DRAFT

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

BLUE OAK ACADEMY GROWTH PROJECT

28050 ROAD 148

VISALIA, CALIFORNIA 93292

April 2022

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BLUE OAK ACADEMY GROWTH PROJECT

28050 ROAD 148

VISALIA, CALIFORNIA 93292

Submitted to:

Visalia Unified School District
5000 West Cypress Avenue
Visalia, CA 93277

Prepared by:

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April 2022

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LIST OF ABBREVIATIONS AND ACRONYMS

AB	Assembly Bill
ADA	Americans with Disabilities Act
AE	Exclusive agriculture
APN	Assessor's Parcel Number
AST	Aboveground storage tank
BAAQMD	Bay Area Air Quality Management District
BMP	Best management practice
BNSF	Burlington Northern Santa Fe
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAM 17	California Title 22 Metals
CAPCOA	California Air Pollution Control Officers' Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH_4	Methane
CNDDB	California Natural Diversity Database
CNEL	Community noise equivalent level
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
dB	Decibel
dBA	A-weighted decibel
DPM	Diesel particulate matter
EIR	Environmental impact report
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GAMAQI	Guide for Assessing and Mitigating Air Quality Impacts
GHG	Greenhouse gas
GWP	Global warming potential
HVAC	Heating, ventilation and air conditioning
IS/MND	Initial Study/Mitigated Negative Declaration
kV	Kilovolt
L_{dn}	Day-night sound level, dBA
L_{eq}	Equivalent sound level, dBA
L_{max}	Maximum instanteous noise level
LOS	Level of service
LUST	Leaking underground storage tank
MCL	Maximum contaminant level
N_2O	Nitrous oxide
NAHC	Native American Heritage Commission
NPDES	National Pollutant Discharge Elimination System
O_3	Ozone
PM_{10}	Particulate matter with diameter 10 microns

$PM_{2.5}$	Particulate matter with diameter 2.5 microns
PPV	Peak particle velocity
PRC	Public Resources Code
SB	Senate Bill
SCE	Southern California Edison
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SPAL	Small project analysis level
SRA	State Responsibility Area
STEAM	Science, technology, engineering, art, and math
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic air contaminant
TPH	Total petroleum hydrocarbon
VHFHSZ	Very high fire hazard severity zone
VMT	Vehicle miles traveled
WDR	Waste discharge requirement

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1.0 PROJECT INFORMATION

1. **Project Title:**
   Blue Oak Academy Growth Project

2. **Lead Agency Name and Address:**
   Visalia Unified School District
   5000 West Cypress Avenue
   Visalia, California 93277

3. **Contact Person and Phone Number:**
   Steve Pena, (559) 730-7350

4. **Project Location:**
   28050 Road 148
   Visalia, California 93292

5. **Project Sponsor's Name and Address:**
   N/A

6. **General Plan Designation:**
   Public Institutional

7. **Zoning:**
   Exclusive Agriculture (AE-20)

8. **Description of Project:**
   The Visalia Unified School District (District) proposes to construct a new administration and classroom building, expand the existing parking lot with student drop-off and other associated site development on the existing Blue Oak Academy campus on Assessor's Parcel Number (APN) 127-050-013 (Figure 1). The proposed building would include two kindergarten classrooms with integral restrooms, five standard classrooms, a STEAM lab and student restrooms, In addition, the proposed project includes new water service and new electrical service.

9. **Surrounding Land Uses and Setting:**
   The proposed project area is located at the northeast corner of Road 148 and Avenue 280 in unincorporated Tulare County. Surrounding properties have a designation of Agriculture and are zoned Exclusive Agriculture (AE-20).

10. **Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):**
    - California Department of Education, School Facilities and Transportation Unit
    - Department of Toxic Substance Control

- Division of the State Architect
- California State Clearing House
- Native American Heritage Commission
- California Regional Water Quality Control Board
- Tulare County Public Works
- Tulare County Fire Department
- Tulare County Environmental Health Division

Figure 1: **Project Location**

Figure 2: **Proposed Project**

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource 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 District requested a Sacred Lands File search from the Native American Heritage Commission in May 2021. Pursuant to AB 52, the District contacted the tribal representatives on the list on September 9, 2021. To date, the District has received no responses from tribal representatives. In the event that the tribal representatives express interest in the project and/or the project area, the District will coordinate with the tribes to address any concerns.

2.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist in Chapter 3.0.

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

2.1 DETERMINATION

On the basis of this initial evaluation:

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

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

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

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

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

Signature _____ Date _____

Special Requirements under the State School Facility Program

In addition to the CEQA Guidelines, primary and secondary public schools have several additional requirements established by the California Code of Regulations and California Education Code. Table 1 identifies the specific health and safety requirements for a state-funded new school or a state-funded addition to an existing school site. These health and safety requirements are outlined in the California Department of Education (CDE) School Site Selection and Approval Guide. The analyses and response is included under the relevant section identified in the table below.

Table 1: Special Requirements for School Site Selection and Approval

Topic	Environmental Code	Environmental Checklist
Air Quality		
Is the boundary of the proposed school site within 500 feet of the edge of the closest traffic lane of a freeway or busy traffic corridor? If yes, would the project create an air quality health risk due to the placement of the School?	PRC § 21151.8(a)(1)(D); Ed. Code§ 17213(c)(2)(C)	Section 3.3 Air Quality, Question (e)
Would the project create an air quality hazard due to the placement of a school within one-quarter mile of: (a) permitted and non-permitted facilities identified by the jurisdictional air quality control board or air pollution control district; (b) freeways and other busy traffic corridors; (c) large agricultural operations; and/or (d) a rail yard, which might reasonably be anticipated to emit hazardous air emissions, or handle hazardous or acutely hazardous material, substances, or waste?	PRC § 21151.8 (a)(2); Ed. Code § 17213 (b)	Section 3.3 Air Quality, Question (f)
Geology and Soils		
Does the site contain an active earthquake fault or fault trace, or is the site located within the boundaries of any special studies zone or within an area designated as geologically hazardous in the safety element of the local general plan?	CCR, Title 5 § 14010(f); Ed. Code, § 17212	Section 3.7 Geology and Soils, Question (a)(i)
Would the project involve the construction, reconstruction, or relocation of any school building on a site subject to moderate to high liquefaction?	CCR, Title 5 § 14010(i)	Section 3.7 Geology and Soils, Question (a)(iii)
Would the project involve the construction, reconstruction, or relocation of any school building on a site subject to landslides?	CCR, Title 5 § 14010(i)	Section 3.7 Geology and Soils, Question (a)(iv)
Would the project involve the construction, reconstruction, or relocation of any school building on the trace of a geological fault along which surface rupture can reasonably be expected to occur within the life of the school building?	CCR, Title 5 § 14010(f); Ed. Code § 17212	Section 3.7 Geology and Soils, Question (a)(i)
Hazards and Hazardous Materials		
Is the property line of the proposed school site less than the following distances from the edge of respective powerline easements: (1) 100 feet of a 50-133 kV line; (2) 150 feet of a 220-230 kV line; or (3) 350 feet of a 500-550 kV line?	CCR, Title 5 § 14010(c)	Section 3.9 Hazards and Hazardous Materials, Question (h)
Is the proposed school site located near an aboveground water or fuel storage tank or within 1,500 feet of an easement of an aboveground or	CCR, Title 5 § 14010(h)	Section 3.9 Hazards and

underground pipeline that can pose a safety hazard to the site?		Hazardous Materials, Question (i)
Is the proposed school site situated within 2,000 feet of a significant disposal of hazardous waste?	CCR, Title 5 § 14010(t)	Section 3.9 Hazards and Hazardous Materials, Question (d)
Does the proposed school site contain one or more pipelines, situated underground or aboveground, which carry hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line that is used only to supply natural gas to that school or neighborhood?	PRC § 21151.8 (a)(1)(C)	Section 3.9 Hazards and Hazardous Materials, Question (i)
Is the school site in an area designated in a city, county, or city and county general plan for agricultural use and zoned for agricultural production, and if so, do neighboring agricultural uses have the potential to result in any public health and safety issues that may affect the pupils and employees at the school site? *(Does not apply to school sites approved by CDE prior to January 1, 1997.)*	Ed. Code § 17215.5 (a)	Section 3.9 Hazards and Hazardous Materials, Question (j)
Does the project site contain a current or former hazardous waste disposal site or solid waste disposal site and, if so, have the wastes been removed?	PRC § 21151.8 (a)(1)(A)	Section 3.9 Hazards and Hazardous Materials, Question (k)
Is the project site a hazardous substance release site identified by the state Department of Health Services in a current list adopted pursuant to §25356 for removal or remedial action pursuant to Chapter 6.8 of Division 20 of the Health and Safety Code?	PRC § 21151.8 (a)(1)(B)	Section 3.9 Hazards and Hazardous Materials, Question (d)
If prepared, has the risk assessment been performed with a focus on children's health posed by a hazardous materials release or threatened release, or the presence of naturally occurring hazardous materials on the school site?	Ed. Code § 17210.1 (a)(3)	Section 3.9 Hazards and Hazardous Materials, Question (c)
If a response action is necessary and proposed as part of this project, has it been developed to be protective of children's health, with an ample margin of safety?	Ed. Code § 17210.1 (a)(4)	Section 3.9 Hazards and Hazardous Materials, Question (l)
Is the proposed school site within two miles, measured by airline, of that point on an airport runway or potential runway included in an airport master plan that is nearest to the site? *(Does not apply to school sites acquired prior to January 1,1966.)*	Ed. Code § 17215 (a)&(b)	Section 3.9 Hazards and Hazardous Materials, Question (e)
Hydrology and Water Quality		
Is the project site subject to flooding or dam inundation?	CCR, Title 5 § 14010(g); Ed. Code § 17212;	Section 3.10 Hydrology and Water Quality, Question (d)
Land Use and Planning		
Would the proposed school conflict with any existing or proposed land uses, such that a potential health or safety risk to students would be created?	CCR, Title 5 § 14010(m)	Section 3.11 Land Use and Planning, Question(b)

