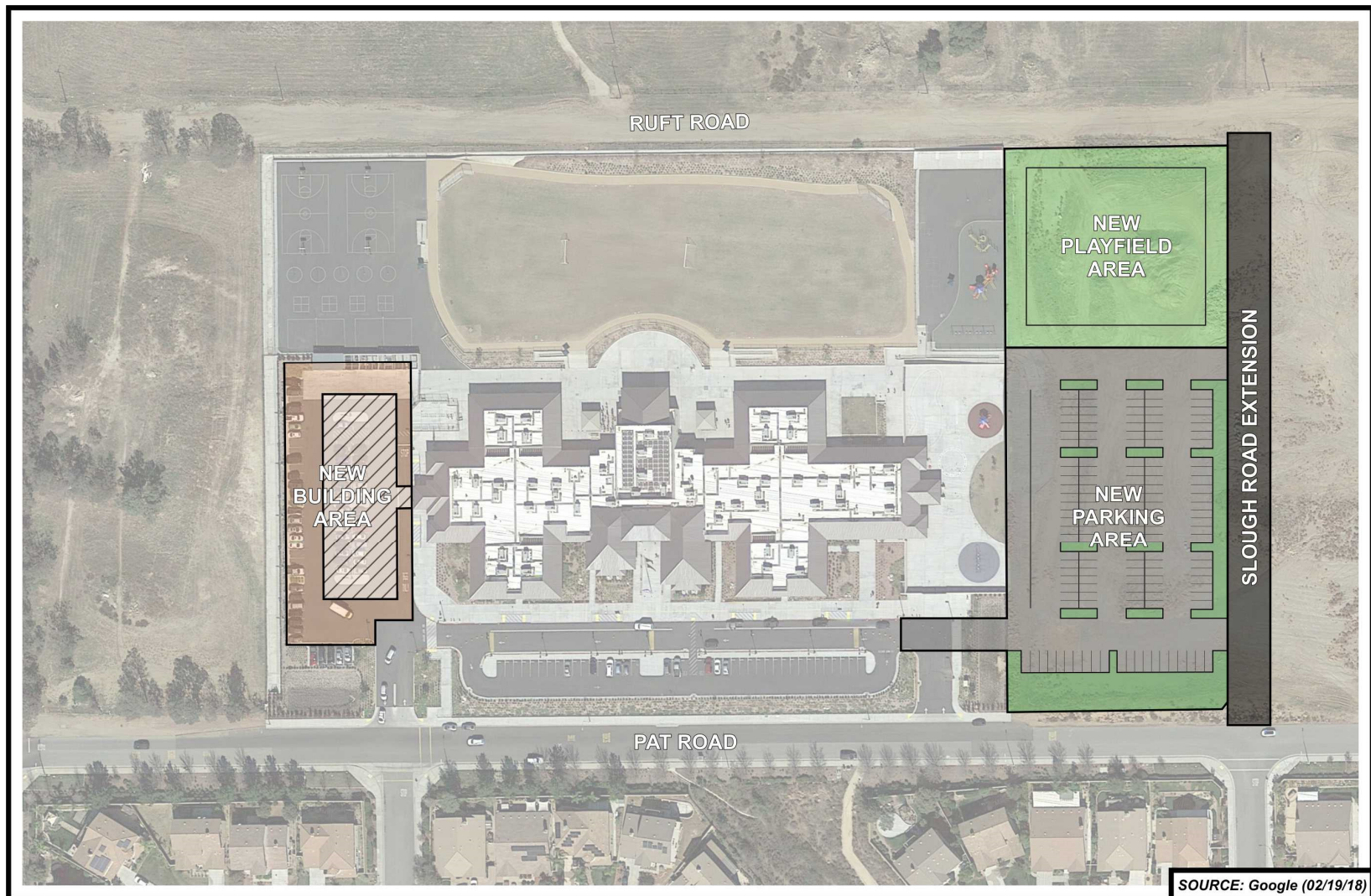
The MUSD is proposing to increase the enrollment of Harvest Hill to include K-8th grade educational facilities and increase the enrollment of the school by an estimated 450 students (150 for each grade 6-8). The proposed physical modifications to the school site include the construction of a two-story, 28,000 square-foot middle school classroom building addition on the west side of the existing school, a new approximately 120 stall parking lot on the southeast corner of the site, a new playfield on the northeast corner of the site, and an extension to Slough Road on the eastern boundary to provide better access to the school and new parking area (see Figure 3).

The new two-story classroom building will be constructed where the existing staff parking lot is currently located, west of the current main school building. The new 120 stall parking lot is expected to be sufficiently large to accommodate both the displaced parking stalls and the increased parking needs from a larger school capacity.

1.4.1 Construction Schedule

Grading for construction is expected to begin in 2019 and will take about one month. Building construction is expected to take approximately 16 months, paving will take approximately 1 month, and architectural coating will take approximately one month. Thus, construction is expected to take approximately 19 months total from grading to project completion.





Environmental Audit, Inc.

AERIAL SITE PLAN
31600 Pat Road
Winchester, CA 92596

0 2,000'



CHAPTER 2

ENVIRONMENTAL CHECKLIST FORM

Introduction
General Information
Potentially Significant Impact Areas
Determination
Environmental Checklist and Discussion
 Aesthetics
 Agriculture and Forestry Resources
 Air Quality
 Biological Resources
 Cultural Resources
 Geology / Soils
 Greenhouse Gas Emissions
 Hazards & Hazardous Materials
 Hydrology / Water Quality
 Land Use / Planning
 Mineral Resources
 Noise
 Population / Housing
 Public Services
 Recreation
 Transportation / Traffic
 Utilities / Service Systems
 Mandatory Findings of Significance
References

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	Harvest Hill STEAM Academy Project
Lead Agency Name:	Menifee Union School District
Lead Agency Address:	29775 Haun Road, Menifee, CA 92586
Contact Person:	Jim Sellers
Contact Phone Number:	(951) 672-1851
Project Location:	31600 Pat Road, Winchester, CA
Project Sponsor's Name:	Menifee Union School District
Project Sponsor's Address:	29775 Haun Road, Menifee, CA 92586
General Plan Designation:	Low Density Residential
Zoning:	Residential RS-6 (low-medium density)
Description of Project:	The MUSD is proposing to increase the enrollment of Harvest Hill to include Kindergarten through eighth grade educational facilities and increase the enrollment of the school by an estimated 450 students (150 for each grade 6-8). The proposed physical modifications to the school site include the construction of a two-story, 28,000 square-foot middle school classroom building addition on the west side of the existing school, a new approximately 120 stall parking lot on the southeast corner of the site, a new playfield on the northeast corner of the site, and an extension to Slough Road on the eastern boundary to provide better access to the school and new parking area (see Figure 3).
Surrounding Land Uses and Setting:	Land use south and west of the school site is primarily residential, with scattered commercial development. Land uses to the north and east of the site include open space, agricultural, and residential (see Figure 2).
Other Public Agencies Whose Approval is Required:	State of California Department of Education, School Facilities Planning Division California Division of the State Architect

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

The Pechanga Band of Luiseno Indians requested consultation and consultation was implemented. Mitigation measures have been developed that include tribal monitoring of the site during grading in native soils.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓" may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

- | | | |
|---|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology & Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology & Water Quality | <input type="checkbox"/> Land Use & Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population & Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities & Services Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION

On the basis of this initial evaluation:

- ☐ I find the proposed project **COULD NOT** have a significant effect on the environment, and that a **NEGATIVE DECLARATION** will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- ☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.


Signature:

3-29-19
Date:

Jim Sellers, Director of Facilities
Printed Name:

April 1, 2019
Date:

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant with Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document to the extent to which they address site-specific conditions for the project.

- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less-than- Significant Impact	No Impact
I. AESTHETICS.				
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1.1 Significance Criteria

The proposed project impacts on aesthetics will be considered significant if:

The project will block views from a scenic highway or corridor.

The project will adversely affect the visual continuity of the surrounding area.

The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

1.2 Setting and Impacts

1. a and b) The existing Harvest Hill STEAM Academy is located at 31600 Pat Road, between Winchester Road and Elliott Road in Winchester, an unincorporated area of Riverside, CA that is part of the County of Riverside’s Southwest Area. The areas adjacent to the existing school are primarily low to medium density residential, with a commercial area to the east, and vacant, undeveloped land to the north. Three highways within the Southwest Area have been nominated for Scenic Highway status, Interstate 215, Interstate 15, and State Route 74. Interstate 215 is eligible for Riverside County scenic highway status and is located 3.56 miles west of Harvest Hill. Interstate 15 and State Route 74 are eligible for California state scenic highway status and are located 6.5 miles southwest and 5.1 miles north of Harvest Hill, respectively. Thus, any physical changes to the existing school that occur as a result of the proposed project would not be visible from any scenic highways due to distance separation and intervening topography (e.g., hills). Existing vegetation located on the school site is planted for landscaping purposes or ruderal/weed vegetation. There are no unique rock outcrops or plant life that could be considered a visual resource. Thus, modifications that occur as a result of the proposed project are not expected to damage or degrade existing scenic resources.

1. c) The existing school has been graded and is relatively flat, ranging about thirty feet in elevation difference across the property with a small elevation increase towards the north side of the site. The proposed project would involve the construction of a new two story classroom building on the west side of the school site, a new parking lot on the southeast corner of the site, a new playfield on the northeast corner of the site, and an extension to Slough Road on the eastern boundary of the site. The new classroom building will be built where there is an existing parking lot, while all other modifications will occur on currently vacant land. The proposed project is not expected to change the overall character of the site as it will continue to remain a developed school site. No significant adverse aesthetic impacts are expected from the modifications to the existing school site as no unique visual resources will be disturbed. Further, the proposed project would not substantially degrade the existing visual environment and would not conflict with regulations that govern scenic qualities.

1. d) The proposed project is expected to add light sources to Harvest Hill for the operation of the new school building, parking lot, and athletic fields. These new light sources are expected to be similar to existing light sources, and are not expected to substantially change the total amount of light that is currently produced at the existing school. Lighting will be provided for security and safety purposes to light buildings, parking lots, walkways, play areas, etc. New light sources will continue to use directional lighting so that areas within the existing school site are illuminated and areas outside of the site are not. Thus, impacts due to light or glare are expected to be less than significant.

1.3 Mitigation Measures

No further mitigation measures are required since no significant adverse aesthetic impacts associated with the modifications to the existing school site were identified.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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II. AGRICULTURE and FOREST RESOURCES.

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

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | | | | |
| e) Involve other changes in the existing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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?

2.1 Significance Criteria

Project-related impacts on agricultural and forest resources will be considered significant if any of the following conditions are met:

The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.

The proposed project will 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 Resources Agency, to non-agricultural use.

The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural uses or forest to non-forest uses.

2.2 Environmental Setting and Impacts

2. a, b, c, d, and e) All construction related to the proposed project would occur on an existing school site that has already been graded. The site currently contains no agricultural uses, sparse native vegetation, and no animal habitat. The proposed project is not located within an area mapped by the County General Plan or California Farmland Mapping and Monitoring Program (FMMP) as containing Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The existing school is not in an Agricultural Preserve, is not under a Williamson Act contract, and is not located within 300 feet of agriculturally zoned property. Therefore, the proposed project would not result in potentially significant direct or indirect impacts to agricultural lands. Further, no forest resources are located on the existing school site. All development will occur on land already owned by the school that has the same land-use designation as the existing school. Since the existing school site is not zoned for agriculture use, and zoned agricultural land is not located in close proximity to the site, modifications to the existing school site as a result of the proposed project would not create changes in the environment which could potentially convert other farmlands to non-agricultural use. Similarly, forest resources are not located within or in close proximity to the existing school site. Therefore, modifications to the existing school site would not create changes in the environment which could potentially convert forestland to non-forestland use.

2.3 Mitigation Measures

Since there are no adverse significant agricultural or forest resource impacts due to the modifications to the existing school site, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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III. AIR QUALITY.

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

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non-attainment area for an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors adversely affecting substantial number of people?)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.1 Significance Criteria

Impacts will be evaluated and compared to the South Coast Air Quality Management District (SCAQMD) significance criteria in Table 2-1. If impacts equal or exceed any of the criteria in Table 2-1, they will be considered significant.

TABLE 2-1
Air Quality Significance Thresholds

Mass Daily Thresholds		
Pollutant	Construction	Operation
NO _x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
SO _x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
TAC, AHM, and Odor Thresholds		
Toxic Air Contaminants (TACs)	Maximum Incremental Cancer Risk \geq 10 in 1 million Hazard Index \geq 1.0 (project increment) Hazard Index \geq 3.0 (facility-wide)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	

PM₁₀ = particulate matter less than 10 microns in size, TAC = toxic air contaminant; AHM = Acutely Hazardous Material. NO_x = Nitrogen Oxide, CO = Carbon Monoxide, VOC = Volatile Organic Compounds, SO_x = Sulfur Oxide.

3.2 Environmental Setting and Impacts

3. a) The project is located in the South Coast Air Basin. The most recent air plan for the South Coast Air Basin is the 2016 Air Quality Management Plan (AQMP). The 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved in the South Coast Air Basin within the timeframes required under federal law (SCAQMD, 2016). Growth projections from local general plans adopted by cities in the district are provided to the Southern California Association of Governments (SCAG), the agency that develops regional growth forecasts, and they are then used to develop future air quality forecasts in the 2016 AQMP. Projects that are consistent with the local General Plans are consistent with the air quality related regional plans. While Harvest Hill STEAM Academy is located in an unincorporated part of Riverside County, the school falls within the sphere of influence of the City of Murrieta; thus, Murrieta planning documents include Harvest Hill STEAM Academy. The City of Murrieta's General Plan designates the site of the proposed project as a low density residential area. Additionally, the school is zoned for low-medium density residential. A residential zoning designation is common for schools when they are located within residential communities. The proposed project site is considered to be consistent with the air quality related regional plans since it is consistent with the General Plan for the area (City of Murrieta, 2011).

3. b) Construction Emissions: Construction activities associated with the proposed project would result in emissions of carbon monoxide (CO), particulate matter less than 10 microns in diameter (PM₁₀), particulate matter less than 2.5 microns in diameter (PM_{2.5}), volatile organic compounds (VOCs), nitrogen oxides (NO_x) and sulfur oxides (SO_x). Construction activities

include grading for the construction of new foundations, installation of the new school buildings, and paving to develop parking lots. Construction-related activities will generate emissions from worker vehicles, trucks, and construction equipment.

Daily construction emissions were calculated for the peak daily construction activities. Construction emissions are the sum of the highest daily emissions from employee vehicles, fugitive dust sources, construction equipment, and transport activities for the construction period. The peak day is based on the day in which the highest emissions occur for each pollutant. The construction emission calculations were determined using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 for a junior high school. Criteria pollutant emissions during construction activities were then compared to their respective significance thresholds. Peak construction emissions for the proposed project are summarized in Table 2-2. The CalEEMod output for the construction emissions is provided in Appendix A.

The proposed project emissions during the construction phase are compared to the SCAQMD CEQA thresholds in Table 2-2. The peak construction emissions are expected to be less than the SCAQMD CEQA significance thresholds so that no significant impacts on air quality are expected during the construction phase.

TABLE 2-2

Peak Construction Emissions

Year of Activity	Peak Daily Emissions (lbs/day)					
	CO	VOC	NO _x	SO _x	PM ₁₀	PM _{2.5}
2019 Emissions	41.0	18.6	61.9	<0.1	9.8	5.5
2020 Emissions	19.9	2.5	19.8	<0.1	2.0	1.3
SCAQMD Threshold	550	75	100	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

See Appendix A for CalEEMod results.

Notes: SCAQMD Threshold = threshold criteria for determining environmental significance of construction activities, as provided in the South Coast Air Quality Management District's 1993 Handbook for Air Quality Analysis.

The construction emissions were also compared to the SCAQMD's localized significance thresholds (SCAQMD, 2009) (see Table 2-3) for a five-acre project. Construction activities are expected to be limited to a maximum of about four acres during peak construction activities. The localized significance thresholds are used to determine whether or not a project may generate significant adverse air quality impacts to the local sensitive receptors in the vicinity of the proposed project. The proposed project site is located in SCAQMD source receptor area 24. The estimated construction emissions associated with construction of the school were compared to the localized significance thresholds for CO, NO_x, PM₁₀, and PM_{2.5}. In all cases, the construction emissions were below the localized significance thresholds (see Appendix A). Therefore, no significant localized air quality impacts are expected.

TABLE 2-3

Localized Emission Impacts Analysis

Source/Activity	On-site Source Emissions (lbs/day)					
	CO	VOC	NO _x	SO _x	PM10	PM2.5
Peak On-site Emissions	22.1	15.5	45.6	<0.1	8.6	2.2
Screening Value ⁽¹⁾	1,577	NA	270	NA	13	8
Significant?	No	-	No	-	No	No

(1) Screening values for LST analysis from SCAQMD Final Localized Significance Threshold Methodology, Appendix C, Tables C-1, C-2, and C-4 and C-5 for SRA No. 24 for five-acre sites at 25 meters (October 2009).

Operational Emissions

The emissions related to the operation of the proposed project include emissions from mobile sources, including buses and worker vehicles, and area sources (emissions associated with natural gas use, landscaping activities, etc.). The operational emissions from the proposed project were determined using CalEEMod Version 2016.3.2 (see Appendix A) and are summarized in Table 2-4. Table 2-4 reports the peak operational emissions regardless of whether the emissions occur during winter or summer months. The peak proposed project emissions during the operational phase are also compared to the SCAQMD CEQA thresholds in Table 2-4. The estimated operational emissions are expected to be less than the SCAQMD CEQA thresholds so that no significant impacts on air quality are expected during the operation of the proposed project.

TABLE 2-4

Operational Emissions Increases

Activity	Emissions (lbs/day, 24 hr/day)					
	CO	VOC	NO _x	SO _x	PM10	PM2.5
Area Source Emissions	<0.1	0.7	<0.1	<0.1	<0.1	<0.1
Energy	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vehicle Emissions	13.9	1.0	5.3	<0.1	3.8	1.0
Total Project Emissions	14.0	1.0	5.3	<0.1	3.8	1.0
SCAQMD Threshold	550	55	55	150	150	55
Significant?	NO	NO	NO	NO	NO	NO

See Appendix A for CalEEMod results.

3. c) The proposed development of the proposed project is not expected to expose sensitive receptors within one mile to significant emissions. The consumer products (e.g., paints, coatings, cleaners, solvents, etc.) used by the school are regulated by the California Air Resources Board (CARB). The VOC content of coatings, cleaners, and solvents have been regulated by CARB and the SCAQMD, and the allowable VOC content of these materials has been decreasing, resulting in a concurrent reduction in VOC and related toxic air contaminant emissions. No major changes in the use of materials or the land uses adjacent to the existing school are expected.

School districts are required to consider emissions resulting from the use of chemicals listed in the California Health and Safety Code §25532 and §44321. The school site is located within the jurisdiction of the SCAQMD. In order to determine if the SCAQMD has any permitted facilities with the potential to emit hazardous air pollutants within one-quarter mile of the school site, the SCAQMD FIND website was accessed. The FIND website contains information on permitted facilities with emissions, including toxic air contaminants. One SCAQMD permitted source was identified within one mile of the school site; a mobile diesel generator used by the Eastern Municipal Water District. This source is not expected to be a regular producer of substantial emissions, thus the proposed project is not expected to expose sensitive receptors to substantial emissions. Impacts related to toxic air contaminants are expected to be less than significant.

3. d) No emissions are expected during either the construction or operational phases that are expected to generate odors. Emissions are limited to construction equipment and mobile sources so that no significant odor impacts are expected.

3.3 Mitigation Measures

Relative to air quality, no mitigation measures are required since the preceding analyses demonstrated that no significant adverse impacts to air quality are expected. Construction activities must comply with the SCAQMD's Rule 403 – Control of Fugitive Dust Emissions in order to minimize impacts on nearby residential areas.

CHAPTER 2: ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.1 Significance Criteria

The impacts on biological resources will be considered significant if any of the following criteria apply:

The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.

The project interferes substantially with the movement of any resident or migratory wildlife species.

The project adversely affects aquatic communities through construction or operation of the project.

4.2 Environmental Setting and Impacts

4. a, b, d, e, and f) The proposed project involves the physical expansion of the Harvest Hill STEAM Academy to include grades five through eight. The proposed project would involve the construction of a new two story classroom building on the west side of the school site, a new parking lot on the southeast corner of the site, a new playfield on the northeast corner of the site, and an extension to Slough Road on the eastern boundary of the site. The new classroom building will be built where there is an existing parking lot, while all other modifications will occur on currently vacant land. The vacant area in which construction will occur has been previously disturbed by agricultural activity and does not contain dense vegetation. There are no major water bodies on the existing school site, and the property is not located within a 100- or 500-year flood zone, nor within any wetlands.

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), which was adopted by the County on June 17, 2003, is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on conservation of species and their associated habitats. This MSHCP is one of several large, multi-jurisdictional habitat planning efforts in southern California with the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region. The MSHCP will allow the County of Riverside and its cities to better control local land use decision while addressing the requirements of the state and federal Endangered Species Acts. The school site is not located within a designated cell group of the MSHCP (Ordinance No. 810).

Based on analyses contained in the MSHCP, Harvest Hill Academy is not located within lands designated with high biological value, but supports common wildlife species that are adopted to human land uses, and is not expected to conflict with any habitat conservation plan. Further, the construction areas which the proposed project would affect have been previously disturbed by agricultural and residential land use and do not contain native habitat. Therefore, development of the proposed project is not expected to significantly impact any endangered, threatened, sensitive or special species or the habitat that they use.

4.3 Mitigation Measures

No significant adverse impacts to biological resources are expected to occur as a result of construction and operation of the proposed project. Since no potentially significant adverse biological resources impacts were identified, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.1 Significance Criteria

Impacts to cultural resources will be considered significant if:

The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group.

Unique paleontological resources are present that could be disturbed by construction of the proposed project.

The project would disturb human remains.

5.2 Environmental Setting and Impacts

5. a) CEQA Guidelines state that “generally, a resource shall be considered ‘historically significant’ if the resource meets the criteria for listing in the California Register of Historical Resources including the following:

- Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Is associated with the lives of persons important in our past;

- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values;
- Has yielded or may be likely to yield information important in prehistory or history” (CEQA Guidelines §15064.5).

Generally, resources (buildings, structures, equipment) that are less than 50 years old are excluded from listing in the National Register of History Places unless they can be shown to be exceptionally important. The buildings that compose Harvest Hill STEAM Academy have been constructed in the past five years and would not be considered historically significant. No structures would be demolished as part of the project; therefore, no significant impacts to historic buildings would occur.

5. b) A cultural resources records search was completed at the Eastern Information Center (EIC) by Duke Cultural Resources Management for the Harvest Hill STEAM Academy expansion project (see Appendix B for the full report). The EIC is part of the California Historical Resources Information System (CHRIS) and is located at the University of California, Riverside. The records search included a review of all recorded historic and cultural resources surveys and excavation reports. In addition, the California State Historic Property Data file was examined, which includes the National Register of Historic Places, California Register of Historic Resources, California Historical Landmarks, and California Points of Historical Interest.