Noise		
Is the proposed school site located adjacent to or near a major arterial roadway or freeway whose noise generation may adversely affect the education program?	CCR, Title 5 § 14010(e)	Section 3.13 Noise, Question (d)
Public Services		
Does the site promote joint use of parks, libraries, museums, and other public services?	CCR, Title 5 § 14010(o)	Section 3.15 Public Services, Question (f)
Transportation		
Is the proposed school site within 1,500 feet of a railroad track easement?	CCR, Title 5 § 14010(d)	Section 3.17 Transportation, Question (e)
Is the site easily accessible from arterials and is the minimum peripheral visibility maintained for driveways per Caltrans' Highway Design Manual?	CCR, Title 5 § 14010(k)	Section 3.17 Transportation, Question (f)
Are traffic and pedestrian hazards mitigated per Caltrans' School Area Pedestrian Safety manual?	CCR, Title 5 § 14010(l)	Section 3.17 Transportation, Question (g)

3.0 CEQA ENVIRONMENTAL CHECKLIST

3.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☐	☒
c. 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?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

3.1.1 Impact Analysis

a. Would the project have a substantial effect on a scenic vista?

The proposed project area is located in a rural area characterized by views of orchards, transmission lines, and area residences. According to the Tulare County General Plan there are no designated scenic vistas within the planning area (see Figure 11-2 of the County General Plan). Development of the proposed project would have no impact on a scenic vista.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

While the project site has non-native trees, the project site is devoid of rock outcroppings or historic structures. Additionally according to the California Department of Transportation (Caltrans), the nearest Eligible State Scenic Highway is State Route 198 approximately 2.0 miles north of the proposed project (Esri 2018). Therefore, project construction and operation would have no impact on scenic resources within a state scenic highway.

c. In non-urbanized areas, would the project 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?

Views of the project area from publicly accessible vantage points (i.e., Road 148 and Avenue 280) currently consist of the existing Blue Oak Academy campus, surrounding orchards, and nearby overhead transmission lines. Views of the surrounding areas contain rural residences, overhead transmission lines, and orchard trees in the foreground, trees and transmission lines in the middle ground, and trees and mountains (east) in the background. The proposed project would introduce new features that would replace existing structures but would be visible from publicly accessible vantage points; however, construction and operation of the proposed project would be consistent with the existing and proposed use identified in the Tulare County General Plan and would not degrade the visual quality of the site or surroundings. Impacts would be less than significant.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The proposed project includes construction of a new administration/classroom building and remodeling of existing campus buildings. The existing Blue Oak Academy campus includes light sources. The project would include a variety of indoor and outdoor lighting. Lighting would be provided for adequate illumination for safe access and basic security. Exterior lighting would include wall-mounted fixtures on buildings and bollard lighting. Pole-mounted lighting would be shielded and directional so as to direct light away from surrounding land uses. Because the project would provide nighttime lighting consistent with existing uses, this impact would be less than significant.

3.2 AGRICULTURE AND FORESTRY RESOURCES

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

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

3.2.1 Impact Analysis

a. Would the project 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?

The project site is designated as Urban and Built-Up Land on the Tulare County Important Farmland Map released by the California Department of Conservation (DOC 2016). Therefore, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use. The project would have no impact.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Although the project site is zoned AE-20 (exclusive agriculture zone), the site is not actively used for agricultural use. Likewise, the project area is not under a Williamson Act Contract. This impact would be less than significant.

c. Would the project 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))?

The project site is surrounded by agricultural and residential uses. The site's existing zoning "AE-20" (exclusive agriculture zone) does not support the definitions provided by Public Resources Code (PRC) Section 42526 for timberland, PRC Section 12220(g) for forestland, or Government Code Section 51104(g) for timberland zoned for production. Therefore, no impacts related to the conversion of timberlands or forest land would occur.

d. Would the project result in the loss of forest land or conversion of forestland to non-forest use?

As discussed in the response 3.2.1(c), the project site is surrounded by residential and agricultural uses. Implementation of the project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

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

The project site has been dedicated as a school site since 1965. No forest land is located within the project site or the vicinity of the project site. Implementation of the proposed project would not result in changes to the environment that, due to its location or nature, could result in the conversion of farmland to non-agricultural use or converting forest land to non-forest use. Therefore, no impact would occur.

3.3 AIR QUALITY

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐
e. Is the boundary of the proposed school site within 500 feet of the edge of the closest traffic lane of a freeway or busy traffic corridor? If yes, would the project create an air quality health risk due to the placement of the School?	☐	☐	☐	☒
f. Would the project create an air quality hazard due to the placement of a school within one-quarter mile of: (a) permitted and non-permitted facilities identified by the jurisdictional air quality control board or air pollution control district; (b) freeways and other busy traffic corridors; (c) large agricultural operations; and/or (d) a rail yard, which might reasonably be anticipated to emit hazardous air emissions, or handle hazardous or acutely hazardous material, substances, or waste?	☐	☐	☒	☐

3.3.1 Impact Analysis

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The project site is located within the San Joaquin Valley Air Basin (SJVAB), which includes Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare Counties, and is within the jurisdictional boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD). A project is nonconforming with an air quality plan if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable SJVAPCD rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Zoning changes, specific plans, general plan amendments and similar land use plan changes which do not increase dwelling unit density, do not increase vehicle trips, and do

not increase vehicle miles traveled are also deemed to comply with the applicable air quality plan (SJVAPCD 2017).

For construction impacts, the pollutant of greatest concern to the SJVAPCD is respirable particulate matter (PM_{10}). To aid in evaluating potentially significant construction and/or operational impacts of a project, SJVAPCD has prepared an advisory document, the Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI), which contains standard procedures for addressing air quality in CEQA documents (SJVAPCD, 2002), which was updated in March 2017. The SJVAPCD recommends that significance be based on a consideration of the control measures to be implemented during project construction. Compliance with Regulation VIII (Fugitive PM_{10} Prohibitions) and implementation of appropriate mitigation measures to control PM_{10} emissions are considered by the Air District to be sufficient to render a project's construction-related impacts less than significant. All control measures listed in the GAMAQI Table 2 (Regulation VIII Control Measures) are required for all construction sites by regulation. Therefore, implementation of **Mitigation Measure AQ-1**, as required by the SJVAPCD would reduce construction-related impacts to less than significant.

GAMAQI presents a three-tiered approach to operational air quality analysis. The Small Project Analysis Level (SPAL) is first used to screen the project for potentially significant impacts. A project that meets the screening criteria at this level requires no further analysis and air quality impacts of the project may be deemed less than significant. If a project does not meet all the criteria at this screening level, additional screening is recommended at the Cursory Analysis Level and, if warranted, the Full Analysis Level.

GAMAQI 5-3(b) (Table 5-2), which SJVAPCD recommends using as part of the initial screening process, shows the maximum trips per day to be considered a SPAL project. For institutional projects, the daily vehicle trip threshold is 1,707 vehicle trips per day. The District projects that the proposed project would generate 176 additional trips per day (JLB Traffic Engineering 2021). Based on the California Department of Education DataQuest website, there are 286 students enrolled in Blue Oak Academy and 16.06 staff on campus daily. For a conservative estimate, if every student and teacher arrived and departed campus in a single vehicle and did not carpool, the District estimates existing trips per day are 604; therefore, with the addition of 176 vehicle trips per day associated with the proposed project, the project does not exceed the daily vehicle threshold of 1,707 vehicle trips per day and meets the SPAL criterion for project type and is excluded from quantifying criteria pollutant emissions for CEQA purposes.

Therefore, the project's emissions would not exceed the construction significance thresholds with the implementation of **Mitigation Measure AQ-1** and is not expected to generate activities that could cause exceedance of the operational thresholds or violate any SJVAPCD rule or regulation. The project would not conflict with or delay the implementation of the SJVAPCD Attainment Plans. Therefore, project impacts would be less than significant with the implementation of **Mitigation Measure AQ-1**.

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

The SJVAB is designated as a nonattainment area for federal ozone (O_3) and particulate matter 2.5 microns or less in diameter ($PM_{2.5}$) standards and for state O_3, PM_{10}, and $PM_{2.5}$ standards. Movement of soil and pollutant emissions associated with entrained dust (earth movement) and internal combustion engines used by on-site construction equipment and from off-site worker vehicles and truck trips during project construction have the potential to release short-term criteria air pollutants. However, due to the short duration of construction activities and the implementation of **Mitigation Measure AQ-1**, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment. The project would not change the land use of the project site or produce criteria pollutant emissions during project operation. Therefore, impacts would be less than significant with implementation of **Mitigation Measure AQ-1**.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

During construction, diesel equipment would be operating. Diesel particulate matter (DPM) is known to the State of California as a toxic air contaminant (TAC). The risks associated with exposure to substances with carcinogenic effects are typically evaluated based on a lifetime of chronic exposure, which is defined in the California Air Pollution Control Officers' Association (CAPCOA's) Air Toxics "Hot Spots" Program Risk Assessment Guidelines as 24 hours per day, 7 days per week, 365 days per year, for 70 years. DPM would be emitted during the short term of construction assumed for the proposed project from heavy equipment used in the construction process. Because diesel exhaust particulate matter is considered carcinogenic, long-term exposure to diesel exhaust emissions has the potential to result in adverse health impacts. Due to the short-term nature of project construction, impacts from exposure to diesel exhaust emissions during construction would be less than significant. No DPM-generating equipment, aside from potential landscape equipment, would be located on-site during operation of the proposed project; therefore, the proposed project would result in intermittent operation of DPM-generating equipment. This impact would be less than significant.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The CEQA guidelines indicate that a significant impact would occur if the proposed project would create objectionable odors affecting a substantial number of people. Construction of the proposed project would emit diesel exhaust and volatile organic compounds, which are objectionable to some; however, emissions would disperse rapidly from the project site and the activity would be temporary. Impacts due to objectionable odors would be less than significant.

e. Is the boundary of the proposed school site within 500 feet of the edge of the closest traffic lane of a freeway or busy traffic corridor? If yes, would the project create an air quality health risk due to the placement of the School?

Busy traffic corridors are defined as 50,000 vehicles per day in a rural area as defined by the California Department of Education (CDE). The nearest highway is Highway 198, which is located approximately 1.0 mile north of the proposed project area. Highway 198 in the project vicinity experiences an average daily traffic of 45,500 vehicles per day (Caltrans 2017). Additionally, Avenue 280, which is located along the southern perimeter of the school campus, experiences an average daily traffic of 8,700 per day (Tulare County 2010). There would be no impact related to placement of a school within 500 feet of a freeway or a busy traffic corridor.

f. Would the project create an air quality hazard due to the placement of a school within one-quarter mile of: (a) permitted and non-permitted facilities identified by the jurisdictional air quality control board or air pollution control district; (b) freeways and other busy traffic corridors; (c) large agricultural operations; and/or (d) a rail yard, which might reasonably be anticipated to emit hazardous air emissions, or handle hazardous or acutely hazardous material, substances, or waste?

Within one-quarter mile of the proposed project area are agricultural and rural residential uses. These uses would not create an air quality hazard for the proposed school site. As discussed in response 3.3(e), the nearest highway, which is not a busy traffic corridor based on the CDE definition, is approximately 1.0 mile north of the proposed project area. The project site is surrounded by agricultural operations; however, the proposed project would occur within the existing school boundaries and would not expand onto additional parcels. The project area is located approximately 0.35 mile south of the existing Amtrak line. This impact would be less than significant.

3.3.2 Mitigation Measures

Mitigation Measure AQ-1: The following measures shall be implemented by the construction contractor during construction activities:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping shall be prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne

toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

3.4 BIOLOGICAL RESOURCES

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

3.4.1 Impact Analysis

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

A search of the California Department of Wildlife's California Natural Diversity Database (CNDDB) Exeter 7.5-minute quadrangle identified 15 occurrences of special-status plant and animal species. However, with the exception of trees on the project site, no suitable habitat is present within the proposed project area to support the special-status species. No native habitat is present on or adjacent to the project site. Because of the surrounding built environment, no mammals other than raccoons, domestic dogs and cats occur in the area, nor do any reptilian species.

Common native and non-native bird species may find shelter and nesting opportunities within the trees on the project site. Therefore, implementation of **Mitigation Measure BIO-1**

would reduce impacts to nesting birds protected by the Migratory Bird Treaty Act to a less-than-significant level.

With implementation of Mitigation Measure BIO-1, construction and operation of the proposed project would not impact species identified as candidate, sensitive, or special-status in local or regional plans, policies, and regulations.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Review of the National Wetlands Inventory indicates there are no surface waters within 0.25 mile of the project site. Therefore, no direct or indirect impacts to riparian habitat or other sensitive natural communities are anticipated as a result of project activities.

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Review of the National Wetlands Inventory indicates no wetlands are mapped on the project site. Therefore, no direct or indirect impacts to federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means are anticipated as a result of project activities.

d. Would the project 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?

The project site has been previously graded and developed and is surrounded by agricultural uses. Rural residential uses and roadway corridors are located to the east and south of the proposed project site. The project site does not contain wildlife travel routes, such as a riparian strip, ridgeline, drainage, or wildlife crossings, such as a tunnel, culvert, or underpass.

The project site and adjacent areas do not support resident or migratory fish species or wildlife nursery sites. No established resident or migratory wildlife corridors occur within the project site. Therefore, the project would not interfere substantially with or impede: (1) the movement of any resident or migratory fish or wildlife species, (2) established resident or migratory wildlife corridors, or (3) the use of wildlife nursery sites.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Trees present onsite include Modesto ash, pine, redwood, and non-native trees. No sensitive habitats are present on the project site. The proposed project may require tree removal; however, the proposed project would plant native trees as part of the proposed project. Therefore, the project would not conflict with local policies or ordinances protecting biological resources.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project site is located in a rural and residential area that is not part of an adopted habitat conservation plan, natural communities conservation plan, or other conservation plan. Therefore, construction and operation of the proposed project would have no impact to an approved habitat conservation plan.

3.4.2 Mitigation Measures

Mitigation Measure BIO-1: Tree removal and construction activities shall be scheduled to commence prior to the beginning of nesting activity (March 1) or after fledging (August 15). If this is infeasible, the District shall retain a biologist to conduct pre-construction surveys between March 1 and August 15 in potential nesting habitat within 350 feet of the project site to identify nest sites. Surveys should be conducted within one week of tree removal and the start of construction to identify active nests prior to the initiation of construction activities. If an active raptor nest is observed within 350 feet of the project site, the District shall contact California Department of Fish and Wildlife (CDFW) for guidance and/or establish a 350-foot buffer around the nest tree. If a passerine bird nest is observed within 100 feet of the project site, the District shall contact CDFW for guidance and/or establish a 100-foot buffer around the nest tree. If construction activities cannot be prohibited within the established buffers until young have fledged, District consultation with CDFW shall be conducted for a reduced buffer zone based on nesting phenology, site conditions, and recommendation(s) of a biological monitor. The District shall prohibit construction activities in the buffer zone until the young have fledged.

3.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

3.5.1 Impact Analysis

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

The project site has been previously disturbed and developed and is adjacent to surrounding residential uses. While the school buildings were constructed in 1965, the onsite buildings are not considered historic resources. Therefore, this impact would be less than significant.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

The project site has been disturbed by previous grading activity. Therefore, the potential for the site to contain archaeological resources is considered to be low.

However, unknown or unrecorded resources may potentially be revealed during construction activities associated with the construction of the proposed school. This may occur if ground disturbance activities penetrate deeper than previous work performed. California PRC protects archaeological, paleontological, and historical sites with a wide variety of state policies and regulations in conjunction with CEQA. Furthermore, all construction activities must comply with PRC Section 21083.2-21084.1 and CEQA Guidelines Section 15064.5 and 15126.4(b), which address the protection of archaeological and historical resources. This impact would be less than significant.

c. Would the project disturb any humans remains, including those interred outside of formal cemeteries?