The records search at the EIC indicated that there were 18 cultural resource reports are on file at the EIC and 14 cultural resources were located within one-half mile of Harvest Hill STEAM Academy. Of the 14 cultural resources within one-half mile of Harvest Hill STEAM Academy, none are within the project boundaries. Eleven are prehistoric (e.g., milling slicks) and three are historic sites (historic foundations, cobblestone retention was and metal water tanks). A majority of the resources are located east and southeast of the project area. A prehistoric bedrock milling stick was found within 1,000 feet to the southeast of Harvest Hill STEAM Academy. The rest of the recorded resources in the record search are comprised of 22 prehistoric milling features, two stone tool artifact scatters, seven stone tool isolates, and three historic features (see Appendix B).

In addition to the record search at the EIC, a review of online historical aerial photographs was conducted. There is no evidence of any occupation within the project boundaries. In 2014 the land underwent development for the current Harvest Hill STEAM Academy and clear grading pathways are visible on the eastern portion of the project site. An intensive pedestrian survey was performed on September 18, 2018. The survey area included the 4.0 acres in the area of the proposed playfield, parking lot, and Slough Road extension. The soil has been heavily disturbed and shows signs of plowing, fill import, and grading activities (see Appendix B).

Considering the previous agricultural use of the land and taking into account previous and current ground disturbances, Duke Cultural Resources Management concluded that the Harvest Hill STEAM Academy Expansion Project has a low sensitivity for prehistoric cultural resources. Therefore, it is not likely that any cultural resources would be impacts by the proposed project

(see Appendix B). This is also consistent with the Riverside County Geographic Information System (GIS) and the City of Murrieta General Plan, which report the area covering the existing school site as having low paleontological sensitivity.

While the likelihood of encountering cultural resources is low, there is still a potential that archaeological resources may exist. Any such impact would be eliminated by using standard construction practices and complying with provisions of Section 21083.2 of the Public Resources Code, which requires the following in the event that unexpected subsurface resources are encountered:

- Conduct a cultural resources orientation for construction workers involved in excavation activities. This orientation will show the workers how to identify the kinds of cultural resources that might be encountered, and what steps to take if cultural resources are encountered during excavation activities;
- Monitoring of subsurface earth disturbance by a professional archaeologist and an appropriate representative if cultural resources are exposed during construction;
- Provide the archaeological monitor with the authority to temporarily halt or redirect earth disturbance work in the vicinity of cultural resources exposed during construction so the find can be evaluated and mitigated as appropriate; and
- As required by state law, prevent further disturbance if human remains are unearthed, until the County Coroner has made the necessary findings with respect to origin and disposition, and the Native American Heritage Commission has been notified if the remains are determined to be of Native American descent.

5. c) No known human remains or burial sites have been identified within the school site, so the proposed project is not expected to disturb any human remains.

5.3 Mitigation Measures

No significant impacts on cultural resources have been identified so no mitigation measures are required.

CHAPTER 2: ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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VI. ENERGY.

Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Result in potentially significant environmental impact due to wasteful, inefficient or unnecessary consumption of energy resources, during project construction or operations? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

6.1 Significance Criteria

The impacts to energy resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

6.2 Environmental Setting and Impacts

6. a) The proposed project involves the physical expansion of the Harvest Hill STEAM Academy to include grades five through eight. The proposed project would involve the construction of a new two story classroom building on the west side of the school site, a new parking lot on the southeast corner of the site, a new playfield on the northeast corner of the site, and an extension to Slough Road on the eastern boundary of the site. Electricity and natural gas are currently supplied to the school and no new electrical or gas connections would be required. Electricity will continue to be used for lighting, computers, cafeteria purposes, etc. Natural gas will continue to be used for heating purposes. The project would result in an incremental increase in electricity and gas use for the new classrooms. The addition to the school site will be required to comply with the applicable portions of Title 24 of the California Code of Regulations (California Building Standards). Specifically, Parts 6 and 11, the California Energy Code and

the California Green Building Standards Code (CALGreen), address the need to improve energy efficiency and combat climate change and have been adopted to minimize energy consumption and reduce GHG emissions. Because of the success of these standards, California's per capita electricity consumption has dropped 24 percent over the last 40 years. Compliance with California's Title 24/CALGreen standards ensures that the project will not result in wasteful, inefficient or unnecessary consumption of energy resources or result in a significant impact on electricity or natural gas.

6. b) The proposed project is not expected to conflict with any adopted energy conservation plan or existing energy standard. There is no known energy conservation plan and standards are those that are included in Title 24/CALGreen standards. As discussed in 6 a) above, the project is required to comply with the applicable portions of Title 24/CALGreen standards; therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

6.3 Mitigation Measures

No significant adverse impacts to energy resources are expected to occur as a result of the construction or operation of the project; therefore, no mitigation measures are required.

CHAPTER 2: ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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VII. GEOLOGY AND SOILS.

Would the project:

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

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a know fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the California Building Code, creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
-

7.1 Significance Criteria

The impacts on the geological environment will be considered significant if any of the following criteria apply:

Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.

Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.

Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.

Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.

Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

7.2 Environmental Setting and Impacts

7. a) According to the California Geological Survey (CGS), the existing school is not within a landslide, liquefaction, or earthquake fault zone. Harvest Hill is not located within the boundaries of an Alquist-Priolo earthquake fault zone, and there is no evidence of active faulting at the existing school. Harvest Hill is also not within a liquefaction zone, thus the chance of liquefaction occurring is extremely low. As concluded previously in the 2011 Negative Declaration, because no active or potentially active faults are located on the site, and based on the underlying geology of the property, the potential for ground rupture is low and is not considered significant.

7. a. (ii and iii), c, and d.) The southern California area is located within a seismically active region. The most significant potential geologic hazard is estimated to be seismic shaking from future earthquakes generated by active or potentially active faults in the region. Although there have been a number of faults identified in southern California, all of the faults are associated with the San Andreas Fault system. The San Andreas Fault is located on the north side of the San Gabriel Mountains trending east-southeast as it passes the Los Angeles Basin. This fault is recognized as the longest and most active fault in California. It is generally characterized as a right-lateral strike-slip fault which is comprised of numerous sub-parallel faults in a zone over two miles wide. There is a high probability that southern California will experience a magnitude

7.0 or greater earthquake along the San Andreas or San Jacinto fault zones, which could generate strong ground motion in the project area (Reich, 1992).

Based on the historical record, it is probable that earthquakes will affect the southern California region in the future. Research shows that damaging earthquakes will occur on or near recognized faults which show evidence of recent geologic activity. There is the potential for damage to the new structure in the event of an earthquake. Thus, the new two-story classroom building must be designed to comply with the California Building Code requirements since the project is located in a seismically active area. The local city is usually responsible for assuring that the proposed project complies with the California Building Code as part of the issuance of the building permits and can conduct inspections to ensure compliance. For schools, the Division of the State Architect (DSA) approves building permits and assures compliance with the applicable building codes. The California Building Code is considered to be a standard safeguard against major structural failures and loss of life. The goal of the code is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage, but with some non-structural damage; and (3) resist major earthquakes without collapse, but with some structural and non-structural damage.

The California Building Code determines seismic design based on minimum lateral seismic forces ("ground shaking"). The California Building Code requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. The basic formulas used for the California Building Code seismic design require determination of the seismic zone and site coefficient, which represent the foundation conditions at the site. MUSD must obtain building permits, as applicable, for all new proposed project structures. MUSD shall submit building plans to the DSA. MUSD must receive approval of all building plans and building permits to assure compliance with the latest Building Code adopted by the DSA prior to commencing construction activities.

Accordingly, the installation of new structures at the school is required to conform to the California Building Code and all other applicable state and local building codes. Thus, modifications and installations of new equipment would not alter the exposure of people or property to geological hazards such as earthquakes, liquefaction, subsidence, landslides, mudslides, ground failure, or other natural hazards. As a result, substantial exposure of people or structures to the risk of loss, injury, or death is not anticipated.

7. a. iv.) The previous 2011 Negative Declaration for the construction of Harvest Hill Academy evaluated the potential for impacts associated with on- or off-site landslides and found no significant risk (MUSD, 2011). Compliance with the California Building Code requirements address site-specific hazards, such as underlying soil conditions, which minimize risks. There are no components of the proposed project that would result in new impacts associated with landslides, lateral spreading, collapse or rock fall hazards. Therefore, implementation of the project would not result in any new significant impacts.

7. b) During construction of the proposed project, the possibility exists for temporary erosion resulting from excavation and grading activities. These activities are expected to be minor since the proposed project will not require significant grading to prepare the site for development, thus

eliminating the potential for significant wind erosion or runoff from affected areas. The proposed project will be required to comply with SCAQMD Rule 403 – Fugitive Dust, which imposes requirements, e.g., site watering, to minimize emissions associated with wind erosion. The control measures expected to apply to the proposed project include water application to the site in sufficient quantities to prevent the generation of visible dust plumes, and limit vehicular traffic and disturbances on soil, where possible.

7. e) Sewer service will be available through a Publicly Owned Treatment Works (POTW), so the soil will not need to support septic tanks, or alternative wastewater disposal systems. Therefore, no impacts on soils due to septic systems or alternative wastewater systems would occur.

7. f) As discussed in Section 5 above, a pedestrian survey was performed on September 18, 2018. The survey area included the 4.0 acres in the area of the proposed playfield, parking lot, and Slough Road extension. The soil has been heavily disturbed and shows signs of plowing, fill import, and grading activities. Considering the previous agricultural use of the land and taking into account previous and current ground disturbances, Duke Cultural Resources Management concluded that the Harvest Hill STEAM Academy Expansion Project has a low sensitivity for prehistoric cultural resources. This is also consistent with the Riverside County Geographic Information System (GIS) and the City of Murrieta General Plan, which report the area covering the existing school site as having low paleontological sensitivity. Therefore, it is not likely that any paleontological resources would be impacted by the proposed project.

7.3 Mitigation Measures

No significant geology and soils impacts were identified as California Building Code requirements provide sufficient safeguards to minimize the impacts associated with seismic hazards. Therefore, no additional mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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VIII. GREENHOUSE GAS EMISSIONS.

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

8.1 Significance Criteria

The impacts on greenhouse gas (GHG) emissions will be considered significant if any of the following criteria apply:

Small projects that exceed 3,000 metric tons per year.

Industrial projects that exceed 10,000 metric tons per year in the SCAQMD.

The threshold is based on the County of Riverside Greenhouse Gas Emissions Screening Tables (County of Riverside, 2012) which determines the GHG emissions allowed by a project such that 90 percent of the emissions (on average) from all projects would exceed that level and be “captured” by the threshold. To establish the threshold, the County reviewed 738 projects from the state Office of Planning and Research (OPR). Emissions from each of these projects were calculated by the SCAQMD to provide a consistent method of emissions calculations across the sample population. In calculating the emissions from projects within the sample population, GHG construction emissions were amortized over 30-years (the average economic life of a development project).

The analysis determined that the 90th percentile ranged from 2,983 metric tons (MT) to 3,143 MT of carbon dioxide equivalents per year. The 3,000 MT per year value is the low end value within that range rounded to the nearest hundred tons of emissions and is used in defining small projects that are considered less than significant and do not need further mitigation (County of Riverside, 2012).

8.2 Environmental Setting and Impacts

8. a and b) Global climate change refers to changes in average climatic conditions on the earth as a whole, including temperature, wind patterns, precipitation and storms. Global warming, a related concept, is the observed increase in the average temperature of the earth's surface and atmosphere. One identified cause of global warming is an increase of GHGs in the atmosphere. The six major GHGs identified by the Kyoto Protocol are CO₂, methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), haloalkanes (HFCs), and perfluorocarbons (PFCs).

Events and activities, such as the industrial revolution and the increased combustion of fossil fuels (e.g., gasoline, diesel, coal, etc.), have contributed to the increase in atmospheric levels of GHGs. Table 2-5 presents the GHG emission inventory in the South Coast Air Basin by major source categories. The emissions reported herein are based on in-Basin energy consumption and do not include out-of-Basin energy production (e.g., power plants, crude oil production) or delivery emissions (e.g., natural gas pipeline loss).

Three major greenhouse gas pollutants have been included: carbon dioxide (CO₂), nitrous oxide (N₂O), and CH₄. These GHG emissions are reported in million metric tons of CO₂ equivalent (MMTCO₂e.) Mobile sources generate 59.4 percent of the total GHG emissions in the Basin (47.0 percent from on-road vehicles and 12.4 percent from other mobile sources (aircraft, trains, ships and boats, and other sources (construction equipment, airport equipment, oil and gas drilling equipment)). The remaining 40.6 percent of the total Basin GHG emissions are from stationary and area sources.

Fuel combustion is the largest contributor to stationary/area source GHG emissions, accounting for 68.6 percent of all the GHG emissions from the stationary/area source category. Fuel combustion from the stationary/area source category accounts for 27.8 percent of the total GHG emissions in the Basin.

In response to growing scientific and political concern regarding global climate change, California has recently adopted a series of laws to reduce both the level of GHGs in the atmosphere and to reduce emissions of GHGs from commercial and private activities within the state. In June 2005, Governor Schwarzenegger signed Executive Order S-3-05, which established GHG emissions reduction targets for the state, as well as a process to ensure that the targets are met. In May 2012, the County of Riverside released a GHG Gas Reduction Plan to reduce greenhouse gas emissions to 15 percent less than 2008 levels by 2020. This target is consistent with the AB 32 target to aid state and international efforts in stabilizing climate change.

TABLE 2-5
2008 GHG Emissions in the South Coast Air Basin

Source Category	Emissions						
	CO ₂	N ₂ O	CH ₄	CO ₂	N ₂ O	CH ₄	CO ₂ e
	(TPD)			(TPY)			(MMT)
Fuel Combustion							
Electric Utilities	34,303	0.08	0.71	12,520,562	29.0	258	11.4
Cogeneration	872	0.00	0.02	318,340	0.60	6.00	0.29
Oil and Gas Production (Combustion)	2,908	0.01	0.08	1,061,470	4.71	29.5	0.96
Petroleum Refining (Combustion)	44,654	0.06	0.57	16,298,766	20.7	207	14.8
Manufacturing and Industrial	22,182	0.06	0.48	8,096,396	20.9	174	7.35
Food and Agricultural Processing	927	0.00	0.02	338,516	0.84	7.16	0.31
Service and Commercial	21,889	0.08	0.59	7,989,416	30.8	215	7.26
Other	2,241	0.02	0.16	818,057	8.58	58	0.75
Total Fuel Combustion	129,977	0.32	2.62	47,441,523	116	956	43.1
Petroleum Production and Marketing							
Oil and Gas Production	92.1	0.00	0.92	33,605	0.06	336	0.04
Petroleum Refining	770	0.00	1.65	280,932	0.36	603	0.27
Petroleum Marketing			83.8	0	0.00	30,598	0.58
Other			0.00	0	0.00	0	0.00
Total Petroleum Production and Marketing	862	0.00	86.4	314,536	0.42	31,537	0.89
Other Source Categories							
Total Waste Disposal ^(b)	3,772	0.04	508	1,376,870	14.9	185,278	4.78
Total Cleaning and Surface Coatings ^(c)	2,648	0.00	0.33	966,628	1.22	122	0.88
Total Industrial Processes ^(d)	279	0.00	1.49	101,832	0.19	543	0.10
Total Solvent Evaporation ^(e)	0.00	0.00	0.07	0.00	0.00	24.20	0.00
Total Miscellaneous Processes ^(f)	38,850	0.12	27.9	14,180,326	45.3	10,179	13.1
Total On-Road Motor Vehicles ^(g)	217,480	6.11	8.26	79,380,188	155	187	72.7
Total Other Mobile Sources ^(h)	57,572	1.83	8.95	21,013,816	668	3,268	19.3
Total Other Source Categories	320,601	8.10	555	117,019,660	885	199,601	111
Total 2008 Baseline GHG Emissions for Basin	451,440	8.42	644	164,775,719	1,001	232,094	155

Source: (SCAQMD, 2013)

(a) MMT = million metric tons.

(b) Waste Disposal includes sewage treatment, landfills, incineration, and other waste disposal.

(c) Cleaning and Surface Coatings includes laundering, degreasing, coatings and related processes, printing, adhesives and sealants, and other cleaning and surface coatings.

(d) Industrial Processes include chemical, food and agriculture, mineral processes, metal processes, wood and paper, glass and related products, electronic, and other industrial processes.

(e) Solvent Evaporation includes consumer products, architectural coating and related solvents, pesticides and fertilizers, and asphalt paving and roofing.

(f) Miscellaneous Processes include residential fuel combustion, farming operations, construction and demolition, paved road dust, unpaved road dust, fugitive windblown dust, fires, waste burning and disposal, utility equipment, cooking, and other miscellaneous processes.

(g) On-Road Motor Vehicles include trucks (all sizes), motorcycles, buses (all types), and motorhomes.

(h) Other Mobile Sources include aircraft; trains; ships; commercial boats, construction, airport, and oil and gas drilling equipment.

The GHG emissions for the proposed project were estimated using CalEEMod (see Table 2-6 and Appendix A). GHG emissions during construction activities are primarily associated with internal combustion engines in heavy construction equipment, e.g., trucks, cranes, bulldozers, etc. The estimated GHG emissions due to construction activities associated with the proposed project are estimated to be about 460 metric tons during the entire construction period, or 15.3 metric tons per year amortized over 30 years.

Operational emissions associated with the proposed project include combustion emissions from vehicle engines, natural gas use, consumer products, architectural coatings, and landscaping activities. The estimated GHG operations emissions due to operation of the proposed project are expected to be about 679.2 metric tons per year. The total operational GHG emissions from the proposed modifications are 694.5 metric tons per year, which is below the Riverside County GHG threshold of 3,000 metric tons per year. Therefore, no significant increase in GHG emissions and related climate change are expected due to the proposed project.

TABLE 2-6
Menifee Unified School District
Harvest Hill STEAM Academy Project Increase in GHG Emissions
(metric tons per year)

ACTIVITY	CO ₂ e
30-year Amortized Construction Emissions	15.3
Increase in Operational Emissions	679.2
Total GHG Emissions	694.5
Significance Threshold Level	3,000
Significant?	No

8.3 Mitigation Measures

No significant adverse impacts from the proposed project on greenhouse gas emissions are expected, therefore, no mitigation measures are required.

CHAPTER 2: ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

9.1 Significance Criteria

The following thresholds of significance are generally based on Appendix G to the CEQA Guidelines. Implementation of the proposed project may have a significant adverse hazards and hazardous materials impact on the environment if the project:

- Creates a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Creates 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; or
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.

9.2 Environmental Setting and Impacts

9. a), b), c), and d) The proposed project would not generate or create a significant hazard through the transport or use of hazardous materials. Current operation of the proposed school does not require extensive or ongoing use of hazardous materials and the addition of a new two-story classroom building, parking lot, and athletic playfield will not significantly change the amount of hazardous materials used. While grading and construction activities may involve the transport, storage, use or disposal of some hazardous materials, e.g., on-site fueling for construction equipment, this activity will be short term and subject to federal, state, and local health and safety requirements.

Operation of the existing school does not involve the transport, storage, use or disposal of hazardous materials. The types of hazardous materials generally associated with the operation of a school are substances such as cleaners, paints, aerosol cans, etc., typically in prepackaged consumer type containers. The amounts and use of these materials by schools are typically limited and not considered to be potentially significant.

A Phase I Environmental Site Assessment (Phase I ESA) under the requirements of California Education Code Section 17213.1(a) was previously completed for the existing school site before the school was constructed. As part of the Phase I ESA, numerous information sources were reviewed to develop an understanding of the current and historical land use practices at the school site and surrounding properties that may impact the school site, associated with the handling, use, storage, and/or disposal of hazardous substances or wastes. The Phase I ESA concluded the following:

- The existing school site (approximately 15.5 acres) was formerly used for dry land grain farming in the late 1970s, early 1980s, and residential purposes between about 1986 and 2006, i.e., two single-family dwellings.
- The existing school site was not identified on any database lists as a property known or suspected to be contaminated. The radius search distances for various federal, state, local and tribal database lists reviewed complied with the requirements of ASTM, E1527-05.
- No facilities that emit hazardous air pollutants have been permitted by the SCAQMD within a one-quarter mile radius of the school site.
- No sites with known toxic and/or hazardous substances contamination are located near the school site, including sites complied pursuant to Government Code Section 65962.5.
- No pipelines carrying hazardous substances, materials or wastes are located in the proximity of the school site.

Based on the above, EAI concluded that no further action (NFA) was required for the school site. Per Education Code Section 17213.1(a), the Phase I ESA was submitted to the Department of Toxic Substances Control (DTSC) for their review and approval. All new school sites must obtain a NFA designation from DTSC which establishes no significant risk to children's health, children's learning abilities, public health or the environment due to the presence or threatened release of hazardous materials or naturally occurring hazardous materials. On November 15, 2011, DTSC issued a NFA letter to the MUSD. Based on the above, no significant hazard impacts are expected from the proposed project.

9. e) The closest airport to the proposed project site is the French Valley airport located approximately three miles south of Harvest Hill STEAM Academy at 37600 Sky Canyon Drive, Murrieta. The proposed project site is not located within the French Valley Airport Influence Policy Area and there are no other airports (public or private) within two miles of the proposed project site. Exposure of additional persons to airport-related safety risks will not result from the proposed project.

9. f) The existing Harvest Hill school site has developed emergency response and emergency evacuation plans for implementation in the event of an earthquake, fire, or other similar incident. The emergency response and emergency evacuation plans will need to be updated to incorporate the proposed new building. Since these plans will be updated, the proposed project will not interfere with any current emergency response or evacuation plans.

9. g) The proposed project is located in an area that has been disturbed for agricultural and urban development, and is not located within an area that contains dense vegetation. The Southwest Planning Area Wildfire Zone classification for the school site and surrounding area is "none." Project plans and implementation must comply with state and local fire codes. Therefore, no significant impacts on the proposed project from wildfires are expected.

9.3 Mitigation Measures

No significant impacts from hazards or hazardous materials have been identified so no mitigation measures are required.

CHAPTER 2: ENVIRONMENTAL CHECKLIST

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

10.1 Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

Water Quality:

The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.

The project will cause the degradation of surface water substantially affecting current or future uses.

The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.

The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.

The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.

The project results in alterations to the course or flow of floodwaters.

Water Demand:

The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use a substantial amount of potable water.

The project increases demand for water by more than five million gallons per day.

10.2 Environmental Setting and Impacts

10. a) Wastewater generated by operation of the school will be limited to sanitary waste, which will be treated by the local wastewater treatment plant so no significant water quality impacts are expected. See Section XVIII – Utilities and Service Systems for a more detailed discussion of the proposed project's impact on wastewater treatment systems.

10. b and e) The Eastern Municipal Water District is responsible for providing potable water within the proposed project area and ensuring the water meets applicable health standards for drinking water. No water wells are proposed to be installed as part of the proposed project, and therefore, the project would not draw directly from groundwater. Because the proposed project would not extract or require the extraction of groundwater, it would not substantially result in the alteration of the amount and/or flow of groundwater supplies.

The proposed project would not directly impact ground water. The proposed project would permanently alter the composition of the surface water runoff due to construction of the new parking lot and the extension of Slough Road, which through percolation has the potential to indirectly impact groundwater quality. Compliance with the requirements of the Storm Water Pollution Prevention Plan requirements (see discussion in 10 c below for further details) would reduce potential impacts on ground water quality to less than significant. No additional mitigation is required.