The project site has been previously graded. During previous ground disturbance activities, no human remains were identified or recorded onsite. In the unlikely event that human remains are discovered, during precise grading or construction activities, the project would be subject to California Health and Safety Code Section 7050.5 and PRC Section 5097.98. California Health and Safety Code Section 7050.5 identify the required procedures to follow in the unlikely discovery of human remains. PRC Section 5097.98 stipulates the notification process during the discovery of Native American human remains, descendants, disposition

of human remains, and associated artifacts. Therefore, adherence to all applicable codes and regulations would result in a less-than-significant impact.

3.6 ENERGY

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

3.6.1 Impact Analysis

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?

Title 24 is designed to provide certainty and uniformity throughout California while ensuring that the efficient and non-wasteful consumption of energy is carried out through design features. Adherence to Title 24 is deemed necessary to ensure that no significant impacts occur from the inefficient, wasteful, and unnecessary consumption of energy. The proposed buildings and remodels would be compliant with Title 24; therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This impact would be less than significant.

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

Title 24 is designed to provide certainty and uniformity throughout California while ensuring that the efficient and non-wasteful consumption of energy is carried out through design features. Adherence to Title 24 is deemed necessary to ensure that no significant impacts occur from the inefficient, wasteful, and unnecessary consumption of energy. The proposed buildings and remodels would be compliant with Title 24; therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. This impact would be less than significant.

3.7 GEOLOGY AND SOILS

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

3.7.1 Impact Analysis

a. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

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

The project site is not within a designated State of California Alquist-Priolo Earthquake Fault Zone, or within an area designated as geologically hazardous in the Safety Element of the Tulare County General Plan. The nearest fault is in the Kern Canyon Fault, which is located 50 miles east of the project area. Therefore, impacts to the project area from rupture of a known earthquake fault would be less than significant.

ii. Strong seismic ground shaking?

The project area is located in a seismic zone which is sufficiently far from known faults and consists primarily of a stable geological formation. The nearest fault is in the Kern Canyon Fault, which is located 50 miles east of the project area. Therefore, the impact due to ground shaking would be less than significant.

iii. Seismic-related ground failure, including liquefaction?

According to the Tulare County General Plan Recirculated Draft EIR, the probability of soil liquefaction occurring in the County is considered to be a low to moderate hazard. The California Office of Emergency Services MyHazards web viewer indicates that the project area is not located in an area requiring liquefaction investigation. This impact would be less than significant.

iv. Landslides?

See response 3.7 (a)(iii). This impact would be less than significant.

b. Would the project result in substantial soil erosion or the loss of topsoil?

Project construction activities, including land clearing, grading, and excavation, would disturb on-site soils, temporarily exposing them to wind and water erosion. Any construction activity affecting 1 acre or more is required to comply with the Construction General Permit (Water Quality No. 2009-0009-DWQ, as amended by Order Nos. 2010-0014-DWQ and 2012-0006-DWQ) implemented and enforced by the Central Valley Regional Water Quality Control Board. The General Permit requires the project applicant to prepare and submit a stormwater pollution prevention plan (SWPPP) that identifies best management practices (BMPs) to reduce construction effects on receiving water quality by implementing erosion control measures and reducing or eliminating non-stormwater discharges. A SWPPP provides a schedule for the implementation and maintenance of erosion control measures and a description of site-specific erosion control practices, such as appropriate design details and a time schedule. The SWPPP would consider the full range of erosion control BMPs. Examples of construction BMPs to reduce erosion include the use of temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; performing clearing and earth-moving activities only during dry weather; and limiting construction access routes and stabilizing designated access points.

Compliance with existing regulations would result in less than significant project impacts.

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

According to the U.S. Department of Agriculture Web Soil Survey, surficial soils at the

project site consist of the Nord fine sandy loam (0 to 2 percent slopes). This soil type has a low to moderate erosion potential, and its shrink-swell potential is low. The proposed project would be constructed on relatively level, stable soils and would not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. This impact would be less than significant.

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

According to the U.S. Department of Agriculture Web Soil Survey, surficial soils at the project site consist of the Nord fine sandy loam (0 to 2 percent slopes). This soil type has a low to moderate erosion potential, and its shrink-swell potential is low. The proposed project would be constructed on relatively level, stable soils to ensure no risks to life or property. This impact would be less than significant.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The project would not include installation of septic tanks, as the proposed project facilities would connect to the County sewer services. Therefore, the capability of the soils to support the operation of such tanks does not need to be evaluated. No impact to soils incapable of supporting septic tanks would occur in association with construction and operation of the project.

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

According to the Tulare County General Plan Draft EIR, paleontological resources have been recorded in the valley; therefore, the potential exists that paleontological resources are discovered during construction activities. Implementation of **Mitigation Measure GEO-1** would reduce potential impacts to paleontological resources to a less-than-significant level.

3.7.1 Mitigation Measures

Mitigation Measure GEO-1: During construction, if paleontological resources are encountered, all ground-disturbing activities shall be redirected within 50 feet of the find until a qualified paleontologist can be contacted to evaluate the find and make recommendations. If found to be significant and proposed project activities cannot avoid the paleontological resources, a paleontological evaluation and monitoring plan, shall be implemented. Adverse impacts to paleontological resources shall be mitigated, which may include monitoring, data recovery and analysis, a final report, and the accession of all fossil material to a paleontological repository. Upon completion of project ground-disturbing activities, a report documenting methods, findings, and recommendations shall be prepared and submitted to the paleontological repository.

3.8 GREENHOUSE GAS EMISSIONS

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

3.8.1 Impact Analysis

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Greenhouse gas emissions (GHGs) are present in the atmosphere naturally, and are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. However, over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global climate change. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons
- Perfluorocarbons
- Sulfur Hexafluoride

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and the length of time that the gas remains in the atmosphere (“atmospheric lifetime”).

The GWP of each gas is measured relative to CO_2, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period.

Construction Greenhouse Gas Emissions. Construction activities associated with the proposed project, such as site preparation, site grading, on-site construction vehicles, equipment hauling materials to and from the project site, and motor vehicles transporting the construction crew would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

There is no threshold for construction-related activities. Using the California Emissions Estimator Model version 2020.4.0 (CalEEMod), it is estimated that construction of the proposed project would generate a total of approximately 440.8 metric tons of CO_2 equivalents (CO_2e). When considered over the 30-year life of the project, the total amortized construction emissions for the proposed project would be 14.7 metric tons per year (MT/yr) of CO_2e. As such, construction of the proposed project would not generate GHG emissions that would have a significant impact on the environment and construction-related impacts would be less than significant.

Operational Greenhouse Gas Emissions. Long-term GHG emissions are typically generated from mobile, area, waste, and water sources as well as indirect emissions from sources associated with energy consumption. Mobile-source GHG emissions would include project-generated haul trips to and from the site. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions are typically generated at off-site utility providers as a result of increased electricity demand generated by a project. Stationary source emissions would be associated with emergency backup generators. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance and water distribution.

Operational emissions were estimated using CalEEMod and the results are presented in Table 2. CalEEMod output sheets are included in Appendix A.

Table 2: Operational GHG Emissions

Emissions Source Category	Operational Emissions (Metric Tons per Year)				
	CO_2	CH_4	N_2O	CO_2e	Percent of Total
Area	0.0087	0.00002	0.00	0.0093	0.0
Energy	20.37	0.00039	0.00037	20.5	3.7
Mobile	540.2	0.019	0.036	551.5	96.4
Total Operational				**572.01**	**100.0**

Source: SSS (April 2022).
Note: Due to rounding, the area emissions source is negligible in the percent total.

The proposed project would generate approximately 572 metric tons of CO_2e per year of emissions, as shown in Table 2. Bay Area Air Quality Management District's (BAAQMD) approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce Statewide GHG emissions. If a project would generate GHG emissions above the threshold level, it would be considered to contribute substantially to a cumulative impact, and would be considered significant. If mitigation can be applied to lessen the emissions such that the project meets its share of emission reductions needed to address the cumulative impact, the project would normally be considered less than significant. Although the proposed project is not located in the Bay Area, the BAAQMD's thresholds for significance are based on the Statewide AB 32 objectives and are scientifically supported and are appropriate to assess potential impacts related to GHG emissions. For land use development projects, the threshold is compliance with a qualified GHG Reduction Strategy or annual emissions less than 1,100 MT/yr of CO_2e. Based on the emission estimates shown in Table 2, the proposed project would not result in the generation of substantial GHG emissions because the threshold is 1,100 MT/yr. As such, operation of the proposed project would not generate GHG emissions that would have a significant impact on the environment and construction-related impacts would be less than significant.

b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

AB 32 is aimed at reducing GHG emissions to 1990 levels by 2020. AB 32 requires the California Air Resource Board (CARB) to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The AB 32 Scoping Plan has a range of GHG reduction actions, which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program.

Executive Order B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan (CARB 2017), to reflect the 2030 target set by Executive Order B-30-15 and codified by Senate Bill (SB) 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Executive Order B-30-15. SB 32 builds on AB 32 and keeps the State on the path toward achieving the 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

As identified above, the AB 32 Scoping Plan contains GHG reduction measures that work towards reducing GHG emissions, consistent with the targets set by AB 32, Executive Order B-30-15 and codified by SB 32 and AB 197. The measures applicable to the proposed project include energy efficiency measures, water conservation and efficiency measures, and transportation and motor vehicle measures, as discussed below.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As discussed in response 3.6.1(b), energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Therefore, the proposed project would not conflict with applicable energy measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The project would implement water conservation and efficiency strategies for irrigation and potable water distribution on the site. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. The District anticipates that the project would continue to accommodate the students living in the vicinity of the proposed project site. The project would not conflict with reduction targets for passenger vehicles. Therefore, the proposed project would not conflict with policies and regulations that have been adopted for the purpose of reducing GHG from transportation sources.

The proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in AB 32, the AB 32 Scoping Plan, Executive Order B-30-15, SB 32, and AB 197 and would be consistent with applicable state plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒
h. Is the property line of the proposed school site less than the following distances from the edge of respective powerline easements: (1) 100 feet of a 50-133 kV line; (2) 150 feet of a 220-230 kV line; or (3) 350 feet of a 500-550 kV line?	☐	☐	☒	☐
i. Is the proposed school site located near an aboveground water or fuel storage tank or within 1,500 feet of an easement of an aboveground or underground pipeline that can pose a safety hazard to the site?	☐	☐	☒	☐
j. Is the school site in an area designated in a city, county, or city and county general plan for agricultural use and zoned for agricultural production, and if so, do neighboring agricultural uses have the potential to result in any public health and safety issues that may affect the pupils and employees at the school site? *(Does not apply to school sites approved by CDE prior to January 1, 1997.)*	☐	☐	☒	☐
k. Does the project site contain a current or former hazardous waste disposal site or solid waste disposal site and, if so, have the wastes been removed?	☐	☐	☐	☒
l. If a response action is necessary and proposed as part of this project, has it been developed to be protective of children's health, with an ample margin of safety?	☐	☐	☐	☒

3.9.1 Impact Analysis

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction of the proposed project would require the transport and use of small quantities of hazardous materials in the form of gasoline, diesel, and oil. There is the potential for small leaks due to refueling of construction equipment; however, implementation of Best Management Practices (BMPs) identified in construction specification plans would reduce the potential for accidental release of construction-related fuels and other hazardous materials. These BMPs would prevent, minimize, or remedy stormwater contamination from spills or leaks, control the amount of runoff from the site, and require proper disposal and handling of hazardous materials.

Any on-site storage, transport, or use of hazardous materials during the operation of the proposed project would comply with local, state, and federal regulatory requirements.

Therefore, impacts associated with a potential hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials would be less than significant.

b. Would the project 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?

Construction of the proposed project would require the transport and use of small quantities of hazardous materials in the form of gasoline, diesel, and oil. There is the potential for accidental release of hazardous materials; however, implementation of BMPs identified in construction specification plans would reduce the potential for accidental release of construction-related fuels and other hazardous materials. These BMPs would prevent, minimize, or remedy stormwater contamination from spills or leaks, control the amount of runoff from the site, and require proper disposal and handling of hazardous materials. Any on-site storage, transport, or use of hazardous materials during the operation of the proposed project would comply with local, state, and federal regulatory requirements.

The Tulare County Office of Education currently operates a school program on a portion of the property, while Blue Oak Academy occupies another portion of the property and is a Charter School associated with Visalia Unified School District. The project site is listed on the State Water Resources Control Board (SWRCB) GeoTracker database as a leaking underground storage tank (LUST) site. The Union Elementary School (28050 Road 148, Visalia, Ca.) is identified on the LUST database. In January 1988 a gasoline leak was discovered to have occurred at the site and a historical enforcement order was issued in August 1988. The site is listed as Completed – Case Closed as of 8/29/1996 on GeoTracker (Padre 2021). Because the case has been closed, the proposed project would result in a less than significant impact related to reasonably foreseeable upset and accident conditions.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The project must comply with the California Education Code (including Section 17521, requiring the governing board of the school district to adopt a resolution in connection with consideration of proposal for occupancy of a building to be constructed on its property and to conduct a public meeting), and the California Code of Regulations (CCR), Title 5, Sections 14001 through 14012, which outlines the powers and duties and establishes standards with which the CDE, and all public school districts, must comply in the selection of new school sites.

According to the *Title V Environmental Hazards Review* prepared for the proposed project, the Southern California Edison (SCE) Reactor Substation Site is located approximately 1,200 feet north-northwest of the project site at 28361 Road 148, Visalia, CA. The site has historically housed several large oil tanks and cooling towers used to generate energy. In April 2003 an environmental investigation performed by SCE found that the site had been impacted by petroleum hydrocarbons and lead. In September 2003 groundwater samples were collected and analyzed for total petroleum hydrocarbon (TPH) and CAM 17 metals. TPH was not detected in groundwater although iron and selenium were detected at levels exceeding the California Department of Health and Human Services maximum contaminant level (MCL) for drinking water. In October 2003 approximately 496 tons of impacted soil were excavated from the SCE site. The soil was remediated, replaced, and compacted. In a letter dated, February 11, 2004, the Central Valley Regional Water Quality Control Board stated that they "… will issue a closure letter for the soil and water pipelines…" and "We do not consider the exceedance of the selenium and iron MCLs in the water sample from the on-site water supply well to be related to site activities." The site is listed as "Completed – Case Closed as of 5/1/2003" on GeoTracker.

Other land uses surrounding the project site include rural residential uses none of which handle or emit significant amounts of hazardous materials. Any future construction within one-quarter mile of the project site, which would take place after project implementation, would be subject to their own CEQA review.

Therefore, this impact would be less than significant.

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

See Response 3.9.1(b).

e. Would the project be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

As discussed in the *Title V Environmental Hazards Review* prepared for the project (Padre 2021), review of the Caltrans Division of Aeronautics – Public Use Airports and Federal Airfields Map and Google Earth satellite imagery dated February 21, 2021 was reviewed, and no airport or airfield was identified within 2-nautical miles of the proposed project site. There would be no impact associated with proximity to a public airport and/or exposure of people residing or working in the area to noise from the airport.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Modification to the existing site would be made in accordance with current building and fire codes and the project would be approved by the Division of the State Architect to avoid unsafe building conditions. The proposed project would not impair or interfere with the implementation of local or any statewide emergency response or evacuation plans; therefore, this impact would be less than significant.

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The California Department of Forestry and Fire Protection (CALFIRE) developed Fire Hazard Severity Zones (FHSZ) for State Responsibility Areas (SRA) and Local Responsibility Areas (LRA). The project site is located in an unzoned LRA area. Therefore, the project would not result in exposure of people or structures to significant risk of loss injury or death as a result of wildland fire hazards.

h. Is the property line of the proposed school site less than the following distances from the edge of respective powerline easements: (1) 100 feet of a 50-133 kV line; (2) 150 feet of a220-230 kV line; or (3) 350 feet of a 500-550 kV line?

Pursuant to CCR, Title 5, Section 14010(c), the property line for a new school site shall not be the following minimum distances from the edge of a high-voltage power line easement: 100 feet for 50-133 kilovolt (kV) lines; 150 feet for 220-230 kV lines; and 350 feet for 500-550 kV lines. For new construction on new school sites, CDE will grant a setback exemption if limited activity uses (i.e., landscaping, parking lots, maintenance areas, driveways) are proposed within the 150-foot setback zone for power lines between 220 and 230 kV. Modernization projects or new construction at existing school sites do not trigger Title 5 electromagnetic field setback requirements but the District must certify that they are not creating or significantly exacerbating an existing safety hazard related to transmission lines.

As discussed in the *Title V Environmental Hazards Review* prepared for the proposed project (Padre 2021), there are two tower transmission lines 220kV line located along Road 148, approximately 80 feet and 170 feet west of the project site. According to the *Electromagnetic Field Study Technical Memorandum VUSD-05* prepared for the proposed

project (Placeworks 2021b), "as limited activity uses are proposed within the setback zone (i.e., parking areas, drop-off/loading, driveway, maintenance area) and these activity uses are similar to those under existing conditions, safety hazards related to the two 220 kV transmission lines would not be exacerbated by the proposed expansion project." This impact would be less than significant.

i. Is the proposed school site located near an aboveground *water or fuel storage tank or within 1,500 feet of an easement of an aboveground or underground pipeline that can pose a safety hazard to the site?*

During the reconnaissance conducted on May 5, 2021, two water aboveground storage tanks (ASTs) were observed on the Blue Oak Academy school site (Padre 2021). A 3,000-gallon capacity water AST is located approximately 150 feet north of the project site. The 3,000-gallon capacity water AST contains potable water for Blue Oak Academy and is supplied by an onsite groundwater well. In addition, there is a 10,000-gallon capacity water AST located approximately 325 feet north of the project site. The 10,000-gallon capacity water AST is supplied by a second onsite groundwater well and is used for irrigation water and as a reserve for fire-fighting at Blue Oak Academy. No aboveground fuel storage tanks were observed at the project site or surrounding property. Because the proposed project would not site a new school within 1,500 feet of water/fuel storage tanks or pipelines, construction and operation of the project would result in a less-than-significant impact with regard to safety hazards.

j. Is the school site in an area designated in a city, county, or city and county general plan for agricultural use and zoned for agricultural production, and if so, do neighboring agricultural uses have the potential to result in any public health and safety issues that may affect the pupils and employees at the school site? (Does not apply to school sites approved by CDE prior to January 1, 1997.)