The proposed project is not expected to substantially reduce groundwater supplies or affect groundwater recharge to the point of depreciating the local groundwater table level or aquifer volume. The construction of the new two-story building, parking lot, playfield, road extension, and operation of the expanded school will not consume large quantities of water. Water will primarily be used for drinking water purposes, sanitary sewer, and landscape irrigation. No water wells are proposed to be installed for the proposed project; therefore, the project would not draw directly from groundwater or obstruct implementation of a groundwater management plan. All water use can be accommodated by existing utilities operated by Eastern Municipal Water District. Water demand is further discussed in Section XVIII. No significant increase in water consumption and no decrease in ground water supplies are expected due to the proposed project.

10. c) There are no streams or rivers in the vicinity of the existing school. Therefore, the construction proposed project is not expected to impact drainages or alter a stream or river.

Part of the proposed project includes the construction of a new parking lot, two-story building, and a road extension over previously vacant land. As such, the project would permanently alter the composition of the surface runoff by construction of impervious surfaces, which has the potential to indirectly impact groundwater quality as water on the site's pervious surfaces percolates to the groundwater table.

The General Construction Activities Stormwater Permit (GCASP) is a statewide NPDES permit issued by the SWRCB (Water Quality Order 2009-0009-DWQ/NPDES General Permit CAS000002). It regulates stormwater discharges from construction projects that encompass at least one acre of soil disturbance unless the discharge is in compliance with an NPDES Permit. In the Riverside area, the GCASP is administered by the RWQCB under Order R8-2010-1-0033 (NPDES No. CAS 618033), which was approved by the Regional Water Quality Control Board, Santa Ana Region, with oversight by U.S.EPA. The GCASP requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that sets forth 1) the Best Management Practices (BMPs) the discharger will use to protect stormwater runoff, and 2) monitoring programs to verify effectiveness of the BMPs. Recent changes to the General Permit include the following:

- Allows small, low risk construction sites (>1 and < 5 acres) to self-certify.
- Establishes numeric action and effluent levels for pH and turbidity.
- Establishes three levels of risk possible for a construction site.
- Imposes more minimum BMPs and requirements.

- Provides options for dischargers to monitor and report the soil characteristics at their project location to provide better risk determination results.
- Requires effluent monitoring and reporting for pH and turbidity in stormwater discharges.
- Requires some high risk dischargers to monitor receiving waters.
- Requires post-construction monitoring under certain conditions.
- Requires certain sites to develop and implement a rain event action plan to protect all exposed portions of the site within 48 hours prior to a likely rain event.
- Requires projects longer than 3 months to submit information and annually certify compliance.
- Requires certification and training requirements for key personnel.

A SWPPP will be required to outline the BMPs that apply to the project and minimize pollutants in storm water runoff during construction activities. BMPs range from source control, such as use of permeable pavement, to treatment of polluted runoff, such as use of detention or retention basins, sediment traps/basins, and constructed wetlands. Maintenance practices (e.g., street sweeping) and public outreach campaigns also fall under the category of BMPs. The preparation of a SWPPP and implementation of BMPs, as required by existing regulations and permit requirements, would minimize the impacts associated with storm water runoff to less than significant. Further, the existing school site and much of the area that will be constructed upon as a result of the proposed project has already been graded. Further, development as a result of the proposed project will not significantly change the character of the site, but simply expand the existing school. Thus, the proposed project is not expected to contribute significantly to runoff or otherwise degrade water quality.

10. d) According to the Federal Emergency Management Agency, Flood Insurance Rate Map, the proposed project is not located within a 100-year flood zone. Additionally, the proposed project is not located in a mapped dam inundation area and is not subject to hazards associated with dam hazards or flooding. Based on the topography and/or site elevations in relation to the ocean, the proposed project is not expected to result in an increased risk of seiche, tsunami or mud flow hazards. No significant water bodies are located in the vicinity of the proposed project so there is no risk of seiching. The proposed project is located over 50 miles from the Pacific Ocean, so there is no risk of tsunami. Finally, part of the proposed project is located on relatively flat land and existing building code requirements are expected to sufficiently mitigate potential mudflows.

10.3 Mitigation Measures

No significant impacts to hydrology and water quality have been identified so no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

11.1 Significance Criteria

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by the City or County.

11.2 Environmental Setting and Impacts

11. a) There are no components of the proposed project that would disrupt or divide an established community. The proposed project would involve the construction of a new two-story classroom building on the west side of the school site, a new parking lot on the southeast corner of the site, a new playfield on the northeast corner of the site, and an extension to Slough Road on the Eastern boundary of the site. These changes will extend from the existing school and will not intersect with any existing buildings or developments. Therefore, the proposed project would not physically divide an established community.

11. b) The proposed project is located in the French Valley Area, with a General Plan designation as the Southwest Planning Area. The Southwest Planning Area is framed by the Santa Ana Mountains to the west, the Santa Margarita Mountains and Agua Tibia range to the south, and the Black Hills to the east. Murrieta Creek runs along the floor of the Murrieta Valley, which generally divides the Southwest Planning Area in a western/eastern configuration. The Cities of Temecula and Murrieta span both sides of Murrieta Creek, further accentuating this pattern. A series of Valleys runs in a north-south manner and includes Warm Springs, Tualota, and Santa Gertrudis Creeks. Temecula Creek forms the Pauba Valley, which runs east-west along the southern boundary of the area. Pechanga Creek forms Wolf Valley, located just south of the City of Temecula. All of these creeks eventually flow to the Santa Margarita River, one of the most diverse environments in southern California.

Harvest Hill STEAM Academy and the immediate surrounding area were historically used for agricultural purposes, with occasional residences. The area has been growing in population within recent years, creating much of the area to be redeveloped for residential purposes.

The proposed project is consistent with the development expected in the French Valley portion of Riverside County and is being developed to support planned population growth in the area that is envisioned in the County's General Plan. Approval of the proposed project would include the development of some currently vacant land to the east side of the school site to allow for a new parking lot and road extension, but no significant impact on land use is expected. The site is consistent with growth envisioned in the General Plan, which recognizes the conversion of agricultural lands into other uses could lead to significant impacts on agricultural resources but adopted a number of policies to mitigate that impact. Such policies include: (1) encourage retaining agriculturally designated lands through incentives such as tax credits; (2) discourage conversion and inappropriate land division in the immediate proximity or agricultural uses; (3) encourage conservation of productive agricultural lands and preservation of prime agricultural lands; and (4) continue to participate in the California Land Conservation Act (Williamson Act). Development of the proposed project will not conflict with any applicable land use plan, general plan or specific plan. The land is also not unique or prime agricultural land.

11.3 Mitigation Measures

Since there are no adverse significant land use or planning impacts due to the modifications to the existing school site, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

12.1 Significance Criteria

Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

The project would 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.

The project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

12.2 Environmental Setting and Impacts

12. a and b) No mines or quarries are known to exist on the school site or in the vicinity of the proposed project. The Munger Map Book (May 1990 edition) contains data on oil and gas wells in the States of California and Alaska. These data are gathered from state agencies, oil well operators, and various trade journals serving the oil and gas industry. According to Munger, there are no wells (active or abandoned) located on the school site and the site is not within an administrative boundary of an oil field. Therefore, the proposed project would not impact mineral resources

12.3 Mitigation Measures

Since there are no adverse significant mineral resource impacts due to the modifications to the existing school site, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE. Would the project:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

13.1 Significance Criteria

Impacts on noise will be considered significant if:

- Construction noise levels exceed the County of Riverside noise ordinance or, if the noise threshold is currently exceeded, proposed project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, proposed project noise sources increase ambient noise levels by more than three dBA at the site boundary.

The Office of Planning and Research has established guidelines for exterior sound levels based on land use categories for Noise Elements in General Plans. The noise guidelines state that the normally acceptable outdoor noise exposure-level for Schools, Libraries, Churches, Hospitals, and Nursing Homes, and school zones is 50 to 70 dBA CNEL. Table 2-7 summarizes the noise compatibility guidelines applicable to a variety of different land use types. The Project area is within the sphere of influence of the City of Murrieta and the City of Murrieta General Plan Noise Element uses the same noise compatibility guidelines (City of Murrieta, 2011).

TABLE 2-7
Land Use Noise Compatibility Guidelines

Land Use^(a)	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential-Low Density, Single-Family, Duplex, Mobile Homes	50 - 60	55 - 70	70 - 75	75 - 85
Residential - Multiple Family	50 - 65	60 - 70	70 - 75	70 - 85
Transient Lodging - Motel, Hotels	50 - 65	60 - 70	70 - 80	80 - 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	80 - 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 - 70	NA	65 - 85
Sports Arenas, Outdoor Spectator Sports	NA	50 - 75	NA	70 - 85
Playgrounds, Neighborhood Parks	50 - 70	NA	67.5 - 77.5	72.5 - 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 70	NA	70 - 80	80 - 85
Office Buildings, Business Commercial and Professional	50 - 70	67.5 - 77.5	75 - 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	75 - 85	NA
<p><u>NORMALLY ACCEPTABLE:</u> Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.</p> <p><u>CONDITIONALLY ACCEPTABLE:</u> New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features have been included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.</p> <p><u>NORMALLY UNACCEPTABLE:</u> New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise-insulation features must be included in the design.</p> <p><u>CLEARLY UNACCEPTABLE:</u> New construction or development should generally not be undertaken.</p>				

Source: Office of Planning and Research, California, *General Plan Guidelines*, October 2003.

13.2 Environmental Setting and Impacts

13. a) and b) The primary existing noise sources within Riverside County include transportation facilities such as airports, railroads, freeways, and highways; commercial and industrial land uses; agricultural land uses; recreational areas; construction; and other noise sources such as shooting ranges, mining, and sand and gravel operations. The ambient noise environment in the vicinity of the proposed project is primarily from traffic along Winchester Road. The noise levels at the school site from Winchester Road are expected to be less than 60 dBA, because Harvest Hill STEAM Academy is located over 2,000 feet from Winchester Road; 60 dBA is in the “normally acceptable” noise range for schools (see Table 2-7).

Construction activity associated with the development of the parking lot, new two-story building, and Slough Road extension will produce noise as a result of operation of construction equipment. Typical sound levels for typical construction equipment ranges from about 77 to 88 decibels (dBA) (see Table 2-8). Proposed project construction is anticipated to increase noise levels temporarily at noise-sensitive (e.g., residential) receptors in the vicinity of the existing school site, because heavy construction equipment is required during construction activities. The magnitude of the increases would depend on the type of construction activity, the noise level generated by various pieces of construction equipment, site geometry (i.e., shielding by intervening fences, buildings, and other structures), and the distance between the noise source and the receptors. These noise sources will operate during daylight hours and will be a source of noise over the construction period.

TABLE 2-8

Example of Noise Levels from Construction Noise Sources

EQUIPMENT	TYPICAL RANGE (decibels)^(a)
Truck	88
Loader	79
Backhoe	78
Air Compressor	78
Pumps	81
Generators	81
Dozer	82
Concrete Mixers	79
Concrete Pumps	81
Tractor	84
Scrapers, Graders	84
Pavers	77
Cranes	81
Rollers	80

(a) FTA, 2006. Levels are in dBA at 50-foot reference distance.

Construction noise levels were estimated based on the types of equipment proposed to be used on-site to complete the various construction activities. These sources include equipment such as loaders, dozers, cranes, trucks, pavers, etc. During any construction project, the overall average noise levels vary with the level of construction activity and the types of equipment that are on-site and operating at a particular time. The estimated noise level during construction activities is expected to be an average of about 80 dBA at 50 feet from the center of construction activity and drop off by six decibels with every doubling distance as outlined in Table 2-9.

TABLE 2-9
Noise Level Attenuation from Construction Site

Distance from Construction Noise Source (ft)	Estimated Noise Level (dBA)
50	80
100	74
200	68
400	62
800	56
1,600	50

Because of the nature of the construction activities, the types, number, operation time and loudness of construction equipment will vary throughout the construction period. As a result, the sound level associated with construction will change as construction progresses. The construction activities that generate noise will be carried out during the daytime from Monday to Friday. The City of Murrieta prohibits construction activities within one-quarter mile of an inhabited dwelling during the evening and nighttime hours. School construction activities will be limited to daytime hours and will be in compliance with the City of Murrieta noise ordinance. Construction noise sources will be temporary and will cease following construction activities. Noise impacts associated with the proposed project construction activities are expected to be less than significant as they would occur during the weekday hours of 8 am to 6 pm.

The operational noise impacts are expected to be similar to existing noise levels and mostly associated with additional traffic generated by population growth and not associated with the modifications to the school site.

Stationary source noise generated by the school is limited to building heating, ventilation, and air conditioning systems, school bells, school announcements, students playing on the playfield, and student movements between classes. The school is expected to increase its capacity by approximately 450 students, which will create additional noise; however, given the distances between these sources of noise and potential off-site receptors, plus the fact that most of them are momentary or short-term, no significant noise impacts are anticipated to occur at adjacent receptor areas.

Operational noise levels would be primarily due to traffic associated with transportation sources, e.g., vehicles and buses. Since noise is measured on a logarithmic scale, a doubling of traffic volumes (i.e., 100 percent increase) would be needed to cause a traffic noise-related increase of 3 dBA. A traffic increase of about 42 percent must occur to result in a noise level increase of about 1.5 dBA. The maximum increase in traffic along Pat road would be approximately 20 percent. Therefore, the increase in traffic associated with additional students would be expected to be less than 1 dBA. The proposed project would not result in a noticeable increase (3 dBA) in noise associated with operation of the expanded school site.

13. c) The proposed project is not located within an airport land use plan or within the vicinity of a private airstrip. The closest air strip to the school is the Therefore, no significant impacts from airport related noise on the proposed project are expected.

13.3 Mitigation Measures

Compliance with existing noise ordinances is expected to minimize construction noise impacts to less than significant. No significant adverse impacts on noise are expected from the proposed project. Therefore, no mitigation measures are required.

CHAPTER 2: ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace a substantial number of existing people or housing units, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

14.1 Significance Criteria

The impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

The demand for temporary or permanent housing exceeds the existing supply.

The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

14.2 Environmental Setting and Impacts

14. a) and b) The expansion to Harvest Hill STEAM Academy is being proposed in part to support the additional student population associated with homes in the area that are being built in response to anticipated regional population growth. No significant population growth will be generated by the proposed project. The expansion of the existing school will have no effect on current housing in the area and is being developed to support the residential development expected in the French Valley area. Further, no people will be displaced due to the proposed project, as construction will be confined within the existing school's property. Therefore, no significant impacts to population and housing are expected.

14.3 Mitigation Measures

Since there are no adverse significant population or housing impacts due to the modifications to the existing school site, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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XV. PUBLIC SERVICES. Would the project:

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

	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fire protection?				
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

15.1 Significance Criteria

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

15.2 Environmental Setting and Impacts

15. a) The County of Riverside provides a variety of facilities and services to residents on a County-wide basis including fire protection, law enforcement, solid waste disposal, parks and recreation, libraries, and hospitals. The Riverside County Fire Department operates 85 fire stations within the County. Fifty-one of these stations, as well as three stations operated by the California Department of Forestry, are located in the unincorporated portion of the County. Eight County fire stations are located within about 10 miles of the proposed project as follows, with Fire Station #83 the primary station responsible for fire protection for the proposed school:

Fire Station	Location – Distance from Proposed Project
French Valley Station #83	37500 Sky Canyon Drive Murrieta, CA 92563 (951) 696-0962 (~4.28 miles)
Menifee Fire Station #68	26020 Wickerd Road Menifee, CA 92584 (951) 679-5163 (~5.90 miles)
Rancho California Station #73	27415 Enterprise Circle West Temecula, CA 92590 (951) 699-0351 (~8.00 miles)
Parkview Station #84	30650 Pauba Road Temecula, CA 92590 (951) 693-0683 (~8.45 miles)
Sun City Station #7	27860 Bradley Road Sun City, CA 92586 (951) 679-3413 (~8.55 miles)
Temecula Station #12	28330 Mercedes Street Temecula, CA 92590 (951) 676-2161 (~8.87 miles)
Sage Station #28	35655 Sage Road Hemet, CA 92544 (951) 767-0118 (~9.90 miles)
Bear Creak Station #75	38900 Clinton Keith Road Murrieta, CA 92562 (951) 698-8338 (~9.90 miles)

The proposed project is located in an area that has been disturbed for agricultural and urban development, and is not located within an area that contains dense vegetation. Further, the Southwest Planning Area Wildfire Zone classification for the school and surrounding area is “none.” The fire hazards associated with the proposed project would be typical of urban areas and the project is not expected to require an increase in fire services. Therefore, no significant adverse impacts to fire services are expected.

The Riverside County Sheriffs Department provides law enforcement services in the area of the proposed project. Other services provided by the Sheriff’s Department include, but are not limited to, operating the emergency 911 system, operating correctional facilities, performing traffic control, and providing crime prevention education. Nine sheriff substations are located throughout the County for providing law enforcement services. The substation responsible for providing law enforcement services for the proposed project is:

<u>Sheriff Substation</u>	<u>Location – Distance from Proposed Project</u>
Southwest Station	30755-A Auld Road Murrieta, CA 92563 (951) 696-3000 (~2.75 miles)

The expansion of Harvest Hill STEAM Academy is being proposed to support the additional student population associated with homes in the area that are being built in response to existing and anticipated regional population growth; however, the proposed school expansion is not expected to generate additional population growth into the area. Additional police service is not expected to be required to service the proposed project, but may be required due to general population growth in the area. Therefore, no significant impacts on sheriff services are expected due to construction and operation of the modifications to the existing school site.

The proposed project is adding an additional 450 student capacity in order to handle the increased number of students entering the school district. Thus, the project is considered to help aid in preventing overcrowding and would provide an overall beneficial impact to schools

15.3 Mitigation Measures

Since there are no adverse significant public services impacts due to the modifications to the existing school site, no mitigation measures are required.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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XVI. RECREATION. Would the project:

- | | | | | | |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) | Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) | Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
-

16.1 Significance Criteria

The impacts to recreation will be considered significant if:

The project results in an increased demand for neighborhood or regional parks or other recreational facilities.

The project adversely effects existing recreational opportunities.

16.2 Environmental Setting and Impacts

16. a), and b) Riverside County has a variety of natural and recreational resources, ranging from the mile-high alpine wilderness of San Jacinto State Park to the Colorado Desert Floor, and from historic parks such as California Citrus State Historic Park to the rolling hills of the Santa Rosa Ecological preserve. Riverside County parks and recreational areas also offer residents and visitors a myriad of recreational opportunities while providing a valuable buffer between built-up urban spaces.

Riverside County maintains 35 regional parks encompassing approximately 22,317 acres. More than half of these parks are located in the western portion of the County, with other facilities scattered in desert, mountain, and Colorado River regions. The extent of these holding ranges from Miller Park (approximately 5 undeveloped acres) southwest of Blythe, to the Lake Skinner Recreation Area (6,040 acres), offering a range of recreational facilities. The Lake Skinner Recreation Area is the closest county recreational facility to the proposed project, and is located about 2.2 miles southwest of the property line.

The proposed project is not expected to impact any existing parks or recreational facilities. Part of the proposed project includes the addition of a new playfield in the northeast corner of the school that can be used by the local population, providing a beneficial impact on recreation.

16.3 Mitigation Measures

Since there are no adverse significant recreation impacts due to the modifications to the existing school site, no mitigation measures are required.

CHAPTER 2: ENVIRONMENTAL CHECKLIST

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

17.1 Significance Criteria

The impacts on transportation/traffic will be considered significant if any of the following criteria apply:

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.

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.

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

Result in inadequate emergency access

17.2 Environmental Setting and Impacts

17 a) and b).

Regional Traffic Circulation

Western Riverside County is served by major freeways connecting Los Angeles, Orange, and San Diego Counties to Riverside and San Bernardino Counties. The Riverside Freeway (91) provides major access through Riverside County in an east-west direction. This freeway links Riverside County to Orange and Los Angeles Counties. Major north-south access is provided by Interstate 15 (I-15) and Interstate 215 (I-215). These freeways connect the Western Riverside County area to San Diego County to the south and San Bernardino County to the north.

State Route 79 (Winchester Road), located about 0.37 miles east of the proposed project, is the major arterial highway in the area. Pat Road is located north and immediately adjacent to the school site, and Elliott Road is situated approximately 210 feet west of the western boundary of the proposed school site (see Figure 1). Pat Road is a paved roadway in the vicinity of the school and runs into a residential neighborhood on the west and terminates into Pourroy Road (near Winchester Road) at its eastern end. Access to the school is also provided from Winchester Road on the east and Elliot Road on the west.

State Route 79, Winchester Road, runs in a northeasterly direction from the interchange at the I-15 freeway through the eastern portion of the City of Murrieta toward the City of Hemet. SR-79 generally provides a parallel north/south route to the I-215 freeway, east of the freeway. Existing daily traffic volumes on SR-79 range from approximately 23,500 to 31,500 vehicles per day.

The operating characteristics of an intersection are defined in terms of the Level of Service (LOS). LOS describes the quality of traffic flow based on variations in traffic volume and other variables such as the number of signal phases. For signalized intersections, it is measured from LOS A (excellent conditions) to LOS F (very poor conditions). Intersections that operate at LOS A to C operate well. LOS C normally is taken as the design level in urban areas outside a regional core. LOS D is generally considered to be the lowest acceptable LOS. LOS E represents volumes at or near the capacity of the highway which will result in possible stoppages of momentary duration and fairly unstable traffic flow. LOS F occurs when a facility is overloaded and is characterized by stop-and-go (forced flow) traffic with stoppages of long duration.

A traffic analysis was completed as part of the City of Murrieta's General Plan Update. The traffic impacts associated with expected growth in the Murrieta area, including the sphere of influence, were determined using the Murrieta Focused Travel Demand Model, which is based on the Riverside Traffic Analysis Model (RivTAM). The Harvest Hill school site is located within Murrieta's sphere of influence and traffic impacts associated with implementation of the General Plan were evaluated at intersections along Winchester in the vicinity of the school (City of Murrieta, 2011), including the intersection of Winchester Road and Keller Road and the

intersection of Winchester Road and Skyview Road. The results of the traffic analysis for these two intersections are provided in Table 2-10. As shown in Table 2-10, traffic levels in the vicinity of the school site are expected to be operating at acceptable traffic flow conditions through 2035.

TABLE 2-10

Murrieta General Plan 2035 Intersection Operation

	Without General Plan Update		2035 With General Plan Update	
	AM Peak	PM Peak	AM Peak	PM Peak
	Delay ⁽¹⁾ /LOS	Delay ⁽¹⁾ /LOS	Delay/LOS ⁽¹⁾	Delay ⁽¹⁾ /LOS
Winchester Rd/Keller Rd	14.2/B	23.0/C	1.6/A	1.6/A
Winchester Road/Nicholas Skyview Road	4.0/A	5.1/A	19.7/B	28.5/C

Source: City of Murrieta, 2011.