The project site is designated as Public Institutional on the Tulare County General Plan Land Use Map (Tulare County 2012). Parcels surrounding the project site are designated as Agriculture land uses; however, the project site has been a school since 1965. This impact would be less than significant.

k. Does the project site contain a current or former hazardous waste disposal site or solid waste disposal site and, if so, have the wastes been removed?

The *Title V Environmental Hazards Review* (Padre 2021) found no evidence of the site having been used as a waste disposal site. No impact would occur.

l. If a response action is necessary and proposed as part of this project, has it been developed to be protective of children's health, with an ample margin of safety?

No response action is necessary. No impact would occur.

3.10 HYDROLOGY AND WATER QUALITY

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

3.10.1 Impact Analysis

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Development of a property may result in two types of water quality impacts: (1) short-term impacts due to construction related discharges; and (2) long-term impacts from operation or changes in site runoff characteristics. Runoff may carry on-site surface pollutants to water bodies such as lakes, streams, and rivers that ultimately drain to the ocean. Projects that increase urban runoff may indirectly increase local and regional flooding intensity and erosion.

Non-stormwater discharges could result from activities such as discharge or accidental spills of hazardous substances such as fuels, oils, petroleum hydrocarbons, concrete, paints, solvents, cleaners, or other construction materials. Erosion and construction-related wastes have the potential to temporarily degrade existing water quality and beneficial uses by altering the dissolved oxygen content, temperature, pH, suspended sediment and turbidity levels, or nutrient content, or by causing toxic effects in the aquatic environment. Therefore, if uncontrolled, project-related construction activities could violate water quality standards.

As required by the SWRCB's National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges associated with construction and land disturbance activities, the District must develop and implement a SWPPP that specifies BMPs to prevent construction pollutants from contacting stormwater, with the intent of keeping all products of erosion from moving offsite. The District would be required to comply with the Construction General Permit because project-related construction activities would result in soil disturbances of at least 1 acre of total land area. **Mitigation Measure HYD-1** requires the preparation and implementation of a SWPPP to comply with the Construction General Permit requirements.

With implementation of **Mitigation Measure HYD-1**, the project would not violate any water quality standards or waste discharge requirements (WDRs) during the construction period, and impacts would be less than significant.

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

The proposed project does not propose the installation of any water wells that would directly extract groundwater. Specifically, the proposed project includes connection to Cal Water service. Additionally, the increase in impervious surface cover that would occur with the proposed project would be negligible and would not reduce the amount of water percolating down into the ground. Therefore, impacts to groundwater supplies or recharge would be less than significant.

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

i. Result in substantial erosion or siltation on- or off-site;

The proposed project would not alter the course of a stream or river. However, grading and development of the project site with the school buildings, walkways, sports fields and recreation areas, and parking lots would substantially and permanently alter the on-site drainage pattern thereby increasing the potential for on-site and off-site erosion and sedimentation and increasing the amount of surface runoff through the addition of impervious surfaces.

Development of impervious surfaces incrementally reduces the amount of natural soil surfaces available for the infiltration of rainfall and runoff. As a result, the frequency, volume, and flow rate of stormwater runoff increases, potentially resulting in on-site flooding, downstream flooding, or potentially contributing to runoff that exceeds the capacity of the existing drainage system in the vicinity of the project site. The majority of the project site, much like its existing condition, would be covered by impervious surfaces in the form of building foundations, hardcourt areas, walkways, and parking lots. Landscaped areas and sports fields would be undeveloped and would provide infiltration of stormwater and reduce the volume of stormwater flowing off-site.

The proposed project has been designed to accommodate the new impervious surface. The drainage facilities that serve the project site would continue to provide storm drainage capacity for the project. Impacts associated with erosion or siltation would be less than significant.

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

See response 3.10.1(c)(i).

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

See response 3.10.1(c)(i). Implementation of the proposed project would increase the amount of impervious surface within the project area; however, the project has been designed to accommodate stormwater without increasing the rate or amount of surface runoff in exceedance of the capacity of existing or planned stormwater drainage systems. This impact would be less than significant.

iv. Impede or redirect flood flows?

The proposed project area is located in an area designated as Zone X (Area of Minimal Flood Hazard) on the Federal Emergency Management Agency (FEMA) Flood Map 06107C0965H (effective 6/16/2009). Due to the location of the proposed project outside of a flood hazard zone, development of the proposed project is not anticipated to impede or redirect flood flows. This impact is considered less than significant.

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

The proposed project site is not located within a FEMA designated 100-year floodplain. In addition, the project site is generally level and is not immediately adjacent to any hillsides. As such, the risk from flooding would be low. Furthermore, no enclosed bodies of water are in close enough proximity that would create a potential risk for seiche or a tsunami at the project site. Additionally, according to the California Office of Emergency Services, the project site is not within a Tsunami Emergency Response Planning Zone. Therefore, there would be no impact related to potential hazards from inundation from flood, tsunami, or seiche.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Pollutants of concern during construction include sediment, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In

addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction. These pollutants may percolate to shallow groundwater from construction activities. However, required compliance with State and local regulations regarding stormwater and dewatering during construction would ensure that the proposed project would result in less-than-significant impacts to water quality during construction.

During operation of the proposed project, surface runoff conditions would be similar to existing conditions. Furthermore, the County's Storm Water Quality and Regulation Ordinance sets forth requirements to protect water resources within the County through the use of BMPs to reduce polluted runoff. The ordinance prohibits polluted non-stormwater discharges to the stormwater conveyance system and requires BMPs that reduce stormwater pollutants to be implemented. Furthermore, the County's Storm Water Quality Regulations require projects to establish erosion prevention, sediment control, and phased grading measures to reduce potential erosion, sedimentation, and water pollution impacts. The project would comply with all applicable local, state, and federal regulations and policies related to the protection of water quality. As a result, impacts to water quality would be less than significant.

3.10.2 Mitigation Measures

Mitigation Measure HYD-1: Prior to ground-disturbing activities, the District shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) that specifies best management practices (BMPs) with the intent of keeping all products of erosion from moving offsite. The SWPPP shall include a site map that shows the construction site perimeter, existing and proposed man-made facilities, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project site. Additionally the SWPPP shall contain a visual monitoring program and a chemical monitoring program for non-visible pollutants to be implemented (if there is a failure of BMPs). The requirements of the SWPPP and BMPs shall be incorporated into design specifications and construction contracts. Recommended BMPs for the construction phase may include the following:

- Stockpiling and disposing of demolition debris, concrete, and soil properly;
- Protecting any existing storm drain inlets and stabilizing disturbed areas;
- Implementing erosion controls;
- Properly managing construction materials; and
- Managing waste, aggressively controlling litter, and implementing sediment controls.

3.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☒	☐

3.11.1 Impact Analysis

a. Would the project physically divide an established community?

The project would be located on a parcel developed as an existing school campus, which is surrounded by agricultural and rural residential uses. Connectivity between the project site and surrounding areas would be maintained, and no division of an established community would occur. Therefore, no impact would occur.

b. Would the project 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?

The project site is zoned as AE-20 (exclusive agriculture) and identified as a Public Institutional use in the Tulare County General Plan. The project does not propose to change the site's existing zoning or land use designation. The proposed project would comply with applicable land use requirements, policies, zoning, and development standards as required by California law for school districts, and adhere to other applicable state codes and regulations.

The project site is not subject to a specific plan or local coastal program. For these reasons, the project would not conflict with any existing state, regional, county, or local laws, policies, regulations, plans or guidelines. Therefore, this impact would be less than significant.

3.12 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
c. 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?	☐	☐	☐	☒

3.12.1 Impact Analysis

a. Would the project 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?

Mineral resources located within Tulare County are predominantly sand and gravel resources primarily provided by four streams: Kaweah River, Lewis Creek, Deer Creek, and the Tule River. According to the USGS Mineral Resources On-Line Spatial Data, the project site is 14 miles southwest of the Lemon Cove Granite quarry. The California Department of Conservation indicates that the nearest, active mining operation (Kaweah South mining sand and gravel) is located approximately 10 miles southwest of the project site. Because of the distance to the mining operations, the project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

b. Would the project 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?