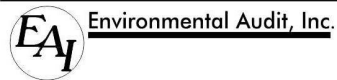
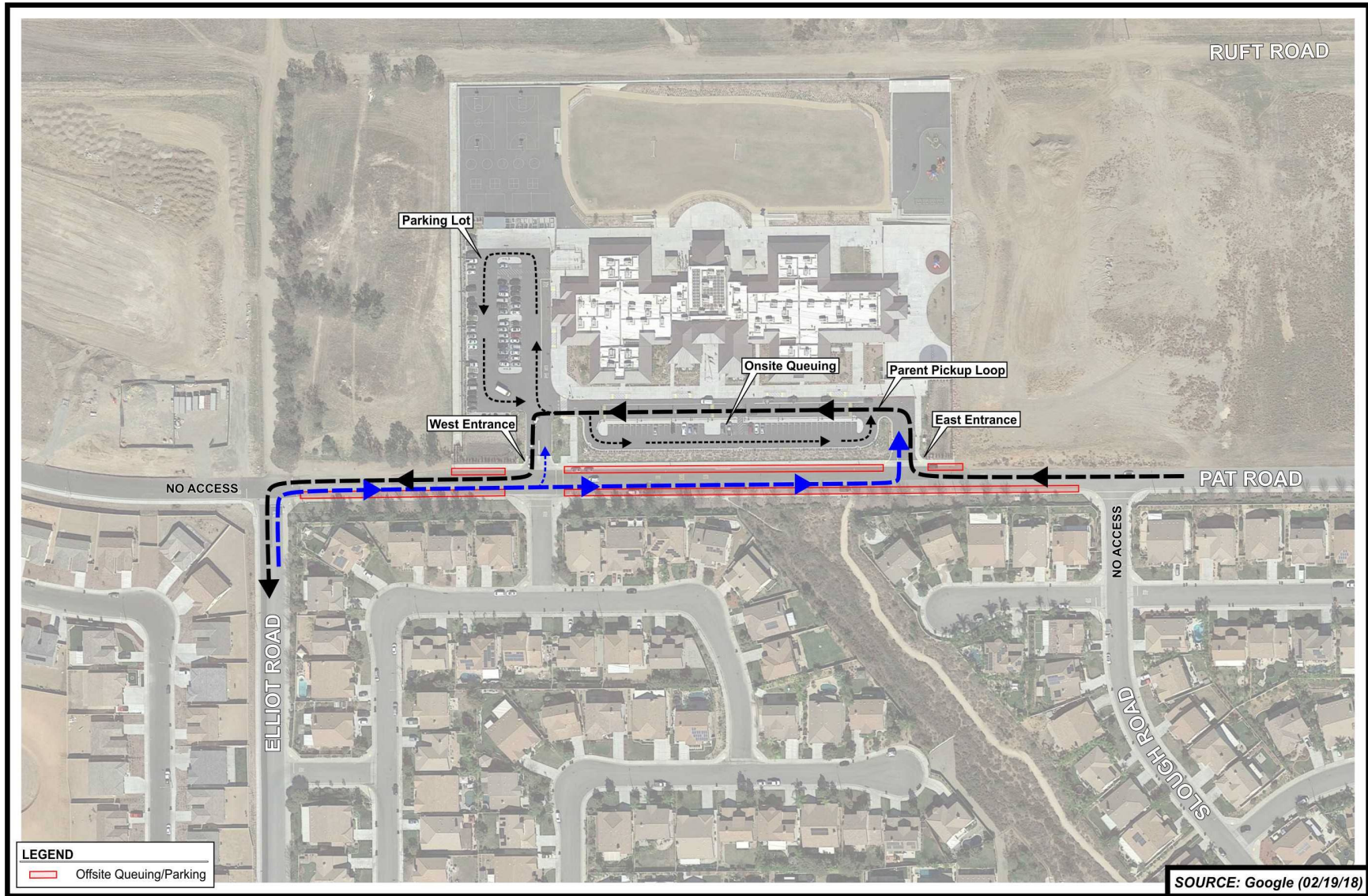
Local Traffic Circulation

The Harvest Hill elementary school is located at 31600 Pat Road, Winchester, California. Access to the school site is provided from Winchester/Pourroy Road on the east and Elliot Road on the west. School hours are currently from 7:40 a.m. to 2:04 p.m. The current pick up/drop off traffic circulation patterns are shown in Figure 4. A review of the traffic circulation during the afternoon pick up period shows that parents begin to queue at approximately 1:55 p.m. Traffic queuing initially occurs onsite in the Parent Pickup Loop and subsequently spills onto both sides of Pat Road between Elliot Road and Slough Road. Traffic generally clears up within about 15 minutes of school closure.

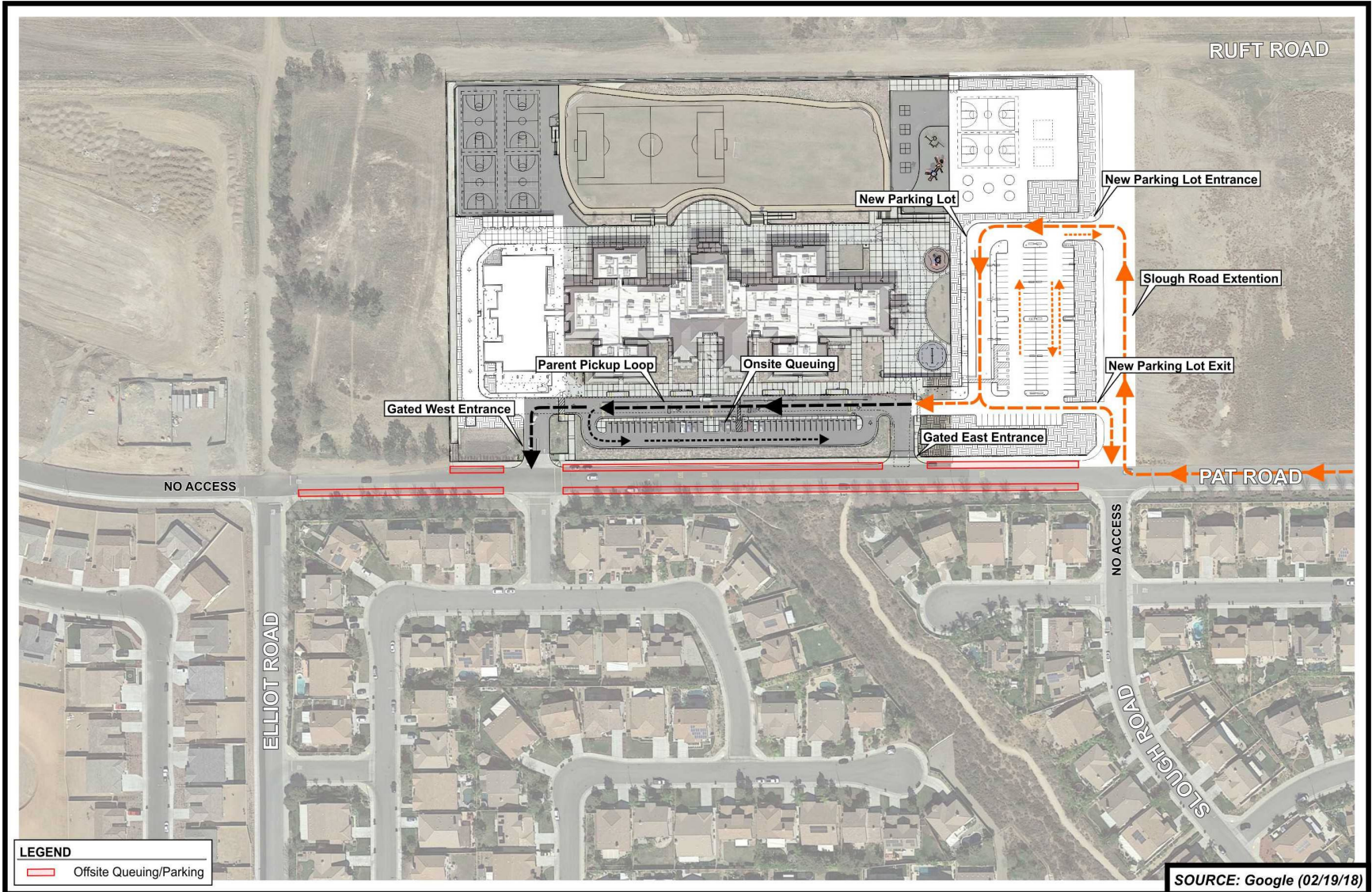
The Harvest Hill elementary school has a school capacity of 900 to 1,000 students with a current enrollment of approximately 750 students in grades kindergarten through sixth grade. The proposed project will add an estimated 450 additional students, for a total school capacity of 1,350 students to 1,450 students, potentially increasing the traffic associated with the operation of the school site. In order to minimize traffic impacts, school hours will be staggered within kindergarten through grade 5 running from 8 a.m. to 2:24 p.m. and grades 6 through 8 running from 8:20 a.m. to 2:44 p.m.

Since the school is proposed to be a neighborhood-serving school, some of the students would walk to the school site, and some would be dropped off by their parents. While the District is investigating the use of buses, buses are not currently used to transport students to school. As shown in Figure 5, separate drop off/pick up lanes will continue to be provided for those students that would be dropped off/picked up at school. The primary Parent Pickup Loop will remain the same as its current configuration. Additional queuing will be provided along the new extension of Slough Road and within the expanded, new parking area. The addition of the new queuing areas will increase the total off-street queuing by about 1,000 feet which would allow space for approximately 50 additional cars. By staggering the school start/end times, the proposed

2-58



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EA_I Environmental Audit, Inc.

PROPOSED PROJECT TRAFFIC CIRCULATION
31600 Pat Road
Winchester, CA 92596



Figure 5

modifications to Harvest Hill are not expected to result in significant traffic impacts. Traffic will be spread out for a longer period of time as school will start between 8 and 8:20 a.m. and end between 2:24 and 2:44 p.m. However, staggering the times will also minimize any increase in peak traffic to less than significant.

A number of street improvements would also be provided including: (1) requiring a 4-way stop at Slough Road/Pat Road; (2) providing a crosswalk at Pat Road on the west side of Slough Road; and (3) pavement markings and school signs will be adjusted at the easterly end of Pat Road. The MUSD will work with the County of Riverside Transportation Department to ensure that the appropriate improvements are made to the roadway network in order to maintain adequate traffic flow. It should also be noted that the expansion to the school could reduce the number of trips and miles currently being traveled by students by providing additional school capacity near new residential areas so that some of those students may live closer to Harvest Hill than other existing schools they currently attend.

During construction activities, up to 60 construction workers would be required during peak construction activities. The construction workers would be expected to stage onsite during the construction activities and along the extension to Slough Road as the grading activities would need to be conducted as part of the first phase on construction. The construction workers would be expected to arrive between 6:30 and 7:00 a.m. with construction ending between 5:00 and 5:30 p.m. Therefore, construction traffic would generally avoid the drop off/pickup times of the students. The construction activities are temporary and will cease following completion of the school construction and prior to any increase associated with the additional students that would be allowed by the increase in capacity.

Based on the above analyses, the modifications to Harvest Hill are not expected to conflict or be inconsistent with CEQA Guidelines § 15064.3 subdivision(b).

17.c) The proposed project includes the expansion of an existing school. A new access road will be provided through the expansion of Slough Road along the eastern boundary of the school site. This access road has been designed to be consistent with county requirements. The District will work with the county so that this new access road will be in compliance with County of Riverside standards so that no hazardous features (sharp curves or dangerous intersections) are included as part of the proposed revisions to the existing school site. No further roadway improvements are planned as part of the modifications to Harvest Hill. Further, there are no known potential conflicts in the area between incompatible uses that could result in traffic hazards.

17. d) Emergency access has been implemented as part of the development of the Harvest Hill Academy. The proposed modifications to Harvest Hill would allow for better access to the site by extending Slough Road adjacent to the school site, including better emergency access. Therefore, modifications to Harvest Hill would not result in inadequate emergency access to the site.

17.3 Mitigation Measures

No significant adverse impacts to transportation are expected to occur as a result of construction or operation of the proposed project. Therefore, no mitigation is necessary or proposed.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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XVIII. TRIBAL CULTURAL RESOURCES.

- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|---|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

18.1 Significance Criteria

The proposed project impacts to tribal resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of tribal cultural significance to a community or ethnic or social group or a California Native American tribe.
- Unique objects with cultural value to a California Native American tribe are present that could be disturbed by construction of the proposed project.

18.2 Environmental Setting and Impacts

The State CEQA Guidelines were amended in July 2015 to include evaluation of impacts on tribal cultural resources. Tribal cultural resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe (Public Resources Code 21074). Assembly Bill (AB) 52 specifies that a project that may cause a substantial adverse change to a Tribal Cultural Resource (TCR) may result in a significant effect on the environment. AB52 requires tribes interested in development projects within a traditionally and culturally affiliated geographic area to notify a lead agency of such interest and to request notification of future projects subject to CEQA prior to determining if a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. The lead agency is then required to notify the tribe within 14 days of deeming a development application subject to CEQA complete to notify the requesting tribe as an invitation to consult on the project. AB52 identifies examples of mitigation measures that will avoid or minimize impacts to a TCR and applies to projects that have a notice of preparation or a notice of intent to adopt a negative declaration/mitigated negative declaration circulated on or after July 1, 2015.

The District received a request from the Pechanga Band of Luiseno Indians (hereinafter referred to as the “Tribe”) to participate in the AB52 CEQA consultation process for projects within the District. Therefore, the District sent out a notice of the proposed project to the Tribe and the Tribe responded and requested formal consultation under AB52 for the proposed project. On July 31, 2018, members of the Tribe and representatives of the District met to begin consultation and review the potential project impacts. The Tribe recommended that a cultural resources survey be completed for the proposed project and that applicable mitigation measures be developed.

18 a) As discussed in Section V, Cultural Resources, resources (buildings, structures, equipment) that are less than 50 years old are excluded from listing in the National Register of History Places unless they can be shown to be exceptionally important. The buildings that compose Harvest Hill STEAM Academy have been constructed in the past five years and would not be considered historically significant. In addition, as part of the cultural resources survey, the California State Historic Property Data file was examined, which includes the National Register of Historic Places, California Register of Historic Resources, California Historical Landmarks, and California Points of Historical Interest. No historic resources are listed on the project site. No structures would be demolished as part of the project; therefore, no significant impacts to historic buildings or resources would occur.

18 b). A site-specific updated cultural resources survey of the project site was conducted by Duke Cultural Resources Management (see Appendix B). Of the 14 cultural resources within one-half mile of Harvest Hill STEAM Academy, none were located within the project boundaries. The survey concluded that the soil at the project site has been heavily disturbed and shows signs of plowing, fill import and previous grading activities. Due to previous agricultural use of the land and previous ground disturbances, the proposed project is not likely to impact cultural or tribal resources.

It should be noted that the location of the new parking lot contains fill from the construction of Harvest Hill. While grading of the Project site will be required to construct the new parking lot, it is currently not known if grading into native soils (ungraded areas) would be required. Tribal cultural resources have been found in developments near the project site and there is the potential for tribal cultural resources to be located in native soils at the project site. Therefore, based on consultation with the Pechanga Tribe, mitigation measures have been incorporated to minimize the potential impacts on tribal cultural resources.

18.3 Mitigation Measures

The following mitigation measures will be imposed on the proposed project.

TR-1 Archeologist Retained. If grading into ungraded native soils is required, the District will retain a qualified archaeologist to monitor all ground disturbing activities in an effort to identify any unknown archaeological resources. The Project Archaeologist and the representative(s) from the Native American Tribe (s) shall be included in the pre-grade meetings to provide cultural/historical sensitivity training including the establishment of set guidelines for ground disturbance in sensitive areas with the grading contractors. The Project Archaeologist and the Tribal representative(s) shall manage and oversee monitoring for ground disturbing activities into native soils and excavation of the portion of the Project activities that would grade into native soils, including clearing, grubbing, mass or rough grading, and trenching. The Project Archaeologist and the Tribal representative(s), shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources in coordination with any required special interest or tribal monitors.

In addition, the Project Archaeologist, in consultation with the Consulting Tribe(s), the contractor, and the District, shall develop a Cultural Resources Management Plan (CRMP) in consultation pursuant to the definition in AB52 to address the details, timing and responsibility of all archaeological and cultural activities that will occur on the project site. A consulting tribe is defined as a tribe that initiated the AB52 tribal consultation process for the Project, has not opted out of the AB52 consultation process, and has completed AB52 consultation with the District as provided for in Cal Pub Res Code Section 21080.3.2(b)(1) of AB52. (Note: the consulting tribes for this project are limited to the Pechanga Band of Luiseno Indians). Details in the Plan shall include:

- a. Location of Project grading into native soils and development scheduling;
- b. The Project archeologist and the Consulting Tribes(s) shall attend the pre-grading meeting with the District, the construction manager and any contractors and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event

inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel that will conduct earthwork or grading activities that begin work on the Project following the initial Training must take the Cultural Sensitivity Training prior to beginning work and the Project archaeologist and Consulting Tribe(s) shall make themselves available to provide the training on an as-needed basis;

- c. The protocols and stipulations that the contractor, District, Consulting Tribe(s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.

TR-2 **Native American Monitoring - Pechanga.** Tribal monitor(s) shall be required on-site during all ground-disturbing activities into native soils including grading, stockpiling of materials, and engineered fill. Prior to commencing grading activities into native soils, the District shall retain a qualified tribal monitor from the Pechanga Band of Luiseno Indians. The Tribal Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground-disturbance activities to allow recovery of cultural resources, in coordination with the Project Archaeologist.

TR-3 **Inadvertent Archeological Find.** If during ground disturbance activities into native soils, unique cultural resources are discovered that were not assessed by the archaeological report(s), monitoring, and/or environmental assessment conducted previously, the following procedures shall be followed. Unique cultural resources are defined, for this condition only, as being multiple artifacts in close association with each other, but may include fewer artifacts if the area of the find is determined to be of significance due to its sacred or cultural importance as determined in consultation with the Native American Tribe(s).

- i. All ground disturbance activities within 100 feet of the discovered cultural resources shall be halted until a meeting is convened between the developer, the archaeologist, the tribal representative(s) and the District to discuss the significance of the find.
- ii. At the meeting, the significance of the discoveries shall be discussed and after consultation with the tribal representative(s) and the archaeologist, a decision shall be made, with the concurrence of the District, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resources.
- iii. Isolates and clearly non-significant deposits will be documented in the field so the monitored grading can proceed.
- iv. Grading of further ground disturbance into native soils shall not resume within the area of the discovery until an agreement has been reached by

all parties as to the appropriate mitigation. Work shall be allowed to continue outside of the buffer area and will be monitored by additional Tribal monitors if needed.

- v. Treatment and avoidance of the newly discovered resources shall be consistent with the Cultural Resources Management Plan Treatment and Monitoring Agreements entered into with the appropriate tribes. This may include avoidance of the cultural resources through project design, in-place preservation of cultural resources located in native soils and/or reburial on the Project property so they are not subject to further disturbance in perpetuity as identified in Non-Disclosure of Reburial Condition.
- vi. Pursuant to Calif. Pub. Res. Code § 21083.2(b) avoidance is the preferred method of preservation for tribal cultural resources. If the landowner and the Tribe(s) cannot agree on the significance or the mitigation for the archaeological or cultural resources, these issues will be presented to the District for decision. The District shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources, recommendations of the project archeologist and shall take into account the cultural and religious principles and practices of the Tribe. Notwithstanding any other rights available under the law, the decision of the District shall be appealable to the District Board.

TR-4 Human Remains. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

TR-5 Non-Disclosure of Location Reburials. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code 6254 (r), parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).

TR-6 Archeology Report - Phase III and IV. The District shall prompt the Project Archeologist to submit two (2) copies of the Phase III Data Recovery report (if conducted for the Project) and the Phase IV Cultural Resources Monitoring Report. Once the report(s) are determined to be adequate, two (2) copies shall be submitted to the Eastern

Information Center (EIC) at the University of California Riverside (UCR) and one (1) copy shall be submitted to the Pechanga Cultural Resources Department.

In the event that grading is required into native soils (ungraded areas), mitigation measures will apply that require a qualified archaeologist and Native American monitor to be present during grading activities and that appropriate measures be implemented in the event that unique resources are discovered. Thus, the impacts of the proposed project on tribal resources are considered to be less than significant with implementation the appropriate mitigation measures.

Mitigation Monitoring: The District shall assure that the required monitoring program is completed with input and oversight of the Tribe. The monitoring activities will occur during the construction phase, should grading be required into native soils. The District will retain a Riverside County quality archaeologist and tribal observer designated by the Tribe and the Tribe will have oversight of grading activities into native soils, should additional grading be required.

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

19.1 Significance Criteria

The impacts to utilities/service systems will be considered significant if any of the following criteria are met:

The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.

The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use a substantial amount of potable water.

The project increases demand for water by more than 300,000 gallons per day.

The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

19.2 Environmental Setting and Impacts

19. a) As discussed in 19 b and 19c below, the proposed project would not result in new or expanded water or wastewater treatment. As discussed in 10 c, the proposed project is not expected to result in a significant impact on stormwater drainage such that new facilities would be required to be constructed. Stormwater drainage facilities were developed as part of the development of Harvest Hill, as well as the adjacent residential areas. No major changes to the drainage facilities would be required due to the additional to the existing school site.

Electricity, natural and telecommunications facilities are currently supplied to the Harvest Hill Academy. The proposed project would add and approximately 28,000 square feet of classrooms that would need to be supplied with electricity and natural gas. These services can be provided from the existing lines that currently service the school site, so no significant impacts would be expected due to construction of electricity, natural gas or telecommunication services.

19. b) The EMWD delivers water from three sources: imported water from the Metropolitan Water District (MWD), groundwater from the San Jacinto Basin, and recycled water.

New water lines will be needed to connect the new two-story science building to the existing water lines. All lines will be designed per EMWD requirements. The infrastructure will be installed to the requirements of the County's Engineering Department. Water use increases as a result of the proposed project will be limited to water for drinking purposes, sanitary purposes and landscape purposes. The City of Los Angeles estimates that the sewage generation factor for both an Elementary school and a Junior High School is eight gallons per day per student. Thus, Harvest Hill STEAM Academy is expected to increase its current water usage from approximately 7,200 (900 students) gallons of effluent per day to 10,800 (1,350) gallons of effluent per day. Minor increases in water demand will also result from landscaping needs of a larger campus, but these demands are expected to be well below the 300,000 gallon per day threshold. Thus, no new infrastructure or water treatment facilities will be required to support the proposed project as existing facilities can meet the necessary capacity.

19. c) Compliance with NPDES requirements shall apply to the proposed project which will minimize construction related water quality impacts. Although the development will result in additional demands upon the current sewer facilities, the Eastern Municipal Water District (EMWD) will be able to accommodate the project's demand for wastewater treatment facilities. EMWD operates and maintains five regional water reclamation facilities, i.e., Hemet/San Jacinto, Moreno Valley, Perris Valley, Sun City and Temecula Valley, treating over 45 millions gallons a day of wastewater. EMWD has upgraded its sewer treatment capacity to support the

region's growth. Effluent generated by the proposed school modifications will go to the Perris Valley Regional Water Reclamation Facility. The facility currently receives approximately 13.8 million gallons per day of wastewater and has a capacity to treat up to 22 million gallons per day with an ultimate capacity of approximately 100 million gallons per day (EMWD, 2016). Therefore, modifications to the school site will not require or result in the construction or expansion of new wastewater treatment facilities.

Wastewater generated by the proposed project consists of sanitary wastes, which will be treated by the existing Perris Valley Regional Water Reclamation Facility treatment plant so no significant water quality impacts are expected.

19. d and e) The proposed project is located within the service area boundaries of Waste Management of the Inland Empire. The waste management company delivers collected solid waste to one of two active landfills in Western Riverside County: the El Sobrante Landfill and the Lamb Canyon Sanitary Landfill. The current remaining disposal capacity of the El Sobrante Landfill is estimated to last until approximately 2030. The current remaining disposal capacity of the Lamb Canyon Sanitary Landfill is estimated to last until approximately 2023. The landfill needs of the proposed project can be met by the existing landfill capacity. The proposed project must comply with local, state and federal regulations and statutes regarding federal wastes, including the County Integrated Waste Management Plan (CIWMP). Therefore, no significant impacts associated with solid or hazardous wastes are expected.

19.3 Mitigation Measures

No significant impacts on utilities and services systems are expected so no mitigation measures are required.

CHAPTER 2: ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evaluation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

20.1 Significance Criteria

The impacts to wildfires will be considered significant if:

The project results in new structures located within or adjacent to lands classified as very high fire hazard severity zones

The project adversely affects emergency response or emergency evacuation plans.

20.2 Environmental Setting and Impacts

20. a), b), c), and d). The proposed project will not increase the existing risk of wildland fires. The existing school site is located within and adjacent to existing developed areas within Riverside County. The site is surrounded by residential development on the west and south sides and by larger ranch type housing on the north. The existing school site and the areas surrounding the school site were used for agricultural uses prior to development. Based on the Fire Hazard Severity Zones in Western Riverside County, no wildlands are located in the immediate or surrounding area and the site is not within or near lands classified as very high fire hazard severity zones.¹ Further, the Southwest Planning Area Wildfire Zone classification for the school and surrounding area is “none.” For these reasons, the project would not expose people or structures to wild fires, would not impair an adopted emergency response plan or emergency evacuation plan for wild fires, would not exposure project occupants to pollutants from a wildfire or the uncontrolled spread of a wildfire and would not exposure people or structures to flooding or landslides as a result of post-fire slope or drainage changes. Therefore, no potential significant adverse impacts resulting from wildfires are expected from the modifications to the school site.

19.3 Mitigation Measures

No significant adverse impacts to wildfires are expected to occur as a result of the construction or operation of the project; therefore, no wildfire mitigation measures are required.

¹ See CalFire Fire Hazard Severity Zone Map, http://www.fire.ca.gov/fire_prevention/fhsz_maps_riversidewest

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

20. MANDATORY FINDINGS OF SIGNIFICANCE

20. a) No significant impacts to biological impacts are expected due to expansion to the existing school because no native habitat exists and no sensitive biological habitat or species exist at the site. The vacant area in which construction will occur has been heavily disturbed by agricultural activity, fill import and previous grading activities. Due to previous ground disturbances, the proposed project site does not support native habitat, and is not used for the movement or migration of native wildlife species. As discussed in Section IV. – Biological Resources, no significant adverse impacts on biological resources is expected. Therefore, development of the proposed project is not expected to degrade the quality of the environment, reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels,

threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal.

As discussed in Section V. – Cultural Resources, cultural resources have been found within and adjacent to the school site. Previous studies have fully addressed these cultural resources and no significant cultural resources have been discovered. Thus, the impacts of the proposed project on cultural resources are considered to be less than significant. Therefore, the proposed project is not expected to eliminate important examples of the major periods of California history or prehistory

As discussed in Section XVIII. - Tribal Cultural Resources, while tribal cultural resources have been found in areas adjacent to the project site. Based on a cultural resources survey (see Appendix B), no such resources have been observed on the project site. In the event that grading is required into native soils (ungraded areas), mitigation measures will apply that require a Native American monitor to be present during grading activities and that appropriate measures be implemented in the event that unique resources are discovered. Thus, the impacts of the proposed project on tribal cultural resources are considered to be less than significant, with the implementation of the imposed mitigation measures.

20. b) CEQA Guidelines Section 15064(h) requires an evaluation of whether the District’s implementation of the proposed project will result in any “cumulatively considerable” contribution to an existing (or reasonably foreseeable future) significant impact. As discussed in the above analyses, the implementation of the proposed project would not result in any significant impacts and will not directly or indirectly adversely affect human beings. Therefore, impacts of the proposed project are not cumulatively significant and would not make a considerable contribution to a cumulatively significant. The Air District concludes that the proposed project will not result in any significant impacts, individually or cumulatively, that must be addressed further.

20. c) As discussed in the above analysis, there are no environmental effects associated with the proposed project that would result in adverse effects on human beings, either directly or indirectly, as evaluated in the previous sections of this document. Therefore, the proposed project is not expected to result in direct or indirect adverse impacts on human beings.

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APPENDIX A

Air Quality Data

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	120.00	Space	2.00	66,800.00	0
City Park	1.10	Acre	1.10	47,916.00	0
Junior High School	300.00	Student	1.00	28,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020

Utility Company Southern California Edison

CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use - Acreage approximate from Google Earth.

Construction Phase - 35 days of grading for new parcel. Approximately 1 month of construction for new playfield.

Grading - Existing parcel is approximately 1 acre. New parcel is approximately 3 acres.

Demolition -

Trips and VMT - Assumes approximately 18 yr3 per truck for hauling.

Construction Off-road Equipment Mitigation -

Vehicle Trips - Play field does not generate additional trips.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	8.00	35.00
tblConstructionPhase	NumDays	230.00	20.00
tblConstructionPhase	PhaseEndDate	9/20/2019	7/3/2020
tblConstructionPhase	PhaseEndDate	10/16/2018	7/26/2019
tblConstructionPhase	PhaseEndDate	11/2/2018	6/28/2019
tblConstructionPhase	PhaseEndDate	10/16/2019	7/24/2019
tblConstructionPhase	PhaseEndDate	10/23/2018	8/2/2019
tblConstructionPhase	PhaseStartDate	11/3/2018	8/19/2019
tblConstructionPhase	PhaseStartDate	9/19/2018	7/1/2019
tblConstructionPhase	PhaseStartDate	10/24/2018	5/1/2019
tblConstructionPhase	PhaseStartDate	9/21/2019	7/1/2019
tblConstructionPhase	PhaseStartDate	10/17/2018	7/29/2019
tblGrading	AcresOfGrading	17.50	3.00
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialExported	0.00	40,000.00
tblGrading	MaterialExported	0.00	5,000.00
tblGrading	MaterialImported	0.00	5,000.00

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tblGrading	MaterialSiltContent	6.90	4.30
tblGrading	MaterialSiltContent	6.90	4.30
tblGrading	MeanVehicleSpeed	7.10	40.00
tblGrading	MeanVehicleSpeed	7.10	40.00
tblLandUse	LandUseSquareFeet	48,000.00	66,800.00
tblLandUse	LandUseSquareFeet	35,268.51	28,000.00
tblLandUse	LotAcreage	1.08	2.00
tblLandUse	LotAcreage	0.81	1.00
tblTripsAndVMT	HaulingTripNumber	494.00	280.00
tblTripsAndVMT	HaulingTripNumber	625.00	280.00
tblTripsAndVMT	HaulingTripNumber	5,000.00	2,222.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

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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					
2019	0.4349	3.1133	2.0717	5.0000e-003	0.3024	0.1403	0.4427	0.1052	0.1310	0.2362	0.0000	458.0362	458.0362	0.0813	0.0000	460.0676
2020	0.1639	1.4528	1.3120	2.6100e-003	0.0534	0.0754	0.1288	0.0144	0.0709	0.0853	0.0000	231.0469	231.0469	0.0412	0.0000	232.0761
Maximum	0.4349	3.1133	2.0717	5.0000e-003	0.3024	0.1403	0.4427	0.1052	0.1310	0.2362	0.0000	458.0362	458.0362	0.0813	0.0000	460.0676

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					
2019	0.4349	3.1133	2.0717	5.0000e-003	0.1673	0.1403	0.3075	0.0544	0.1310	0.1854	0.0000	458.0359	458.0359	0.0813	0.0000	460.0673
2020	0.1639	1.4528	1.3120	2.6100e-003	0.0534	0.0754	0.1288	0.0144	0.0709	0.0853	0.0000	231.0467	231.0467	0.0412	0.0000	232.0761
Maximum	0.4349	3.1133	2.0717	5.0000e-003	0.1673	0.1403	0.3075	0.0544	0.1310	0.1854	0.0000	458.0359	458.0359	0.0813	0.0000	460.0673

	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
Percent Reduction	0.00	0.00	0.00	0.00	37.99	0.00	23.65	42.45	0.00	15.79	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
3	3-19-2019	6-18-2019	0.8760	0.8760
4	6-19-2019	9-18-2019	1.3699	1.3699
5	9-19-2019	12-18-2019	1.0319	1.0319
6	12-19-2019	3-18-2020	0.8007	0.8007
7	3-19-2020	6-18-2020	0.7969	0.7969
8	6-19-2020	9-18-2020	0.1299	0.1299
		Highest	1.3699	1.3699

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	0.1204	5.0000e-005	5.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0112
Energy	1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	85.6647	85.6647	3.2500e-003	8.6000e-004	86.0021
Mobile	0.1225	0.6975	1.7151	5.9600e-003	0.4759	6.0600e-003	0.4819	0.1275	5.6900e-003	0.1332	0.0000	549.5646	549.5646	0.0279	0.0000	550.2607
Waste						0.0000	0.0000		0.0000	0.0000	11.1320	0.0000	11.1320	0.6579	0.0000	27.5791
Water						0.0000	0.0000		0.0000	0.0000	0.2307	14.2768	14.5075	0.0243	6.8000e-004	15.3178
Total	0.2442	0.7095	1.7307	6.0300e-003	0.4759	6.9900e-003	0.4829	0.1275	6.6200e-003	0.1341	11.3628	649.5165	660.8792	0.7133	1.5400e-003	679.1709

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2.2 Overall Operational**Mitigated Operational**

Category	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
	tons/yr										MT/yr					
Area	0.1204	5.0000e-005	5.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0112
Energy	1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	85.6647	85.6647	3.2500e-003	8.6000e-004	86.0021
Mobile	0.1225	0.6975	1.7151	5.9600e-003	0.4759	6.0600e-003	0.4819	0.1275	5.6900e-003	0.1332	0.0000	549.5646	549.5646	0.0279	0.0000	550.2607
Waste						0.0000	0.0000		0.0000	0.0000	11.1320	0.0000	11.1320	0.6579	0.0000	27.5791
Water						0.0000	0.0000		0.0000	0.0000	0.2307	14.2768	14.5075	0.0243	6.8000e-004	15.3178
Total	0.2442	0.7095	1.7307	6.0300e-003	0.4759	6.9900e-003	0.4829	0.1275	6.6200e-003	0.1341	11.3628	649.5165	660.8792	0.7133	1.5400e-003	679.1709

	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
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**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition of Existing	Demolition	7/1/2019	7/26/2019	5	20	
2	Site Prep for Existing	Site Preparation	7/29/2019	8/2/2019	5	5	
3	Grading East Parcel	Grading	5/1/2019	6/28/2019	5	35	
4	Building Construction	Building Construction	8/19/2019	7/3/2020	5	230	
5	New Parking Lot	Paving	7/1/2019	7/24/2019	5	18	
6	Architectural Coating	Architectural Coating	10/17/2019	11/11/2019	5	18	
7	New Playfield	Building Construction	8/5/2019	8/30/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2

Residential Indoor: 0; Residential Outdoor: 42,000; Non-Residential Outdoor: 14,000; Striped Parking Area: 4,008
(Architectural Coating – sqft)

Offroad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
New Parking Lot	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition of Existing	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition of Existing	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading East Parcel	Excavators	1	8.00	158	0.38
New Parking Lot	Pavers	1	8.00	130	0.42
New Parking Lot	Rollers	2	6.00	80	0.38
Demolition of Existing	Rubber Tired Dozers	2	8.00	247	0.40
Grading East Parcel	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading East Parcel	Tractors/Loaders/Backhoes	3	8.00	97	0.37
New Parking Lot	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Prep for Existing	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading East Parcel	Graders	1	8.00	187	0.41
New Parking Lot	Paving Equipment	2	6.00	132	0.36
Site Prep for Existing	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
New Playfield	Cranes	1	7.00	231	0.29
New Playfield	Forklifts	3	8.00	89	0.20
New Playfield	Generator Sets	1	8.00	84	0.74
New Playfield	Tractors/Loaders/Backhoes	3	7.00	97	0.37
New Playfield	Welders	1	8.00	46	0.45

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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
Demolition of Existing	6	15.00	0.00	280.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Prep for Existing	7	18.00	0.00	280.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading East Parcel	6	15.00	0.00	2,222.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	60.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
New Parking Lot	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
New Playfield	9	60.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition of Existing - 2019

Unmitigated Construction On-Site

Category	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
tons/yr																
MT/yr																
Fugitive Dust					0.0535	0.0000	0.0535	8.1000e-003	0.0000	8.1000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
Total	0.0351	0.3578	0.2206	3.9000e-004	0.0535	0.0180	0.0715	8.1000e-003	0.0167	0.0248	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672

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3.2 Demolition of Existing - 2019**Unmitigated Construction Off-Site**

Category	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
	tons/yr										MT/yr					
Hauling	1.1600e-003	0.0421	8.0800e-003	1.1000e-004	2.4100e-003	1.5000e-004	2.5600e-003	6.6000e-004	1.5000e-004	8.1000e-004	0.0000	10.6731	10.6731	7.5000e-004	0.0000	10.6918
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	7.2000e-004	5.8000e-004	6.2500e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5289	1.5289	5.0000e-005	0.0000	1.5301
Total	1.8800e-003	0.0426	0.0143	1.3000e-004	4.0600e-003	1.6000e-004	4.2200e-003	1.1000e-003	1.6000e-004	1.2600e-003	0.0000	12.2020	12.2020	8.0000e-004	0.0000	12.2219

Mitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Fugitive Dust					0.0209	0.0000	0.0209	3.1600e-003	0.0000	3.1600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180	0.0167	0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
Total	0.0351	0.3578	0.2206	3.9000e-004	0.0209	0.0180	0.0388	3.1600e-003	0.0167	0.0199	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671

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3.2 Demolition of Existing - 2019**Mitigated Construction Off-Site**

Category	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
	tons/yr										MT/yr					
Hauling	1.1600e-003	0.0421	8.0800e-003	1.1000e-004	2.4100e-003	1.5000e-004	2.5600e-003	6.6000e-004	1.5000e-004	8.1000e-004	0.0000	10.6731	10.6731	7.5000e-004	0.0000	10.6918
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	7.2000e-004	5.8000e-004	6.2500e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5289	1.5289	5.0000e-005	0.0000	1.5301
Total	1.8800e-003	0.0426	0.0143	1.3000e-004	4.0600e-003	1.6000e-004	4.2200e-003	1.1000e-003	1.6000e-004	1.2600e-003	0.0000	12.2020	12.2020	8.0000e-004	0.0000	12.2219

3.3 Site Prep for Existing - 2019**Unmitigated Construction On-Site**

Category	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
	tons/yr										MT/yr					
Fugitive Dust					0.0396	0.0000	0.0396	0.0185	0.0000	0.0185	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.1139	0.0552	9.0000e-005		5.9800e-003	5.9800e-003		5.5000e-003	5.5000e-003	0.0000	8.5422	8.5422	2.7000e-003	0.0000	8.6097
Total	0.0108	0.1139	0.0552	9.0000e-005	0.0396	5.9800e-003	0.0456	0.0185	5.5000e-003	0.0240	0.0000	8.5422	8.5422	2.7000e-003	0.0000	8.6097

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3.3 Site Prep for Existing - 2019

Unmitigated Construction Off-Site

Category	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
	tons/yr										MT/yr					
Hauling	1.1600e-003	0.0421	8.0800e-003	1.1000e-004	2.4100e-003	1.5000e-004	2.5600e-003	6.6000e-004	1.5000e-004	8.1000e-004	0.0000	10.6731	10.6731	7.5000e-004	0.0000	10.6918
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	2.2000e-004	1.7000e-004	1.8800e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	1.3800e-003	0.0422	9.9600e-003	1.2000e-004	2.9000e-003	1.5000e-004	3.0600e-003	7.9000e-004	1.5000e-004	9.4000e-004	0.0000	11.1318	11.1318	7.6000e-004	0.0000	11.1509

Mitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Fugitive Dust	0.0108	0.1139	0.0552	9.0000e-005	0.0155	0.0000	0.0155	7.2100e-003	0.0000	7.2100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.1139	0.0552	9.0000e-005	0.0155	0.0000	0.0155	7.2100e-003	0.0000	7.2100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0108	0.1139	0.0552	9.0000e-005	0.0155	0.0000	0.0155	7.2100e-003	0.0000	7.2100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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3.3 Site Prep for Existing - 2019**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	1.1600e-003	0.0421	8.0800e-003	1.1000e-004	2.4100e-003	1.5000e-004	2.5600e-003	6.6000e-004	1.5000e-004	8.1000e-004	0.0000	10.6731	10.6731	7.5000e-004	0.0000	10.6918
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	2.2000e-004	1.7000e-004	1.8800e-003	1.0000e-005	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	1.3800e-003	0.0422	9.9600e-003	1.2000e-004	2.9000e-003	1.5000e-004	3.0600e-003	7.9000e-004	1.5000e-004	9.4000e-004	0.0000	11.1318	11.1318	7.6000e-004	0.0000	11.1509

3.4 Grading East Parcel - 2019**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					0.1285	0.0000	0.1285	0.0567	0.0000	0.0567	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0555	0.6095	0.3503	6.4000e-004		0.0300	0.0300		0.0276	0.0276	0.0000	57.2809	57.2809	0.0181	0.0000	57.7339
Total	0.0555	0.6095	0.3503	6.4000e-004	0.1285	0.0300	0.1586	0.0567	0.0276	0.0843	0.0000	57.2809	57.2809	0.0181	0.0000	57.7339

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3.4 Grading East Parcel - 2019

Unmitigated Construction Off-Site

Category	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
	tons/yr										MT/yr					
Hauling	0.0114	0.4100	0.0788	1.0600e-003	0.0202	1.4900e-003	0.0217	5.6400e-003	1.4200e-003	7.0600e-003	0.0000	104.0584	104.0584	7.2900e-003	0.0000	104.2408
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	1.5600e-003	1.2400e-003	0.0135	4.0000e-005	3.5400e-003	3.0000e-005	3.5700e-003	9.4000e-004	3.0000e-005	9.7000e-004	0.0000	3.2872	3.2872	1.0000e-004	0.0000	3.2898
Total	0.0129	0.4112	0.0922	1.1000e-003	0.0237	1.5200e-003	0.0252	6.5800e-003	1.4500e-003	8.0300e-003	0.0000	107.3456	107.3456	7.3900e-003	0.0000	107.5306

Mitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Fugitive Dust					0.0501	0.0000	0.0501	0.0221	0.0000	0.0221	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0555	0.6095	0.3503	6.4000e-004		0.0300	0.0300		0.0276	0.0276	0.0000	57.2808	57.2808	0.0181	0.0000	57.7339
Total	0.0555	0.6095	0.3503	6.4000e-004	0.0501	0.0300	0.0802	0.0221	0.0276	0.0497	0.0000	57.2808	57.2808	0.0181	0.0000	57.7339

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3.4 Grading East Parcel - 2019**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	0.0114	0.4100	0.0788	1.0600e-003	0.0202	1.4900e-003	0.0217	5.6400e-003	1.4200e-003	7.0600e-003	0.0000	104.0584	104.0584	7.2900e-003	0.0000	104.2408
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	1.5600e-003	1.2400e-003	0.0135	4.0000e-005	3.5400e-003	3.0000e-005	3.5700e-003	9.4000e-004	3.0000e-005	9.7000e-004	0.0000	3.2872	3.2872	1.0000e-004	0.0000	3.2898
Total	0.0129	0.4112	0.0922	1.1000e-003	0.0237	1.5200e-003	0.0252	6.5800e-003	1.4500e-003	8.0300e-003	0.0000	107.3456	107.3456	7.3900e-003	0.0000	107.5306

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3.5 Building Construction - 2019**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	0.1145	1.0223	0.8324	1.3100e-003		0.0626	0.0626		0.0588	0.0588	0.0000	114.0255	114.0255	0.0278	0.0000	114.7200
Total	0.1145	1.0223	0.8324	1.3100e-003		0.0626	0.0626		0.0588	0.0588	0.0000	114.0255	114.0255	0.0278	0.0000	114.7200

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3.5 Building Construction - 2019**Unmitigated Construction Off-Site**

Category	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
	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	4.3800e-003	0.1301	0.0326	2.9000e-004	7.0300e-003	8.5000e-004	7.8800e-003	2.0300e-003	8.1000e-004	2.8400e-003	0.0000	27.6166	27.6166	1.9100e-003	0.0000	27.6843
Worker	0.0141	0.0112	0.1213	3.3000e-004	0.0319	2.5000e-004	0.0322	8.4800e-003	2.3000e-004	8.7100e-003	0.0000	29.6614	29.6614	9.3000e-004	0.0000	29.6846
Total	0.0184	0.1412	0.1540	6.2000e-004	0.0390	1.1000e-003	0.0401	0.0105	1.0400e-003	0.0116	0.0000	57.2780	57.2780	2.8400e-003	0.0000	57.3489

Mitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Off-Road	0.1145	1.0223	0.8324	1.3100e-003		0.0626	0.0626		0.0588	0.0588	0.0000	114.0254	114.0254	0.0278	0.0000	114.7198
Total	0.1145	1.0223	0.8324	1.3100e-003		0.0626	0.0626		0.0588	0.0588	0.0000	114.0254	114.0254	0.0278	0.0000	114.7198

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3.5 Building Construction - 2019**Mitigated Construction Off-Site**

Category	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
	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	4.3800e-003	0.1301	0.0326	2.9000e-004	7.0300e-003	8.5000e-004	7.8800e-003	2.0300e-003	8.1000e-004	2.8400e-003	0.0000	27.6166	27.6166	1.9100e-003	0.0000	27.6843
Worker	0.0141	0.0112	0.1213	3.3000e-004	0.0319	2.5000e-004	0.0322	8.4800e-003	2.3000e-004	8.7100e-003	0.0000	29.6614	29.6614	9.3000e-004	0.0000	29.6846
Total	0.0184	0.1412	0.1540	6.2000e-004	0.0390	1.1000e-003	0.0401	0.0105	1.0400e-003	0.0116	0.0000	57.2780	57.2780	2.8400e-003	0.0000	57.3489

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Appendix A

3.5 Building Construction - 2020**Unmitigated Construction On-Site**

Category	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
	tons/yr										MT/yr					
Off-Road	0.1410	1.2759	1.1204	1.7900e-003		0.0743	0.0743		0.0699	0.0699	0.0000	154.0206	154.0206	0.0376	0.0000	154.9600
Total	0.1410	1.2759	1.1204	1.7900e-003		0.0743	0.0743		0.0699	0.0699	0.0000	154.0206	154.0206	0.0376	0.0000	154.9600

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3.5 Building Construction - 2020**Unmitigated Construction Off-Site**