Refer to response 3.12.1(a). Implementation of the proposed project would not result in the loss of availability of a locally-important mineral resource recovery site. Therefore, no impact would occur.

3.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
d. Is the proposed school site located adjacent to or near a major arterial roadway or freeway whose noise generation may adversely affect the education program?	☐	☐	☒	☐

3.13.1 Impact Analysis

a. Would the project result in 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?

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent

continuous sound level (L_{eq}) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq}, the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on dBA. CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

The Tulare County General Plan 2030 Update: Chapter 10 – Health and Safety contains the policies that relate to noise and which have potential relevance to the project's CEQA review: HS-8.11 Peak Noise Generators wherein the County shall limit noise generating activities, such as construction, to the hours of normal business operation (7 a.m. to 7 p.m.). No peak noise generating activities shall be allowed to occur outside of normal business hours without County approval; HS-8.18 Construction Noise wherein the County shall seek to limit the potential noise impacts of construction activities by limited construction activities to the hours of 7 a.m. and 7 p.m., Monday through Saturday when construction activities are located near sensitive receptors. No construction shall occur on Sundays or national holidays without a permit from the County to minimize noise impacts associated with development near sensitive receptors; HS-8.19 Construction Noise Control wherein the County shall ensure that construction contractors implement best practices guidelines (i.e., berms, screens, etc.) as appropriate and feasible to reduce construction-related noise impacts on surrounding land uses.

Certain land uses are considered more sensitive to noise than others. Examples of these sensitive land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The proposed project site is surrounded by rural residential uses to the north, east, west, and south beyond Road 148 and Avenue 280.

Short-Term (Construction) Noise Impacts. Project construction would result in short-term noise impacts on the nearby sensitive receptors. Maximum construction noise would be short-term, generally intermittent depending on the construction phase, and variable depending on receiver distance from the active construction zone. The duration of noise impacts generally would be from one day to several days depending on the phase of construction. The level and types of noise impacts that would occur during construction are described below.

Short-term noise impacts would occur during grading and site preparation activities. Table 4 lists typical construction equipment noise levels (L_{max}) recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, obtained from the Federal Highway Administration (FHWA) Roadway Construction Noise Model. Construction-related short-term noise levels would be higher than existing ambient noise levels currently in the project area but would no longer occur once construction of the project is completed.

Table 3: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L_{max}) at 50 Feet[1]
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Impact Pile Drivers	20	95
Jackhammers	20	85
Pick-up Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Welder	40	73

Source: Roadway Construction Noise Model (FHWA 2006).
Note: Noise levels reported in this table are rounded to the nearest whole number.
[1] Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
L_{max} = maximum instantaneous sound level

Two types of short-term noise impacts could occur during construction of the proposed project. The first type involves construction crew commutes and the transport of construction equipment and materials to the sites, which would incrementally increase noise levels on roads leading to the sites. As shown in Table 4, there would be a single-event noise exposure potential at a maximum level of 55 dBA L_{max} with trucks passing at 50 feet.

The second type of short-term noise impact is related to noise generated during grading and construction on the project site. Construction is performed in discrete steps, or phases, each with its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Typical maximum noise levels range up to 87 dBA L_{max} at 50 feet during the noisiest construction phases. The site preparation phase, including excavation and grading of the site, tends to generate the highest noise levels because earthmoving machinery is the noisiest construction equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these

types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

This analysis assumes that a bulldozer, dump truck, and backhoe would be operating simultaneously during construction of the project. Based on the typical construction equipment noise levels shown in Table 4, noise levels associated with a bulldozer, dump truck, and backhoe operating simultaneously would be approximately 88 dBA L_{max} at 50 feet.

As noted above, the project is surrounded by agricultural and rural residential uses. It is anticipated that construction activities would occur no closer than 250 feet of the adjoining residential property lines. Construction noise is permitted by Tulare County when activities occur between the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday. In addition, **Mitigation Measure NOI-1** would be required to limit construction activities to daytime hours and would reduce potential construction period noise impacts for the indicated sensitive receptors to a less-than-significant level.

Implementation of **Mitigation Measure NOI-1** would limit construction hours and require the construction contractor to implement noise-reducing measures during construction, which would reduce short-term construction noise impacts to a less-than-significant level.

Operational Noise Impacts. A significant impact would occur if the project would exceed established standards, including resulting in a substantial permanent increase in ambient exterior noise levels above levels existing without the project. In acoustics, every doubling of an equal sound energy would result in a 3 dBA increase in combined noise level (an increase of 3 dBA represents the lowest noise increase that is perceptible by humans outside of a laboratory environment). For the purposes of this analysis, an increase of 5 or more dBA would be significant.

Permanent increases in the ambient noise level in the project vicinity would result from vehicle noise associated with school traffic, noise made by children at play in outdoor areas, and maintenance activities. However, noise levels associated with the proposed project are expected to be consistent with existing conditions.

The proposed school would be exposed to noise levels associated with traffic on Road 148 and Avenue 280. Given the distance of the proposed classrooms from the centerline and the volumes of traffic on Road 148 and Avenue 280, traffic noise from adjacent roads would have a less-than-significant impact on the school.

The project would include outdoor recreational areas, which would create noise for adjacent land uses. Noise levels associated with playing fields can generally be expected to range from 55 to 60 dB L_{eq}, with maximum noise levels ranging from 70 to 75 dB, at a distance of 100 feet from the source. The residence nearest to the proposed project area is approximately 250 feet away. Noise levels are not anticipated to exceed the County's performance standard, because most activities would occur at a distance greater than 250 feet from the nearest residence. The impacts associated with routine use would be less than significant.

Landscape Maintenance

Mowers, blowers, weed cutters, and tractors would be operated onsite to maintain the project landscaping. Landscape maintenance would occur between the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday, consistent with the County's Noise Ordinance; therefore, this impact would be less than significant.

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction activities that might expose persons to excessive ground borne vibration or ground borne noise have the potential to cause a significant impact. Ground borne vibration information related to construction/heavy equipment activities has been collected by the California Department of Transportation (Caltrans). The Caltrans data indicates that transient vibrations (such as from demolition activity) with a peak particle velocity (PPV) of approximately 0.035 inches per second may be characterized as barely perceptible, and vibration levels up to 0.25 inches per second may be characterized as distinctly perceptible (Caltrans 2013). Caltrans (2013) uses a damage threshold of 0.2 inches per second PPV for conventional buildings.

Ground borne vibration is typically attenuated over relatively short distances. With the anticipated construction equipment, construction-related vibration levels would be approximately 0.127 inches per second PPV at 25 feet from the construction area (assuming simultaneous operation of a caisson drill, a jackhammer, and a small bulldozer). At 25 feet, this vibration would be above the threshold of "barely perceptible" level of 0.035 inches per second PPV; however, the nearest residence is approximately 250 feet from the nearest construction area. At a distance of 250 feet, the vibration level is not anticipated to exceed the distinctly perceptible level of 0.25 inches per second PPV (Caltrans 2013). The expected vibration level at the residential buildings is also expected to be below the Caltrans damage threshold for conventional buildings. Therefore, impacts related to ground borne vibration would be less than significant.

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The nearest public or public use airport to the project area is the Visalia Municipal Airport, which is approximately 8 miles west of the project area. There would be no impact associated with proximity to a public airport and/or exposure of people residing or working in the area to noise from the airport.

d. Is the proposed school site located adjacent to or near a major arterial roadway or freeway whose noise generation may adversely affect the education program?

See response 3.13.1(a). The proposed school would be exposed to noise levels associated with traffic on Road 148 and Avenue 280. The nearest proposed classroom would be approximately 150 feet from the centerline of Road 148 and 340 feet from the centerline of Avenue 280. Given the distance of the site from the centerline and the volumes of traffic on Road 148 (1,217 average daily traffic) and Avenue 280 (9,778 average daily traffic) (JLB

Traffic Engineering 2021), traffic noise from adjacent roads would have a less-than-significant impact on the school.

3.13.2 Mitigation Measures

Mitigation Measure NOI-1: The project contractor shall implement the following measures during construction of the proposed project:

- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers consistent with manufacturers' standards.
- All stationary construction equipment shall be placed so that emitted noise is directed away from sensitive receptors nearest the active project site.
- Equipment staging shall be located in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all construction activities.
- All general construction related activities shall be restricted to between the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday.
- The District shall designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler) and shall determine and implement reasonable measures warranted to correct the problem.

3.14 POPULATION AND HOUSING

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

3.14.1 Impact Analysis

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

The project does not include the construction of dwellings or an increase in the resident population of the surrounding area. Project implementation would meet the demands of projected population growth in the project area by providing accommodation for students. As such, the project would have no impact on direct or indirect population growth.