Category	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
	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	5.1200e-003	0.1632	0.0404	3.9000e-004	9.6400e-003	8.0000e-004	0.0104	2.7800e-003	7.7000e-004	3.5500e-003	0.0000	37.6183	37.6183	2.4700e-003	0.0000	37.6801
Worker	0.0178	0.0137	0.1511	4.4000e-004	0.0438	3.4000e-004	0.0441	0.0116	3.1000e-004	0.0119	0.0000	39.4079	39.4079	1.1300e-003	0.0000	39.4361
Total	0.0229	0.1769	0.1915	8.3000e-004	0.0534	1.1400e-003	0.0546	0.0144	1.0800e-003	0.0155	0.0000	77.0262	77.0262	3.6000e-003	0.0000	77.1162

Mitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Off-Road	0.1410	1.2759	1.1204	1.7900e-003		0.0743	0.0743		0.0699	0.0699	0.0000	154.0205	154.0205	0.0376	0.0000	154.9598
Total	0.1410	1.2759	1.1204	1.7900e-003		0.0743	0.0743		0.0699	0.0699	0.0000	154.0205	154.0205	0.0376	0.0000	154.9598

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3.5 Building Construction - 2020**Mitigated Construction Off-Site**

Category	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
	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	5.1200e-003	0.1632	0.0404	3.9000e-004	9.6400e-003	8.0000e-004	0.0104	2.7800e-003	7.7000e-004	3.5500e-003	0.0000	37.6183	37.6183	2.4700e-003	0.0000	37.6801
Worker	0.0178	0.0137	0.1511	4.4000e-004	0.0438	3.4000e-004	0.0441	0.0116	3.1000e-004	0.0119	0.0000	39.4079	39.4079	1.1300e-003	0.0000	39.4361
Total	0.0229	0.1769	0.1915	8.3000e-004	0.0534	1.1400e-003	0.0546	0.0144	1.0800e-003	0.0155	0.0000	77.0262	77.0262	3.6000e-003	0.0000	77.1162

3.6 New Parking Lot - 2019**Unmitigated Construction On-Site**

Category	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
	tons/yr										MT/yr					
Off-Road	0.0114	0.1148	0.1108	1.7000e-004		6.4800e-003	6.4800e-003		5.9700e-003	5.9700e-003	0.0000	15.0501	15.0501	4.6300e-003	0.0000	15.1658
Paving	2.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0140	0.1148	0.1108	1.7000e-004		6.4800e-003	6.4800e-003		5.9700e-003	5.9700e-003	0.0000	15.0501	15.0501	4.6300e-003	0.0000	15.1658

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3.6 New Parking Lot - 2019**Unmitigated Construction Off-Site**

Category	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
	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	8.7000e-004	6.9000e-004	7.5000e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8347	1.8347	6.0000e-005	0.0000	1.8362
Total	8.7000e-004	6.9000e-004	7.5000e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8347	1.8347	6.0000e-005	0.0000	1.8362

Mitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Off-Road	0.0114	0.1148	0.1108	1.7000e-004		6.4800e-003	6.4800e-003		5.9700e-003	5.9700e-003	0.0000	15.0501	15.0501	4.6300e-003	0.0000	15.1658
Paving	2.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0140	0.1148	0.1108	1.7000e-004		6.4800e-003	6.4800e-003		5.9700e-003	5.9700e-003	0.0000	15.0501	15.0501	4.6300e-003	0.0000	15.1658

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3.6 New Parking Lot - 2019**Mitigated Construction Off-Site**

Category	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
	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	8.7000e-004	6.9000e-004	7.5000e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8347	1.8347	6.0000e-005	0.0000	1.8362
Total	8.7000e-004	6.9000e-004	7.5000e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.8347	1.8347	6.0000e-005	0.0000	1.8362

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3.7 Architectural Coating - 2019**Unmitigated Construction On-Site**

Category	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
	tons/yr										MT/yr					
Archit. Coating	0.1391					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4000e-003	0.0165	0.0166	3.0000e-005		1.1600e-003	1.1600e-003	1.1600e-003	1.1600e-003	1.1600e-003	0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028
Total	0.1415	0.0165	0.0166	3.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028

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3.7 Architectural Coating - 2019**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	5.2000e-004	4.1000e-004	4.5000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.1008	1.1008	3.0000e-005	0.0000	1.1017
Total	5.2000e-004	4.1000e-004	4.5000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.1008	1.1008	3.0000e-005	0.0000	1.1017

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	0.1391					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4000e-003	0.0165	0.0166	3.0000e-005		1.1600e-003	1.1600e-003	1.1600e-003	1.1600e-003	1.1600e-003	0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028
Total	0.1415	0.0165	0.0166	3.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028

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3.7 Architectural Coating - 2019**Mitigated Construction Off-Site**

Category	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
	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	5.2000e-004	4.1000e-004	4.5000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.1008	1.1008	3.0000e-005	0.0000	1.1017
Total	5.2000e-004	4.1000e-004	4.5000e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.1008	1.1008	3.0000e-005	0.0000	1.1017

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3.8 New Playfield - 2019**Unmitigated Construction On-Site**

Category	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
	tons/yr										MT/yr					
Off-Road	0.0236	0.2108	0.1716	2.7000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	23.5104	23.5104	5.7300e-003	0.0000	23.6536
Total	0.0236	0.2108	0.1716	2.7000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	23.5104	23.5104	5.7300e-003	0.0000	23.6536

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3.8 New Playfield - 2019**Unmitigated Construction Off-Site**

Category	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
	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	9.0000e-004	0.0268	6.7300e-003	6.0000e-005	1.4500e-003	1.8000e-004	1.6300e-003	4.2000e-004	1.7000e-004	5.9000e-004	0.0000	5.6941	5.6941	3.9000e-004	0.0000	5.7040
Worker	2.9000e-003	2.3000e-003	0.0250	7.0000e-005	6.5800e-003	5.0000e-005	6.6300e-003	1.7500e-003	5.0000e-005	1.8000e-003	0.0000	6.1158	6.1158	1.9000e-004	0.0000	6.1205
Total	3.8000e-003	0.0291	0.0318	1.3000e-004	8.0300e-003	2.3000e-004	8.2600e-003	2.1700e-003	2.2000e-004	2.3900e-003	0.0000	11.8099	11.8099	5.8000e-004	0.0000	11.8245

Mitigated Construction On-Site

Category	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
	tons/yr										MT/yr					
Off-Road	0.0236	0.2108	0.1716	2.7000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	23.5104	23.5104	5.7300e-003	0.0000	23.6536
Total	0.0236	0.2108	0.1716	2.7000e-004		0.0129	0.0129		0.0121	0.0121	0.0000	23.5104	23.5104	5.7300e-003	0.0000	23.6536

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3.8 New Playfield - 2019**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	9.0000e-004	0.0268	6.7300e-003	6.0000e-005	1.4500e-003	1.8000e-004	1.6300e-003	4.2000e-004	1.7000e-004	5.9000e-004	0.0000	5.6941	5.6941	3.9000e-004	0.0000	5.7040
Worker	2.9000e-003	2.3000e-003	0.0250	7.0000e-005	6.5800e-003	5.0000e-005	6.6300e-003	1.7500e-003	5.0000e-005	1.8000e-003	0.0000	6.1158	6.1158	1.9000e-004	0.0000	6.1205
Total	3.8000e-003	0.0291	0.0318	1.3000e-004	8.0300e-003	2.3000e-004	8.2600e-003	2.1700e-003	2.2000e-004	2.3900e-003	0.0000	11.8099	11.8099	5.8000e-004	0.0000	11.8245

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4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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	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	0.1225	0.6975	1.7151	5.9600e-003	0.4759	6.0600e-003	0.4819	0.1275	5.6900e-003	0.1332	0.0000	549.5646	549.5646	0.0279	0.0000	550.2607
Unmitigated	0.1225	0.6975	1.7151	5.9600e-003	0.4759	6.0600e-003	0.4819	0.1275	5.6900e-003	0.1332	0.0000	549.5646	549.5646	0.0279	0.0000	550.2607

A-26 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Junior High School	486.00	0.00	0.00	1,252,355	1,252,355
Parking Lot	0.00	0.00	0.00		
Total	486.00	0.00	0.00	1,252,355	1,252,355

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
City Park	16.60	8.40	6.90	0.00	0.00	0.00	66	28	6
Junior High School	16.60	8.40	6.90	72.80	22.20	5.00	63	25	12
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Junior High School	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Parking Lot	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	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
tons/yr																
MT/yr																
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	72.5756	72.5756	3.0000e-003	6.2000e-004	72.8352
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	72.5756	72.5756	3.0000e-003	6.2000e-004	72.8352
Natural Gas Mitigated	1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	13.0891	13.0891	2.5000e-004	2.4000e-004	13.1669
Natural Gas Unmitigated	1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	13.0891	13.0891	2.5000e-004	2.4000e-004	13.1669

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5.2 Energy by Land Use - NaturalGas**Unmitigated**

Land Use	NaturalGas Use kBTU/yr	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
City Park	0	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
Junior High School	245280	1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	13.0891	13.0891	2.5000e-004	2.4000e-004	13.1669
Parking Lot	0	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
Total		1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	13.0891	13.0891	2.5000e-004	2.4000e-004	13.1669

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Appendix A

Mitigated

Land Use	NaturalGas Use kBTU/yr	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
City Park	0	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
Junior High School	245280	1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	13.0891	13.0891	2.5000e-004	2.4000e-004	13.1669
Parking Lot	0	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
Total		1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	13.0891	13.0891	2.5000e-004	2.4000e-004	13.1669

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Junior High School	204400	65.1262	2.6900e- 003	5.6000e- 004	65.3592
Parking Lot	23380	7.4494	3.1000e- 004	6.0000e- 005	7.4760
Total		72.5756	3.0000e- 003	6.2000e- 004	72.8352

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Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Junior High School	204400	65.1262	2.6900e- 003	5.6000e- 004	65.3592
Parking Lot	23380	7.4494	3.1000e- 004	6.0000e- 005	7.4760
Total		72.5756	3.0000e- 003	6.2000e- 004	72.8352

6.0 Area Detail

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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	0.1204	5.0000e-005	5.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0112
Unmitigated	0.1204	5.0000e-005	5.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0112

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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	0.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1060					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0112
Total	0.1204	5.0000e-005	5.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0112

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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	tons/yr										MT/yr					
Architectural Coating	0.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1060					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0112
Total	0.1204	5.0000e-005	5.4100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0105	0.0105	3.0000e-005	0.0000	0.0112

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7.0 Water Detail**7.1 Mitigation Measures Water**

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	14.5075	0.0243	6.8000e-004	15.3178
Unmitigated	14.5075	0.0243	6.8000e-004	15.3178

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.31063	4.6395	1.9000e-004	4.0000e-005	4.6561
Junior High School	0.727272 / 1.87013	9.8681	0.0241	6.4000e-004	10.6617
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		14.5075	0.0243	6.8000e-004	15.3178

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	Mgal	MT/yr			
City Park	0 / 1.31063	4.6395	1.9000e-004	4.0000e-005	4.6561
Junior High School	0.727272 / 1.87013	9.8681	0.0241	6.4000e-004	10.6617
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		14.5075	0.0243	6.8000e-004	15.3178

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8.0 Waste Detail**8.1 Mitigation Measures Waste**

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11.1320	0.6579	0.0000	27.5791
Unmitigated	11.1320	0.6579	0.0000	27.5791

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.09	0.0183	1.0800e-003	0.0000	0.0453
Junior High School	54.75	11.1138	0.6568	0.0000	27.5339
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		11.1320	0.6579	0.0000	27.5791

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8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.09	0.0183	1.0800e-003	0.0000	0.0453
Junior High School	54.75	11.1138	0.6568	0.0000	27.5339
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		11.1320	0.6579	0.0000	27.5791

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9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

3096 - MUSD ES #10 - South Coast AQMD Air District, Summer

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South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	120.00	Space	2.00	66,800.00	0
City Park	1.10	Acre	1.10	47,916.00	0
Junior High School	300.00	Student	1.00	28,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020

Utility Company Southern California Edison

CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use - Acreage approximate from Google Earth.

Construction Phase - 35 days of grading for new parcel. Approximately 1 month of construction for new playfield.

Grading - Existing parcel is approximately 1 acre. New parcel is approximately 3 acres.

Demolition -

Trips and VMT - Assumes approximately 18 yr3 per truck for hauling.

Construction Off-road Equipment Mitigation -

Vehicle Trips - Play field does not generate additional trips.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	8.00	35.00
tblConstructionPhase	NumDays	230.00	20.00
tblConstructionPhase	PhaseEndDate	9/20/2019	7/3/2020
tblConstructionPhase	PhaseEndDate	10/16/2018	7/26/2019
tblConstructionPhase	PhaseEndDate	11/2/2018	6/28/2019
tblConstructionPhase	PhaseEndDate	10/16/2019	7/24/2019
tblConstructionPhase	PhaseEndDate	10/23/2018	8/2/2019
tblConstructionPhase	PhaseStartDate	11/3/2018	8/19/2019
tblConstructionPhase	PhaseStartDate	9/19/2018	7/1/2019
tblConstructionPhase	PhaseStartDate	10/24/2018	5/1/2019
tblConstructionPhase	PhaseStartDate	9/21/2019	7/1/2019
tblConstructionPhase	PhaseStartDate	10/17/2018	7/29/2019
tblGrading	AcresOfGrading	17.50	3.00
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialExported	0.00	40,000.00
tblGrading	MaterialExported	0.00	5,000.00
tblGrading	MaterialImported	0.00	5,000.00

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tblGrading	MaterialSiltContent	6.90	4.30
tblGrading	MaterialSiltContent	6.90	4.30
tblGrading	MeanVehicleSpeed	7.10	40.00
tblGrading	MeanVehicleSpeed	7.10	40.00
tblLandUse	LandUseSquareFeet	48,000.00	66,800.00
tblLandUse	LandUseSquareFeet	35,268.51	28,000.00
tblLandUse	LotAcreage	1.08	2.00
tblLandUse	LotAcreage	0.81	1.00
tblTripsAndVMT	HaulingTripNumber	494.00	280.00
tblTripsAndVMT	HaulingTripNumber	625.00	280.00
tblTripsAndVMT	HaulingTripNumber	5,000.00	2,222.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

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2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

Year	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
lb/day																
2019	18.5210	61.9370	40.9920	0.0841	17.0258	2.6250	19.4782	7.7113	2.4684	9.9698	0.0000	8,721.207 ₂	8,721.207 ₂	1.7227	0.0000	8,759,252 ₅
2020	2.4668	21.7820	19.8761	0.0397	0.8179	1.1341	1.9520	0.2202	1.0665	1.2867	0.0000	3,870.945 ₀	3,870.945 ₀	0.6822	0.0000	3,888,000 ₇
Maximum	18.5210	61.9370	40.9920	0.0841	17.0258	2.6250	19.4782	7.7113	2.4684	9.9698	0.0000	8,721.207 ₂	8,721.207 ₂	1.7227	0.0000	8,759,252 ₅

Mitigated Construction

Year	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
lb/day																
2019	18.5210	61.9370	40.9920	0.0841	7.3597	2.6250	9.8121	3.2036	2.4684	5.4620	0.0000	8,721.207 ₂	8,721.207 ₂	1.7227	0.0000	8,759,252 ₅
2020	2.4668	21.7820	19.8761	0.0397	0.8179	1.1341	1.9520	0.2202	1.0665	1.2867	0.0000	3,870.945 ₀	3,870.945 ₀	0.6822	0.0000	3,888,000 ₇
Maximum	18.5210	61.9370	40.9920	0.0841	7.3597	2.6250	9.8121	3.2036	2.4684	5.4620	0.0000	8,721.207 ₂	8,721.207 ₂	1.7227	0.0000	8,759,252 ₅

Year	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
lb/day																
Percent Reduction	0.00	0.00	0.00	0.00	54.17	0.00	45.10	56.83	0.00	40.05	0.00	0.00	0.00	0.00	0.00	0.00

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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	0.6608	4.0000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983
Energy	7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286
Mobile	1.0083	5.1431	13.8890	0.0478	3.7281	0.0466	3.7746	0.9976	0.0437	1.0413		4,851.404 ₂	4,851.404 ₂	0.2384		4,857.364 ₂
Total	1.6764	5.2094	13.9876	0.0482	3.7281	0.0517	3.7798	0.9976	0.0489	1.0464		4,930.555₂	4,930.555₂	0.2402	1.4500e-003	4,936.991₂

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	0.6608	4.0000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983
Energy	7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286
Mobile	1.0083	5.1431	13.8890	0.0478	3.7281	0.0466	3.7746	0.9976	0.0437	1.0413		4,851.404 ₂	4,851.404 ₂	0.2384		4,857.364 ₂
Total	1.6764	5.2094	13.9876	0.0482	3.7281	0.0517	3.7798	0.9976	0.0489	1.0464		4,930.555₂	4,930.555₂	0.2402	1.4500e-003	4,936.991₂

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	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
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	Demolition of Existing	Demolition	7/1/2019	7/26/2019	5	20	
2	Site Prep for Existing	Site Preparation	7/29/2019	8/2/2019	5	5	
3	Grading East Parcel	Grading	5/1/2019	6/28/2019	5	35	
4	Building Construction	Building Construction	8/19/2019	7/3/2020	5	230	
5	New Parking Lot	Paving	7/1/2019	7/24/2019	5	18	
6	Architectural Coating	Architectural Coating	10/17/2019	11/11/2019	5	18	
7	New Playfield	Building Construction	8/5/2019	8/30/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 42,000; Non-Residential Outdoor: 14,000; Striped Parking Area: 4,008 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
New Parking Lot	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition of Existing	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition of Existing	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading East Parcel	Excavators	1	8.00	158	0.38
New Parking Lot	Pavers	1	8.00	130	0.42
New Parking Lot	Rollers	2	6.00	80	0.38
Demolition of Existing	Rubber Tired Dozers	2	8.00	247	0.40
Grading East Parcel	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading East Parcel	Tractors/Loaders/Backhoes	3	8.00	97	0.37
New Parking Lot	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Prep for Existing	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading East Parcel	Graders	1	8.00	187	0.41
New Parking Lot	Paving Equipment	2	6.00	132	0.36
Site Prep for Existing	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
New Playfield	Cranes	1	7.00	231	0.29
New Playfield	Forklifts	3	8.00	89	0.20
New Playfield	Generator Sets	1	8.00	84	0.74
New Playfield	Tractors/Loaders/Backhoes	3	7.00	97	0.37
New Playfield	Welders	1	8.00	46	0.45

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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
Demolition of Existing	6	15.00	0.00	280.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Prep for Existing	7	18.00	0.00	280.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading East Parcel	6	15.00	0.00	2,222.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	60.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
New Parking Lot	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
New Playfield	9	60.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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3.2 Demolition of Existing - 2019

Unmitigated Construction On-Site

Category	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
Fugitive Dust					5.3498	0.0000	5.3498	0.8100	0.0000	0.8100			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	5.3498	1.7949	7.1447	0.8100	1.6697	2.4797		3,816.8994	3,816.8994	1.0618		3,843.4451

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3.2 Demolition of Existing - 2019**Unmitigated Construction Off-Site**

Category	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
lb/day																
Hauling	0.1150	4.0757	0.7801	0.0110	0.2446	0.0151	0.2598	0.0671	0.0145	0.0815		1,185.544 ₁	1,185.544 ₁	0.0809		1,187.565 ₉
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	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		177.1484	177.1484	5.5400e-003		177.2869
Total	0.1885	4.1269	1.4541	0.0128	0.4123	0.0164	0.4287	0.1115	0.0157	0.1272		1,362.692₄	1,362.692₄	0.0864		1,364.852₈

Mitigated Construction On-Site

Category	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
lb/day																
Fugitive Dust					2.0864	0.0000	2.0864	0.3159	0.0000	0.3159			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.899 ₄	3,816.899 ₄	1.0618		3,843.445 ₁
Total	3.5134	35.7830	22.0600	0.0388	2.0864	1.7949	3.8813	0.3159	1.6697	1.9856	0.0000	3,816.899₄	3,816.899₄	1.0618		3,843.445₁

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3.2 Demolition of Existing - 2019**Mitigated Construction Off-Site**

Category	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
	lb/day										lb/day					
Hauling	0.1150	4.0757	0.7801	0.0110	0.2446	0.0151	0.2598	0.0671	0.0145	0.0815		1,185.544 ₁	1,185.544 ₁	0.0809		1,187.565 ₉
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	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		177.1484	177.1484	5.5400e-003		177.2869
Total	0.1885	4.1269	1.4541	0.0128	0.4123	0.0164	0.4287	0.1115	0.0157	0.1272		1,362.692₄	1,362.692₄	0.0864		1,364.852₈

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3.3 Site Prep for Existing - 2019**Unmitigated Construction On-Site**

Category	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
	lb/day										lb/day					
Fugitive Dust					15.8460	0.0000	15.8460	7.3898	0.0000	7.3898			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.452 ₉	3,766.452 ₉	1.1917		3,796.244 ₅
Total	4.3350	45.5727	22.0630	0.0380	15.8460	2.3904	18.2364	7.3898	2.1991	9.5889		3,766.452₉	3,766.452₉	1.1917		3,796.244₅

3096 - MUSD ES #10 - South Coast AQMD Air District, Summer

3.3 Site Prep for Existing - 2019**Unmitigated Construction Off-Site**

Category	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
	lb/day										lb/day					
Hauling	0.4602	16.3029	3.1204	0.0439	0.9786	0.0605	1.0391	0.2682	0.0579	0.3261		4,742.176 3	4,742.176 3	0.3235		4,750.263 7
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	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		212.5780	212.5780	6.6500e-003		212.7442
Total	0.5483	16.3643	3.9292	0.0461	1.1798	0.0621	1.2418	0.3215	0.0593	0.3809		4,954.754 3	4,954.754 3	0.3302		4,963.008 0

Mitigated Construction On-Site

Category	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
	lb/day										lb/day					
Fugitive Dust					6.1800	0.0000	6.1800	2.8820	0.0000	2.8820			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.452 9	3,766.452 9	1.1917		3,796.244 5
Total	4.3350	45.5727	22.0630	0.0380	6.1800	2.3904	8.5703	2.8820	2.1991	5.0811	0.0000	3,766.452 9	3,766.452 9	1.1917		3,796.244 5

3096 - MUSD ES #10 - South Coast AQMD Air District, Summer

3.3 Site Prep for Existing - 2019**Mitigated Construction Off-Site**

Category	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
Hauling	0.4602	16.3029	3.1204	0.0439	0.9786	0.0605	1.0391	0.2682	0.0579	0.3261		4,742.176 3	4,742.176 3	0.3235		4,750.263 7
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	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		212.5780	212.5780	6.6500e-003		212.7442
Total	0.5483	16.3643	3.9292	0.0461	1.1798	0.0621	1.2418	0.3215	0.0593	0.3809		4,954.754 3	4,954.754 3	0.3302		4,963.008 0

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Appendix A

3.4 Grading East Parcel - 2019**Unmitigated Construction On-Site**

Category	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
Fugitive Dust					5.9770	0.0000	5.9770	2.6357	0.0000	2.6357			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.806 8	2,936.806 8	0.9292		2,960.036 1
Total	2.5805	28.3480	16.2934	0.0297	5.9770	1.3974	7.3744	2.6357	1.2856	3.9213		2,936.806 8	2,936.806 8	0.9292		2,960.036 1

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3.4 Grading East Parcel - 2019

Unmitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.5217	18.4822	3.5375	0.0498	0.9532	0.0686	1.0218	0.2657	0.0656	0.3313		5,376.0794	5,376.0794	0.3667		5,385.2480
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	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		177.1484	177.1484	5.5400e-003		177.2869
Total	0.5951	18.5333	4.2115	0.0516	1.1209	0.0699	1.1908	0.3102	0.0668	0.3770		5,553.2278	5,553.2278	0.3723		5,562.5348

Mitigated Construction On-Site

Category	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
lb/day																
Fugitive Dust					2.3310	0.0000	2.3310	1.0279	0.0000	1.0279			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
Total	2.5805	28.3480	16.2934	0.0297	2.3310	1.3974	3.7284	1.0279	1.2856	2.3135	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361

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3.4 Grading East Parcel - 2019**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	0.5217	18.4822	3.5375	0.0498	0.9532	0.0686	1.0218	0.2657	0.0656	0.3313		5,376.0794	5,376.0794	0.3667		5,385.2480
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	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		177.1484	177.1484	5.5400e-003		177.2869
Total	0.5951	18.5333	4.2115	0.0516	1.1209	0.0699	1.1908	0.3102	0.0668	0.3770		5,553.2278	5,553.2278	0.3723		5,562.5348

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3.5 Building Construction - 2019**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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635

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3.5 Building Construction - 2019**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	0.0887	2.6318	0.6362	5.9600e-003	0.1472	0.0174	0.1646	0.0424	0.0167	0.0591		635.3053	635.3053	0.0420		636.3862
Worker	0.2939	0.2045	2.6960	7.1200e-003	0.6707	5.2200e-003	0.6759	0.1779	4.8100e-003	0.1827		708.5934	708.5934	0.0222		709.1475
Total	0.3825	2.8362	3.3322	0.0131	0.8179	0.0227	0.8405	0.2202	0.0215	0.2417		1,343.8987	1,343.8987	0.0642		1,345.5037

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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635

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3.5 Building Construction - 2019**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	0.0887	2.6318	0.6362	5.9600e-003	0.1472	0.0174	0.1646	0.0424	0.0167	0.0591		635.3053	635.3053	0.0420		636.3862
Worker	0.2939	0.2045	2.6960	7.1200e-003	0.6707	5.2200e-003	0.6759	0.1779	4.8100e-003	0.1827		708.5934	708.5934	0.0222		709.1475
Total	0.3825	2.8362	3.3322	0.0131	0.8179	0.0227	0.8405	0.2202	0.0215	0.2417		1,343.898 7	1,343.898 7	0.0642		1,345.503 7

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3.5 Building Construction - 2020**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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063	2,553.063	0.6229		2,568.634
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5

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3.5 Building Construction - 2020**Unmitigated Construction Off-Site**

Category	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
	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	0.0755	2.4135	0.5747	5.9200e-003	0.1472	0.0120	0.1592	0.0424	0.0114	0.0538		631.2315	631.2315	0.0396		632.2222
Worker	0.2715	0.1825	2.4529	6.8900e-003	0.6707	5.0900e-003	0.6758	0.1779	4.6900e-003	0.1826		686.6505	686.6505	0.0197		687.1440
Total	0.3470	2.5960	3.0276	0.0128	0.8179	0.0171	0.8349	0.2202	0.0161	0.2364		1,317.881₉	1,317.881₉	0.0594		1,319.366₃

Mitigated Construction On-Site

Category	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
	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 ₁	2,553.063 ₁	0.6229		2,568.634 ₅
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063₁	2,553.063₁	0.6229		2,568.634₅

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3.5 Building Construction - 2020**Mitigated Construction Off-Site**

Category	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
	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	0.0755	2.4135	0.5747	5.9200e-003	0.1472	0.0120	0.1592	0.0424	0.0114	0.0538		631.2315	631.2315	0.0396		632.2222
Worker	0.2715	0.1825	2.4529	6.8900e-003	0.6707	5.0900e-003	0.6758	0.1779	4.6900e-003	0.1826		686.6505	686.6505	0.0197		687.1440
Total	0.3470	2.5960	3.0276	0.0128	0.8179	0.0171	0.8349	0.2202	0.0161	0.2364		1,317.881₉	1,317.881₉	0.0594		1,319.366₃

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3.6 New Parking Lot - 2019**Unmitigated Construction On-Site**

Category	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
	lb/day										lb/day					
Off-Road	1.2679	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637		1,843.319 ₁	1,843.319 ₁	0.5671		1,857.496 ₆
Paving	0.2911					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5590	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637		1,843.319₁	1,843.319₁	0.5671		1,857.496₆

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3.6 New Parking Lot - 2019**Unmitigated Construction Off-Site**

Category	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
	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	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825
Total	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825

Mitigated Construction On-Site

Category	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
	lb/day										lb/day					
Off-Road	1.2679	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637	0.0000	1,843.319 ₁	1,843.319 ₁	0.5671		1,857.496 ₆
Paving	0.2911					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5590	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637	0.0000	1,843.319₁	1,843.319₁	0.5671		1,857.496₆

3096 - MUSD ES #10 - South Coast AQMD Air District, Summer

3.6 New Parking Lot - 2019**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	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825
Total	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825

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3.7 Architectural Coating - 2019**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	15.4521					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	15.7185	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423

3096 - MUSD ES #10 - South Coast AQMD Air District, Summer

3.7 Architectural Coating - 2019**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		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
Worker	0.0588	0.0409	0.5392	1.4200e-003	0.1341	1.0400e-003	0.1352	0.0356	9.6000e-004	0.0365	141.7187	141.7187	141.7187	4.4300e-003		141.8295
Total	0.0588	0.0409	0.5392	1.4200e-003	0.1341	1.0400e-003	0.1352	0.0356	9.6000e-004	0.0365	141.7187	141.7187	141.7187	4.4300e-003		141.8295

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	15.4521					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	15.7185	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423

3096 - MUSD ES #10 - South Coast AQMD Air District, Summer

3.7 Architectural Coating - 2019**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		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
Worker	0.0588	0.0409	0.5392	1.4200e-003	0.1341	1.0400e-003	0.1352	0.0356	9.6000e-004	0.0365	141.7187	141.7187	141.7187	4.4300e-003		141.8295
Total	0.0588	0.0409	0.5392	1.4200e-003	0.1341	1.0400e-003	0.1352	0.0356	9.6000e-004	0.0365	141.7187	141.7187	141.7187	4.4300e-003		141.8295

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3.8 New Playfield - 2019**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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899	1.2127	1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899	1.2127	1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635

3096 - MUSD ES #10 - South Coast AQMD Air District, Summer

3.8 New Playfield - 2019**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	0.0887	2.6318	0.6362	5.9600e-003	0.1472	0.0174	0.1646	0.0424	0.0167	0.0591		635.3053	635.3053	0.0420		636.3862
Worker	0.2939	0.2045	2.6960	7.1200e-003	0.6707	5.2200e-003	0.6759	0.1779	4.8100e-003	0.1827		708.5934	708.5934	0.0222		709.1475
Total	0.3825	2.8362	3.3322	0.0131	0.8179	0.0227	0.8405	0.2202	0.0215	0.2417		1,343.898₇	1,343.898₇	0.0642		1,345.503₇

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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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.580 ₂	2,591.580 ₂	0.6313		2,607.363 ₅
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.580₂	2,591.580₂	0.6313		2,607.363₅

3096 - MUSD ES #10 - South Coast AQMD Air District, Summer

3.8 New Playfield - 2019**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	0.0887	2.6318	0.6362	5.9600e-003	0.1472	0.0174	0.1646	0.0424	0.0167	0.0591		635.3053	635.3053	0.0420		636.3562
Worker	0.2939	0.2045	2.6960	7.1200e-003	0.6707	5.2200e-003	0.6759	0.1779	4.8100e-003	0.1827		708.5934	708.5934	0.0222		709.1475
Total	0.3825	2.8362	3.3322	0.0131	0.8179	0.0227	0.8405	0.2202	0.0215	0.2417		1,343.898₇	1,343.898₇	0.0642		1,345.503₇

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Appendix A

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

3096 - MUSD ES #10 - South Coast AQMD Air District, Summer

	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	1.0083	5.1431	13.8890	0.0478	3.7281	0.0466	3.7746	0.9976	0.0437	1.0413		4,851.404 2	4,851.404 2	0.2384		4,857.364 2
Unmitigated	1.0083	5.1431	13.8890	0.0478	3.7281	0.0466	3.7746	0.9976	0.0437	1.0413		4,851.404 2	4,851.404 2	0.2384		4,857.364 2

A-61 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Junior High School	486.00	0.00	0.00	1,252,355	1,252,355
Parking Lot	0.00	0.00	0.00		
Total	486.00	0.00	0.00	1,252,355	1,252,355

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
City Park	16.60	8.40	6.90	0.00	0.00	0.00	66	28	6
Junior High School	16.60	8.40	6.90	72.80	22.20	5.00	63	25	12
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

3096 - MUSD ES #10 - South Coast AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Junior High School	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Parking Lot	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956

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															
Natural Gas Mitigated	7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286
Natural Gas Unmitigated	7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286

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5.2 Energy by Land Use - NaturalGas**Unmitigated**

Land Use	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
	kBTU/yr																
City Park	0	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
Junior High School	672	7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286
Parking Lot	0	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
Total		7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286

Mitigated

Land Use	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
	kBTU/yr																
City Park	0	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
Junior High School	0.672	7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286
Parking Lot	0	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
Total		7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286

6.0 Area Detail

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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	0.6608	4.0000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983
Unmitigated	0.6608	4.0000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983

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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	0.0762					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0700e-003	4.0000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983
Total	0.6608	4.0000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983

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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	0.0762					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0700e-003	4.0000e-004	0.0433	0.0000	1.6000e-004	1.6000e-004	1.6000e-004	1.6000e-004	1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983
Total	0.6608	4.0000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983

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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
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

3096 - MUSD ES #10 - South Coast AQMD Air District, Summer

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

3096 - MUSD ES #10

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	120.00	Space	2.00	66,800.00	0
City Park	1.10	Acre	1.10	47,916.00	0
Junior High School	300.00	Student	1.00	28,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020

Utility Company Southern California Edison

CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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1.3 User Entered Comments & Non-Default Data

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

Project Characteristics -

Land Use - Acreage approximate from Google Earth.

Construction Phase - 35 days of grading for new parcel. Approximately 1 month of construction for new playfield.

Grading - Existing parcel is approximately 1 acre. New parcel is approximately 3 acres.

Demolition -

Trips and VMT - Assumes approximately 18 yr3 per truck for hauling.

Construction Off-road Equipment Mitigation -

Vehicle Trips - Play field does not generate additional trips.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	8.00	35.00
tblConstructionPhase	NumDays	230.00	20.00
tblConstructionPhase	PhaseEndDate	9/20/2019	7/3/2020
tblConstructionPhase	PhaseEndDate	10/16/2018	7/26/2019
tblConstructionPhase	PhaseEndDate	11/2/2018	6/28/2019
tblConstructionPhase	PhaseEndDate	10/16/2019	7/24/2019
tblConstructionPhase	PhaseEndDate	10/23/2018	8/2/2019
tblConstructionPhase	PhaseStartDate	11/3/2018	8/19/2019
tblConstructionPhase	PhaseStartDate	9/19/2018	7/1/2019
tblConstructionPhase	PhaseStartDate	10/24/2018	5/1/2019
tblConstructionPhase	PhaseStartDate	9/21/2019	7/1/2019
tblConstructionPhase	PhaseStartDate	10/17/2018	7/29/2019
tblGrading	AcresOfGrading	17.50	3.00
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialExported	0.00	40,000.00
tblGrading	MaterialExported	0.00	5,000.00
tblGrading	MaterialImported	0.00	5,000.00

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tblGrading	MaterialSiltContent	6.90	4.30
tblGrading	MaterialSiltContent	6.90	4.30
tblGrading	MeanVehicleSpeed	7.10	40.00
tblGrading	MeanVehicleSpeed	7.10	40.00
tblLandUse	LandUseSquareFeet	48,000.00	66,800.00
tblLandUse	LandUseSquareFeet	35,268.51	28,000.00
tblLandUse	LotAcreage	1.08	2.00
tblLandUse	LotAcreage	0.81	1.00
tblTripsAndVMT	HaulingTripNumber	494.00	280.00
tblTripsAndVMT	HaulingTripNumber	625.00	280.00
tblTripsAndVMT	HaulingTripNumber	5,000.00	2,222.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

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					
2019	18.5562	62.1623	40.6092	0.0831	17.0258	2.6256	19.4794	7.7113	2.4689	9.9708	0.0000	8,621,410 ₇	8,621,410 ₇	1.7256	0.0000	8,659,811 ₄
2020	2.4950	21.7969	19.6978	0.0391	0.8179	1.1343	1.9521	0.2202	1.0666	1.2869	0.0000	3,808,261 ₅	3,808,261 ₅	0.6838	0.0000	3,825,357 ₅
Maximum	18.5562	62.1623	40.6092	0.0831	17.0258	2.6256	19.4794	7.7113	2.4689	9.9708	0.0000	8,621,410 ₇	8,621,410 ₇	1.7256	0.0000	8,659,811 ₄

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					
2019	18.5562	62.1623	40.6092	0.0831	7.3597	2.6256	9.8133	3.2036	2.4689	5.4631	0.0000	8,621,410 ₇	8,621,410 ₇	1.7256	0.0000	8,659,811 ₄
2020	2.4950	21.7969	19.6978	0.0391	0.8179	1.1343	1.9521	0.2202	1.0666	1.2869	0.0000	3,808,261 ₅	3,808,261 ₅	0.6838	0.0000	3,825,357 ₅
Maximum	18.5562	62.1623	40.6092	0.0831	7.3597	2.6256	9.8133	3.2036	2.4689	5.4631	0.0000	8,621,410 ₇	8,621,410 ₇	1.7256	0.0000	8,659,811 ₄

	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
Percent Reduction	0.00	0.00	0.00	0.00	54.17	0.00	45.10	56.83	0.00	40.04	0.00	0.00	0.00	0.00	0.00	0.00

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

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	0.6608	4.000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983
Energy	7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286
Mobile	0.9615	5.2690	12.9758	0.0452	3.7281	0.0468	3.7749	0.9976	0.0439	1.0415		4,593.442 ₈	4,593.442 ₈	0.2373		4,599.374 ₇
Total	1.6295	5.3353	13.0744	0.0456	3.7281	0.0520	3.7800	0.9976	0.0491	1.0467		4,672.593₈	4,672.593₈	0.2391	1.4500e-003	4,679.001₇

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	0.6608	4.0000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983
Energy	7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286
Mobile	0.9615	5.2690	12.9758	0.0452	3.7281	0.0468	3.7749	0.9976	0.0439	1.0415		4,593.442 ₈	4,593.442 ₈	0.2373		4,599.374 ₇
Total	1.6295	5.3353	13.0744	0.0456	3.7281	0.0520	3.7800	0.9976	0.0491	1.0467		4,672.593₈	4,672.593₈	0.2391	1.4500e-003	4,679.001₇

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

	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
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	Demolition of Existing	Demolition	7/1/2019	7/26/2019	5	20	
2	Site Prep for Existing	Site Preparation	7/29/2019	8/2/2019	5	5	
3	Grading East Parcel	Grading	5/1/2019	6/28/2019	5	35	
4	Building Construction	Building Construction	8/19/2019	7/3/2020	5	230	
5	New Parking Lot	Paving	7/1/2019	7/24/2019	5	18	
6	Architectural Coating	Architectural Coating	10/17/2019	11/11/2019	5	18	
7	New Playfield	Building Construction	8/5/2019	8/30/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 42,000; Non-Residential Outdoor: 14,000; Striped Parking Area: 4,008 (Architectural Coating – sqft)

OffRoad Equipment

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
New Parking Lot	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition of Existing	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition of Existing	Excavators	3	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading East Parcel	Excavators	1	8.00	158	0.38
New Parking Lot	Pavers	1	8.00	130	0.42
New Parking Lot	Rollers	2	6.00	80	0.38
Demolition of Existing	Rubber Tired Dozers	2	8.00	247	0.40
Grading East Parcel	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading East Parcel	Tractors/Loaders/Backhoes	3	8.00	97	0.37
New Parking Lot	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Prep for Existing	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading East Parcel	Graders	1	8.00	187	0.41
New Parking Lot	Paving Equipment	2	6.00	132	0.36
Site Prep for Existing	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
New Playfield	Cranes	1	7.00	231	0.29
New Playfield	Forklifts	3	8.00	89	0.20
New Playfield	Generator Sets	1	8.00	84	0.74
New Playfield	Tractors/Loaders/Backhoes	3	7.00	97	0.37
New Playfield	Welders	1	8.00	46	0.45

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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
Demolition of Existing	6	15.00	0.00	280.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Prep for Existing	7	18.00	0.00	280.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading East Parcel	6	15.00	0.00	2,222.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	60.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
New Parking Lot	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
New Playfield	9	60.00	23.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition of Existing - 2019

Unmitigated Construction On-Site

Category	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
Fugitive Dust					5.3498	0.0000	5.3498	0.8100	0.0000	0.8100			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	5.3498	1.7949	7.1447	0.8100	1.6697	2.4797		3,816.8994	3,816.8994	1.0618		3,843.4451

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

3.2 Demolition of Existing - 2019**Unmitigated Construction Off-Site**

Category	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
	lb/day										lb/day					
Hauling	0.1184	4.1306	0.8440	0.0108	0.2446	0.0154	0.2601	0.0671	0.0147	0.0818		1,164.030 0	1,164.030 0	0.0845		1,166.143 4
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	0.0800	0.0560	0.6081	1.6600e- 003	0.1677	1.3000e- 003	0.1690	0.0445	1.2000e- 003	0.0457		165.6984	165.6984	5.1800e- 003		165.8278
Total	0.1984	4.1866	1.4521	0.0124	0.4123	0.0167	0.4290	0.1115	0.0159	0.1275		1,329.728 3	1,329.728 3	0.0897		1,331.971 2

Mitigated Construction On-Site

Category	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
	lb/day										lb/day					
Fugitive Dust					2.0864	0.0000	2.0864	0.3159	0.0000	0.3159			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.899 4	3,816.899 4	1.0618		3,843.445 1
Total	3.5134	35.7830	22.0600	0.0388	2.0864	1.7949	3.8813	0.3159	1.6697	1.9856	0.0000	3,816.899 4	3,816.899 4	1.0618		3,843.445 1

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

3.2 Demolition of Existing - 2019**Mitigated Construction Off-Site**

Category	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
lb/day																
Hauling	0.1184	4.1306	0.8440	0.0108	0.2446	0.0154	0.2601	0.0671	0.0147	0.0818		1,164.030 0	1,164.030 0	0.0845		1,166.143 4
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	0.0800	0.0560	0.6081	1.6600e- 003	0.1677	1.3000e- 003	0.1690	0.0445	1.2000e- 003	0.0457		165.6984	165.6984	5.1800e- 003		165.8278
Total	0.1984	4.1866	1.4521	0.0124	0.4123	0.0167	0.4290	0.1115	0.0159	0.1275		1,329.728 3	1,329.728 3	0.0897		1,331.971 2

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3.3 Site Prep for Existing - 2019**Unmitigated Construction On-Site**

Category	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
lb/day																
Fugitive Dust					15.8460	0.0000	15.8460	7.3898	0.0000	7.3898			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.452 9	3,766.452 9	1.1917		3,796.244 5
Total	4.3350	45.5727	22.0630	0.0380	15.8460	2.3904	18.2364	7.3898	2.1991	9.5889		3,766.452 9	3,766.452 9	1.1917		3,796.244 5

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

3.3 Site Prep for Existing - 2019

Unmitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.4737	16.5224	3.3761	0.0431	0.9786	0.0616	1.0402	0.2682	0.0590	0.3271		4,656.1198	4,656.1198	0.3382		4,664.5735
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	0.0960	0.0672	0.7297	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		198.8380	198.8380	6.2100e-003		198.9933
Total	0.5697	16.5896	4.1058	0.0451	1.1798	0.0632	1.2430	0.3215	0.0604	0.3819		4,854.9578	4,854.9578	0.3444		4,863.5669

Mitigated Construction On-Site

Category	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
lb/day																
Fugitive Dust					6.1800	0.0000	6.1800	2.8820	0.0000	2.8820			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904	2.1991	2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	6.1800	2.3904	8.5703	2.8820	2.1991	5.0811	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

3.3 Site Prep for Existing - 2019**Mitigated Construction Off-Site**

Category	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
lb/day											lb/day					
Hauling	0.4737	16.5224	3.3761	0.0431	0.9786	0.0616	1.0402	0.2682	0.0590	0.3271		4,656.119 ₈	4,656.119 ₈	0.3382		4,664.573 ₅
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	0.0960	0.0672	0.7297	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		198.8380	198.8380	6.2100e-003		198.9933
Total	0.5697	16.5896	4.1058	0.0451	1.1798	0.0632	1.2430	0.3215	0.0604	0.3819		4,854.957₈	4,854.957₈	0.3444		4,863.566₉

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3.4 Grading East Parcel - 2019**Unmitigated Construction On-Site**

Category	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
lb/day											lb/day					
Fugitive Dust					5.9770	0.0000	5.9770	2.6357	0.0000	2.6357			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.806 ₈	2,936.806 ₈	0.9292		2,960.036 ₁
Total	2.5805	28.3480	16.2934	0.0297	5.9770	1.3974	7.3744	2.6357	1.2856	3.9213		2,936.806₈	2,936.806₈	0.9292		2,960.036₁

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3.4 Grading East Parcel - 2019

Unmitigated Construction Off-Site

Category	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
lb/day																
Hauling	0.5370	18.7310	3.8274	0.0489	0.9532	0.0699	1.0231	0.2657	0.0668	0.3325		5,278.5195	5,278.5195	0.3834		5,288.1032
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	0.0800	0.0560	0.6081	1.6600e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		165.6984	165.6984	5.1800e-003		165.8278
Total	0.6170	18.7870	4.4355	0.0505	1.1209	0.0712	1.1921	0.3102	0.0680	0.3782		5,444.2179	5,444.2179	0.3885		5,453.9310

Mitigated Construction On-Site

Category	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
lb/day																
Fugitive Dust					2.3310	0.0000	2.3310	1.0279	0.0000	1.0279			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
Total	2.5805	28.3480	16.2934	0.0297	2.3310	1.3974	3.7284	1.0279	1.2856	2.3135	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361

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3.4 Grading East Parcel - 2019**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	0.5370	18.7310	3.8274	0.0489	0.9532	0.0699	1.0231	0.2657	0.0668	0.3325		5,278.5195	5,278.5195	0.3834		5,288.1032
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	0.0800	0.0560	0.6081	1.6600e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		165.6984	165.6984	5.1800e-003		165.8278
Total	0.6170	18.7870	4.4355	0.0505	1.1209	0.0712	1.1921	0.3102	0.0680	0.3782		5,444.2179	5,444.2179	0.3885		5,453.9310

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3.5 Building Construction - 2019**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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

3.5 Building Construction - 2019**Unmitigated Construction Off-Site**

Category	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
	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	0.0926	2.6336	0.7085	5.7900e-003	0.1472	0.0177	0.1649	0.0424	0.0169	0.0593		617.1274	617.1274	0.0452		618.2567
Worker	0.3199	0.2240	2.4323	6.6600e-003	0.6707	5.2200e-003	0.6759	0.1779	4.8100e-003	0.1827		662.7935	662.7935	0.0207		663.3111
Total	0.4126	2.8576	3.1408	0.0125	0.8179	0.0229	0.8408	0.2202	0.0218	0.2420		1,279.920₉	1,279.920₉	0.0659		1,281.567₈

Mitigated Construction On-Site

Category	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
	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.580 ₂	2,591.580 ₂	0.6313		2,607.363 ₅
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.580₂	2,591.580₂	0.6313		2,607.363₅

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3.5 Building Construction - 2019**Mitigated Construction Off-Site**

Category	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
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	0.0926	2.6336	0.7085	5.7900e-003	0.1472	0.0177	0.1649	0.0424	0.0169	0.0593		617.1274	617.1274	0.0452		618.2567
Worker	0.3199	0.2240	2.4323	6.6600e-003	0.6707	5.2200e-003	0.6759	0.1779	4.8100e-003	0.1827		662.7935	662.7935	0.0207		663.3111
Total	0.4126	2.8576	3.1408	0.0125	0.8179	0.0229	0.8408	0.2202	0.0218	0.2420		1,279.920₉	1,279.920₉	0.0659		1,281.567₈

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3.5 Building Construction - 2020**Unmitigated Construction On-Site**

Category	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
lb/day																
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 ₁	2,553.063 ₁	0.6229		2,568.634 ₅
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063₁	2,553.063₁	0.6229		2,568.634₅

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

3.5 Building Construction - 2020**Unmitigated Construction Off-Site**

Category	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
	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	0.0791	2.4110	0.6408	5.7500e-003	0.1472	0.0121	0.1593	0.0424	0.0116	0.0540		612.9795	612.9795	0.0426		614.0436
Worker	0.2961	0.1998	2.2085	6.4500e-003	0.6707	5.0900e-003	0.6758	0.1779	4.6900e-003	0.1826		642.2190	642.2190	0.0184		642.6794
Total	0.3752	2.6108	2.8493	0.0122	0.8179	0.0172	0.8351	0.2202	0.0163	0.2365		1,255.1984	1,255.1984	0.0610		1,256.7230

Mitigated Construction On-Site

Category	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
	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

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3.5 Building Construction - 2020**Mitigated Construction Off-Site**

Category	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
	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	0.0791	2.4110	0.6408	5.7500e-003	0.1472	0.0121	0.1593	0.0424	0.0116	0.0540		612.9795	612.9795	0.0426		614.0436
Worker	0.2961	0.1998	2.2085	6.4500e-003	0.6707	5.0900e-003	0.6758	0.1779	4.6900e-003	0.1826		642.2190	642.2190	0.0184		642.6794
Total	0.3752	2.6108	2.8493	0.0122	0.8179	0.0172	0.8351	0.2202	0.0163	0.2365		1,255.198₄	1,255.198₄	0.0610		1,256.723₀

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3.6 New Parking Lot - 2019**Unmitigated Construction On-Site**

Category	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
	lb/day										lb/day					
Off-Road	1.2679	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637		1,843.319 ₁	1,843.319 ₁	0.5671		1,857.496 ₆
Paving	0.2911					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5590	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637		1,843.319₁	1,843.319₁	0.5671		1,857.496₆

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

3.6 New Parking Lot - 2019**Unmitigated Construction Off-Site**

Category	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
	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	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037
Total	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037

Mitigated Construction On-Site

Category	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
	lb/day										lb/day					
Off-Road	1.2679	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637	0.0000	1,843.319 ₁	1,843.319 ₁	0.5671		1,857.496 ₆
Paving	0.2911					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5590	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637	0.0000	1,843.319₁	1,843.319₁	0.5671		1,857.496₆

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

3.6 New Parking Lot - 2019**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	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037
Total	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037

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3.7 Architectural Coating - 2019**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	15.4521					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	15.7185	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

3.7 Architectural Coating - 2019**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	0.0640	0.0448	0.4865	1.3300e-003	0.1341	1.0400e-003	0.1352	0.0356	9.6000e-004	0.0365		132.5587	132.5587	4.1400e-003		132.6622
Total	0.0640	0.0448	0.4865	1.3300e-003	0.1341	1.0400e-003	0.1352	0.0356	9.6000e-004	0.0365		132.5587	132.5587	4.1400e-003		132.6622

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	15.4521					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	15.7185	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

3.7 Architectural Coating - 2019**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	0.0640	0.0448	0.4865	1.3300e-003	0.1341	1.0400e-003	0.1352	0.0356	9.6000e-004	0.0365		132.5587	132.5587	4.1400e-003		132.6622
Total	0.0640	0.0448	0.4865	1.3300e-003	0.1341	1.0400e-003	0.1352	0.0356	9.6000e-004	0.0365		132.5587	132.5587	4.1400e-003		132.6622

3.8 New Playfield - 2019**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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

3.8 New Playfield - 2019**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	0.0926	2.6336	0.7085	5.7900e-003	0.1472	0.0177	0.1649	0.0424	0.0169	0.0593		617.1274	617.1274	0.0452		618.2567
Worker	0.3199	0.2240	2.4323	6.6600e-003	0.6707	5.2200e-003	0.6759	0.1779	4.8100e-003	0.1827		662.7935	662.7935	0.0207		663.3111
Total	0.4126	2.8576	3.1408	0.0125	0.8179	0.0229	0.8408	0.2202	0.0218	0.2420		1,279.920 ₉	1,279.920 ₉	0.0659		1,281.567 ₈

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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.580 ₂	2,591.580 ₂	0.6313		2,607.363 ₅
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.580 ₂	2,591.580 ₂	0.6313		2,607.363 ₅

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3.8 New Playfield - 2019**Mitigated Construction Off-Site**

Category	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
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	0.0926	2.6336	0.7085	5.7900e-003	0.1472	0.0177	0.1649	0.0424	0.0169	0.0593		617.1274	617.1274	0.0452		618.2567
Worker	0.3199	0.2240	2.4323	6.6600e-003	0.6707	5.2200e-003	0.6759	0.1779	4.8100e-003	0.1827		662.7935	662.7935	0.0207		663.3111
Total	0.4126	2.8576	3.1408	0.0125	0.8179	0.0229	0.8408	0.2202	0.0218	0.2420		1,279.920₉	1,279.920₉	0.0659		1,281.567₈

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Appendix A

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

	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	0.9615	5.2690	12.9758	0.0452	3.7281	0.0468	3.7749	0.9976	0.0439	1.0415		4,593.4428	4,593.4428	0.2373		4,599.3747
Unmitigated	0.9615	5.2690	12.9758	0.0452	3.7281	0.0468	3.7749	0.9976	0.0439	1.0415		4,593.4428	4,593.4428	0.2373		4,599.3747

A-91 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Junior High School	486.00	0.00	0.00	1,252,355	1,252,355
Parking Lot	0.00	0.00	0.00		
Total	486.00	0.00	0.00	1,252,355	1,252,355

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
City Park	16.60	8.40	6.90	0.00	0.00	0.00	66	28	6
Junior High School	16.60	8.40	6.90	72.80	22.20	5.00	63	25	12
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Junior High School	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Parking Lot	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956

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															
Natural Gas Mitigated	7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286
Natural Gas Unmitigated	7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

Land Use	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
	kBTU/yr																
lb/day																	
City Park	0	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
Junior High School	672	7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286
Parking Lot	0	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
Total		7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286

Mitigated

Land Use	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
	kBTU/yr																
lb/day																	
City Park	0	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
Junior High School	0.672	7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286
Parking Lot	0	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
Total		7.2500e-003	0.0659	0.0553	4.0000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003		79.0588	79.0588	1.5200e-003	1.4500e-003	79.5286

6.0 Area Detail

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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	0.6608	4.0000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983
Unmitigated	0.6608	4.0000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983

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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	0.0762					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0700e-003	4.0000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983
Total	0.6608	4.0000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983

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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	0.0762					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0700e-003	4.0000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983
Total	0.6608	4.0000e-004	0.0433	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0922	0.0922	2.5000e-004		0.0983

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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
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

3096 - MUSD ES #10 - South Coast AQMD Air District, Winter

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

APPENDIX B

Cultural Resources Report

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October 3, 2018

Debbie Stevens
Environmental Audit, Inc.
1000-A Ortega Way
Placentia, CA 92870

Subject: Cultural Resources Record Search and Field Survey Results, Harvest Hill STEAM Project (Project number C-0267), unincorporated Winchester, Riverside County, California

Dear Ms. Stevens,

At the request of the Menifee Union School District (MUSD), Duke Cultural Resources Management, LLC (DUKE CRM) has conducted a cultural resources record search and pedestrian field survey for the Harvest Hill Science Technology Engineering Arts and Mathematics (STEAM) Academy expansion project (Project), located in the community of Winchester, Riverside County, California. The existing STEAM Academy is approximately 10 acres in size. MUSD is the lead agency for California Environmental Quality Act (CEQA).

The Project is located in western Riverside County at 31600 Pat Road, Winchester, California, between Winchester Road and Elliott Road, see attached Project Vicinity Map. The 4.9 acre expansion Project is located in Section 29, Township 6 South, Range 2 West, as shown on the USGS *Bachelor Mountain, Calif.* and *Winchester, Calif.*, 7.5 quadrangle maps, see attached Project Location Map. The proposed Project includes the construction of a new two-story building on the west side of the school in the existing parking lot; a new parking lot and playfield east of the existing school boundary; and an extension of Slough Road north to Ruft Road. The Project will allow Harvest Hill Steam Academy to expand from a kindergarten through fifth grade (K-5) elementary school, to a kindergarten through eighth grade (K-8) school.

On September 7, 2018, Sarah Nava B.A., Archaeologist at DUKE CRM, conducted a records search at the Eastern Information Center (EIC). The EIC is part of the California Historical Resources Information System (CHRIS) and is located at the University of California, Riverside. The records search included a review of all recorded historic and prehistoric archaeological sites within a ½ mile radius of the Project, as well as a review of known cultural resource survey and excavation reports. In addition, Ms. Nava examined the California State Historic Property Data File (HPD), which includes the National Register of Historic Places (National Register), California Register of Historical Resources (California Register), California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI). At least eighteen cultural resource reports within ½ mile are on file at the EIC. One of these reports includes a survey that is within the Project boundaries. Table 1 summarizes the surveys within the ½ mile radius.

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Table 1. Reports within ½ Mile of the Project Boundary

Report No.	Year	Report Title	Author(s)	Comments
RI-00313	1978	Environmental Impact Evaluation: Archaeological Assessment of a Portion of the Winchester Area, Riverside County, California	Stephen Bouscaren	Negative 162 acre archaeological survey (within Project)
RI-00395	1978	Archaeological Resources Report on Tentative Tract Number 13317, Northeast Corner of Keller Road and Leon Road, Riverside County	Tony Weber	Negative 80 acre archaeological survey
RI-01731	1983	An Archaeological Assessment of Parcel 19448	Jean A. Salpas	Negative 24 acre archaeological survey
RI-03623	1993	A Phase I Archaeological Assessment of Comprehensive General Plan Amendment 370: 42.22 Acres of Land Near Temecula, Riverside County, CA.	Jean A. Keller.	Negative 42 acre archaeological survey
RI-04709	2004	Cultural Resource Assessment, French Valley Assemblage, Near Menifee, Riverside County	Curt Duke and Nat Lawson	Negative 160 acre archaeological survey
RI-04789	2004	Phase I Archaeological and Paleontological Resources Survey and Assessment of Tentative Tract Map No. 32171, 9.04 Acres of Land Near the City of Murrieta, Riverside County, California	Sherri Gust	Negative 9 acre archaeological survey
RI-04936	2003	A Phase I Cultural Resources Survey of Assessor Parcels 467-160-047 And 467-160-012, Comprising 20 Acres in Riverside County, California	Jeanette A. McKenna	Negative 20 acre archaeological survey
RI-06046	2004	Cultural Resources Reconnaissance of the Vereecken Property, Winchester Hills, Riverside County	Matthew Tennyson	Negative 52 acre archaeological survey
RI-06775	2007	Archaeological Survey Report for Southern California Edison Company DSP-Appaloosa 12KV O/O Auld Substation Project, Riverside County, California,	Stacey C. Jordan	122 acre archaeological survey, 1 cultural resource 33-009760
RI-06902	2006	Results of a Grading Monitoring Program for Cultural Resources (Archaeological and Paleontological Monitoring) at Tract 3118, French Valley, Riverside County, California	Jeanette A. McKenna	Negative 35-acre archaeological and paleontological monitoring
RI-08014	2004	Phase I Archaeological and Paleontological Resources Survey And Assessment Of Tentative Tract Map No. 32171	Sherri Gust	Negative 9 acre archaeological survey
RI-08037	2004	Phase I Archaeological & Paleontological Resources Survey & Assessment of Assessor's Parcel Number 467-160-016	Kim Scott and Sherri Gust	Negative 4 acre archaeological survey
RI-08156	2008	Phase I Archaeological Assessment Tentative Parcel Map No. 36161 Winchester Plaza Project French Valley Area, Riverside County, California	Bai Tang and Michael Hogan	20 acre archaeological survey, 1 cultural resource 33-017628
RI-08184	2009	Phase I Archaeological Resources Assessment of the Proposed Hanna-Winchester Project, Riverside County, California	Matthew Wetherbee	190 acre archaeological survey, 1 cultural resource 33-011258
RI-08456	2008	Historic Property Survey Report: State Route (SR) 79 Widening between Thompson Road and Domenigoni Parkway in the County of Riverside, California	Richard Starzak, Noelle Storey, and Mark Robinson	190 acre archaeological survey and evaluation, 1 cultural resource 33-001418
RI-08602	2010	Supplemental Archaeological Survey Report State Route 79 Widening Report Between Thompson Road and Domenigoni Parkway Riverside County	Mark Robinson	Negative 8 acre archaeological survey

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Report No.	Year	Report Title	Author(s)	Comments
RI-09736	2016	A Phase 1 Cultural Resources Investigation for the Temecula Valley Charter School, Located In the Winchester Area of the French Valley, Riverside County, California	Jeanette A. McKenna	21 acre archaeological, architectural and historical survey, and literature search, 22 cultural resources
RI-09852	2016	Phase 1 Cultural Resources Assessment for the Keller and Pourroy Roads Project, +/- 48 Acres in the Winchester/East Menifee Area, Riverside County, California.	Jennifer M. Sanka, William R. Gillean, and Leslie Nay Irish	Negative, unknown acreage archaeological survey and literature search

At least fourteen cultural resources are recorded within ½ mile of the Project though none are within the Project boundaries. Eleven are prehistoric and three are historic sites. A majority of the resources are located within the ½ mile east and southeast of the project area. A prehistoric bedrock milling slick (33-008932) is located less than 1,000 feet to the southeast of the Project. The rest of the recorded resources in the record search area are comprised of 22 prehistoric milling features, two stone tool artifact scatters, seven stone tool isolates, and three historic features. Table 2 below lists the resources in the record search area and their proximity to the project boundary.

Table 2. Cultural Resources

Resource No.	Resource Type	Description	Eligibility Status	Distance and Direction
33-003843	Prehistoric	Milling, petroglyph, and habitation Site	Not evaluated	.4 miles southeast
33-008932	Prehistoric	Single bedrock milling slick	Not evaluated	.1 miles east
33-008933	Prehistoric	3 milling slicks	Not evaluated	.2 miles southeast
33-009478	Historic	Historic foundations and midden deposit	Not Evaluated	.5 miles southeast
33-011224	Prehistoric	Bedrock milling features	Not evaluated	.3 miles southeast
33-011225	Prehistoric	Isolated milling slick	Not evaluated	.4 miles south
33-011226	Prehistoric	4 milling slicks	Not evaluated	.4 miles north
33-011227	Prehistoric	Lithic artifact and FAR scatters, with milling feature	Not eligible	.4 miles southeast
33-011230	Prehistoric	2 artifact isolates (metate fragment and hammerstone)	Not evaluated	.4 miles east
33-011231	Prehistoric	Isolated metate fragment	Not evaluated	.4 miles southeast
33-011232	Prehistoric	Isolated mano and hammerstone fragment	Not evaluated	.4 miles southeast
33-011233	Historic	Isolated cobblestone retention wall	Not evaluated	.4 miles southeast
33-011234	Historic	Metal water tank	Not evaluated	.4 miles southeast
33-017628	Prehistoric	2 isolated groundstone fragments	Not evaluated	.2 miles east

In addition to the record search at the EIC, Andrew DeLeon, M.A. RPA, archaeologist at DUKE CRM conducted a review of on-line historical aerial photographs, utilizing Google Earth and www.historicaerials.com. Review of aerial photographs indicates that the land in the current project area was agricultural before 1996 with evidence of a possible homestead structure, corral, and fence demarcation after 1996. There is no evidence of any occupation in the Project boundaries from available aerial imagery prior to that year. Sometime after 2014, the land underwent development for the current Harvest Hill STEAM Academy and clear grading pathways are visible on the eastern portion of the Project.

DUKE CULTURAL RESOURCES MANAGEMENT

Mr. DeLeon, conducted an intensive, 15 meter-spaced transect, pedestrian survey of the eastern portion of the Project on September 18, 2018. The survey area included 4.0 acres in the area of the proposed playfield, parking lot, and Slough Road extension, see attached Aerial Map. The soil has been heavily disturbed and shows signs of plowing, fill import, and grading activities, confirming the ground disturbance activities visible on Google Earth dated to 2016. Ground surface visibility was approximately 30%. Several fill piles and rock/boulders are deposited throughout the property. Various pieces of modern refuse were also encountered, see attached Project Photographs. No cultural resources were observed during the field survey.

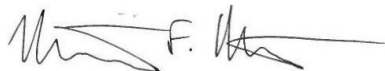
DUKE CRM evaluated the proposed project for impacts to cultural resources according to CEQA. Considering the previous agricultural use of the land and taking into account previous and current ground disturbances in the Project, the Project has low sensitivity for prehistoric cultural resources. Therefore, it is not likely that any cultural resources will be impacted by the Project. DUKE CRM does not recommend any additional work for cultural resources. However, if ground disturbing activities associated with this project change, these changes may have the potential to disturb sediments that are previously undisturbed or may be from the historic period. In addition, if archaeological resources are discovered during project construction an archaeologist shall be notified immediately.

If previously unidentified cultural materials are un-earthed during construction, work shall be halted in that area until a qualified archaeologist can assess the significance of the find. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Thank you for contacting DUKE CRM on this interesting project. If you have any questions or comments, you can contact me at (949)356-6660, ext 1003, or by e-mail at nickhearth@dukecrm.com.

Sincerely,

DUKE CULTURAL RESOURCES MANAGEMENT, LLC



Nicholas F. Hearth, M.A., RPA
Archaeologist

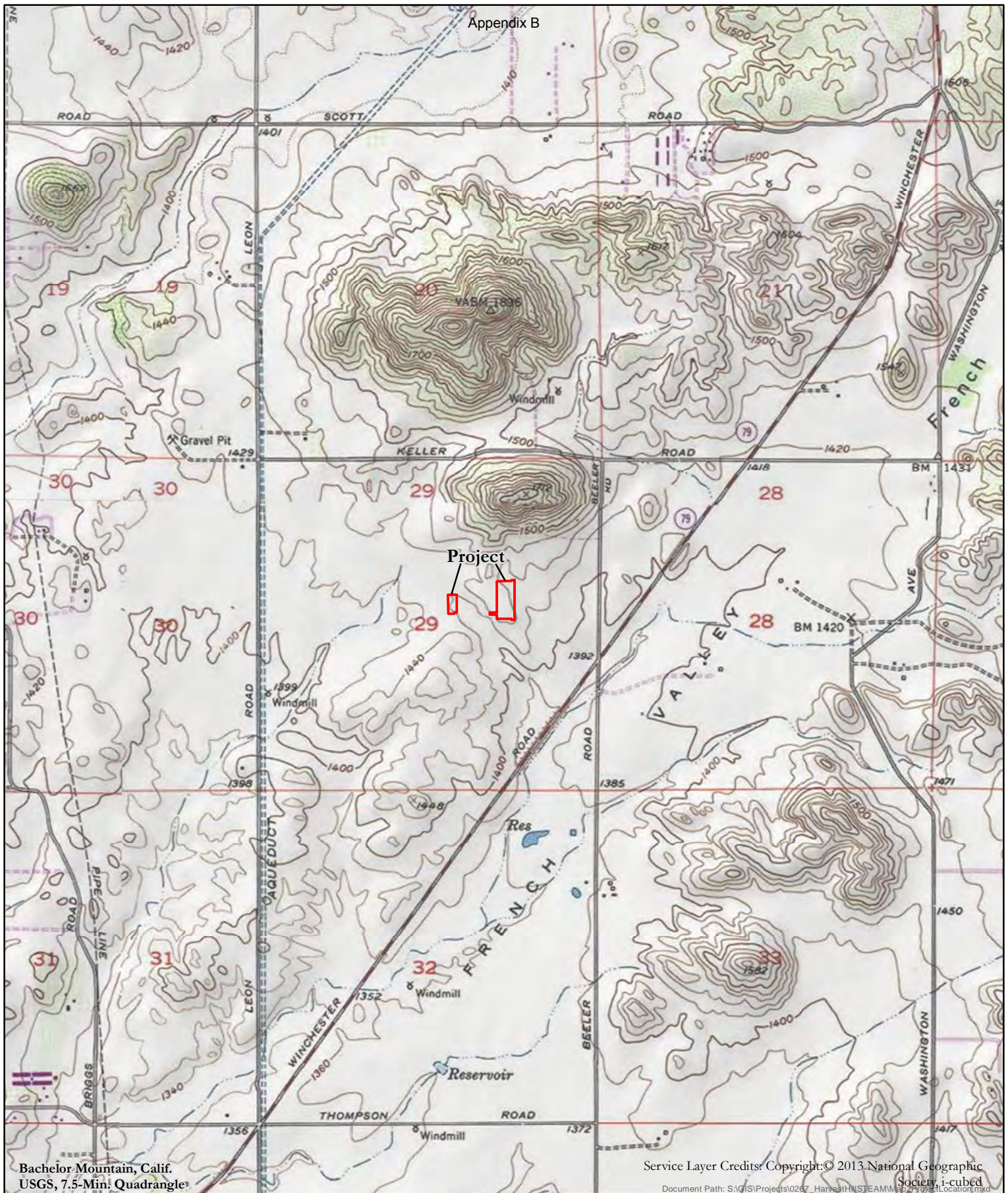
Attachments

Project Maps
Project Photographs

ATTACHMENT

PROJECT MAPS





Map 2- Project Location

Harvest Hill STEAM Academy Expansion Project
Winchester, California



Project

0 2,000 4,000 Feet

1 inch = 2,000 feet

1:24,000





Map 3- Aerial Photograph

Harvest Hill STEAM Academy Expansion Project
Winchester, California



/// Pedestrian
Survey Area
Project

0 200 400
Feet

1 inch = 200 feet

1:2,400



ATTACHMENT

PROJECT PHOTOGRAPHS



Overview north from eastern portion of Project (September 18, 2018).



Overview south from northeastern corner Project (September 18, 2018).



Overview southwest from northwestern corner Project (September 18, 2018).



Overview northeast from southwestern corner Project (September 18, 2018).