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The project site is currently developed as the existing Blue Oak Academy campus; therefore, no dwelling units would be displaced from project implementation. The project would have no impact.

3.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒
b. Does the site promote joint use of parks, libraries, museums, and other public services?	☐	☐	☒	☐

3.15.1 Impact Analysis

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 public services:*

i. Fire protection?

Fire protection for the proposed project site is provided by the Tulare County Fire Department. The nearest Fire Station is the Visalia Fire Department Fire Station 56, located approximately 1.3 miles northwest of the proposed project area. The proposed project would not generate population growth or add people to the area. Thus, the proposed project would not generate the need for additional fire services that would require new or physically altered facilities. No impact to fire services would occur.

ii. Police protection?

Police protection for the proposed project site is provided by the Tulare County Sheriff's Department. The nearest Sheriff's Substation is the Cutler-Orosi Substation, located approximately 4.5 miles northwest of the proposed project area. The proposed project would not generate population growth or add people to the area. Thus, the proposed project would not generate the need for additional police services that would require new or physically altered facilities. No impact to police services would occur.

iii. Schools?

The project would not increase the demand for or cause a shortfall of school services or facilities. Rather, the proposed project would continue to accommodate students living in the attendance area. Therefore, the project would have no impact.

v. Parks?

The proposed project does not include the construction of structures that would increase the population in the area or that would generate a higher demand for parks or other public facilities. Therefore, the demand for parks for the project would be the same as under existing conditions. No impact to parks would occur.

v. Other public facilities?

The proposed project does not include the construction of structures that would increase the population in the area or that would generate a higher demand for other public facilities. Therefore, the demand for public facilities for the project would be the same as under existing conditions. No impact to public facilities would occur.

b. Does the site promote joint use of parks, libraries, museums, and other public services?

The Civic Center Act, as defined in the State of California Education Code Sections 38130-38139, describes the uses of school facilities, including all buildings and grounds for public purposes, and the fees that may be assessed. Section 38131(b)(1) states:

> "(b) The governing board of any school district may grant the use of school facilities or grounds as a civic center upon the terms and conditions the board deems proper, subject to the limitations, requirements, and restrictions set forth in this article, for any of the following purposes:(1) Public, literary, scientific, recreational, educational, or public agency meetings . . .(6) Supervised recreational activities including, but not limited to, sports league activities for youths that are arranged for and supervised by entities, including religious organizations or churches, and in which youths may participate regardless of religious belief or denomination" (California Education Code 1996).

The proposed school would be available for use per Civic Center Act requirements. Therefore, the project does promote the joint use of athletic facilities located onsite. This impact would be less than significant.

3.16 RECREATION

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

3.16.1 Impact Analysis

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

The increase in use of recreational facilities is generally a result of population growth. The project would serve the region's existing population and would not induce population growth. Therefore, there would be no impact on existing neighborhood or regional parks and facilities.

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

Recreational facilities proposed as part of the project include recreation areas. Construction of these facilities would result in the potentially significant physical environmental impacts, as outlined in this document. These impacts are addressed in relevant sections throughout this Initial Study/Mitigation Negative Declaration (IS/MND) in connection with discussions of the impacts of overall site development. Mitigation measures are identified for potentially significant impacts to ensure those impacts are reduced to a less-than-significant level. There are no additional significant impacts beyond those comprehensively considered throughout the other sections of this IS/MND. Therefore, physical effects associated with construction of the proposed project, including recreational areas, would be less than significant with incorporation of mitigation identified in this IS/MND.

3.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☒	☐	☐
b. Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d. Result in inadequate emergency access?	☐	☐	☒	☐
e. Is the proposed school site within 1,500 feet of a railroad track easement?	☐	☐	☐	☒
f. Is the site easily accessible from arterials and is the minimum peripheral visibility maintained for driveways per Caltrans' Highway Design Manual?	☐	☐	☒	☐
g. Are traffic and pedestrian hazards mitigated per Caltrans' School Area Pedestrian Safety manual?	☐	☐	☒	☐

3.17.1 Impact Analysis

a. Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The Visalia Unified School District contracted with JLB Traffic Engineering to prepare a traffic impact analysis for the proposed project. The following discussion is based on the findings of the JLB Traffic Engineer Traffic Impact Analysis (2021).

The County of Tulare *General Plan 2030 Update*'s Circulation Element has established level of service (LOS) D as the acceptable level of traffic congestion on county roads. Therefore, LOS D is used to evaluate the potential significance of LOS impacts to Tulare County intersections. Since all study intersections fall within the County of Tulare, the County of Tulare LOS threshold of LOS D was utilized as the criteria of significance.

JLB Traffic Engineering considered two study area intersections: Road 148/Avenue 280 (an existing two-way stop) and Project Driveway/Avenue 280 (proposed as part of the project). Based on traffic counts and analysis of the data, Table 4 presents the existing intersection operations conditions.

Table 4: Existing Conditions Intersection Levels of Service

ID	Intersection	Intersection Control	AM (7-9) Peak Hour		PM (2-4) Peak Hour	
			Average Delay (second/vehicle)	LOS	Average Delay (second/vehicle)	LOS
1	Road 148 / Avenue 280	Two-Way Stop	28.1	D	24.2	C
2	Project Driveway / Avenue 280	Does Not Exist	--	--	--	--

Source: JLB Traffic Engineering 2021
Note: LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

As shown in Table 4, the Road 148/Avenue 280 intersection operates at an acceptable LOS during both peak periods under existing conditions. The Project Driveway/Avenue 280 intersection does not exist under existing conditions.

The Traffic Impact Analysis also evaluated the Opening Year Plus Project condition. The Opening Year plus Project Traffic Conditions scenario assumes the existing roadway geometrics and traffic controls would remain in place with the addition of an access point along the north side of Avenue 280.

Table 5: Opening Year Plus Project Conditions Intersection Levels of Service

ID	Intersection	Intersection Control	AM (7-9) Peak Hour		PM (2-4) Peak Hour	
			Average Delay (second/vehicle)	LOS	Average Delay (second/vehicle)	LOS
1	Road 148 / Avenue 280	Two-Way Stop	32.6	D	26.0	D
2	Project Driveway / Avenue 280	One-Way Stop	12.8	B	13.3	B

Source: JLB Traffic Engineering 2021
Note: LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

As shown in Table 5, under the Opening Year Plus Project scenario, both study intersections are projected to continue operating at an acceptable LOS during both peak periods.

The Traffic Impact Analysis also evaluated the Cumulative Year 2042 with and without Plus scenarios.

Table 6: Cumulative Year 2042 No Project Condition Levels of Service

ID	Intersection	Intersection Control	AM (7-9) Peak Hour		PM (2-4) Peak Hour	
			Average Delay (second/vehicle)	LOS	Average Delay (second/vehicle)	LOS
1	Road 148 / Avenue 280	Two-Way Stop	**35.4**	**E**	28.0	D
		Two-Way Stop (Improved)	29.7	D	28.0	D
2	Project Driveway / Avenue 280	Does Not Exist	--	--	--	--

Source: JLB Traffic Engineering 2021
Note: LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

As shown in Table 6, under the Cumulative Year 2042 No Project scenario, the intersection of Road 148 and Avenue 280 is projected to exceed its LOS threshold during the AM peak period.

As shown in Table 7, under the Cumulative Year 2042 Plus Project scenario, the intersection of Road 148 and Avenue 280 is projected to exceed its LOS threshold during the AM peak period.

Table 7: Cumulative Year 2042 Plus Project Condition Levels of Service

ID	Intersection	Intersection Control	AM (7-9) Peak Hour		PM (2-4) Peak Hour	
			Average Delay (second/vehicle)	LOS	Average Delay (second/vehicle)	LOS
1	Road 148 / Avenue 280	Two-Way Stop	**39.0**	**E**	28.9	D
		Two-Way Stop (Improved)	33.5	D	28.9	D
2	Project Driveway / Avenue 280	One-Way Stop	13.6	B	14.5	B

Source: JLB Traffic Engineering 2021
Note: LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

Under the Cumulative Year 2042 with and without scenarios, the Road 148/Avenue 280 intersection would operate at an unacceptable LOS; however, with implementation of **Mitigation Measure TRANS-01**, this impact would be reduced to a less than significant level.

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

On September 27, 2013, Governor Jerry Brown signed SB 743 into law and started a process that changes the methodology of a transportation impact analysis as part of CEQA requirements. SB 743 directed the California Office of Planning and Research to establish

new CEQA guidance for jurisdictions that removes the LOS method, which focuses on automobile vehicle delay and other similar measures of vehicular capacity or traffic congestion, from CEQA transportation analysis.

Rather, vehicle miles traveled (VMT), or other measures that promote "the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses," are now be used as the basis for determining significant transportation impacts in the State.

The County of Tulare Draft VMT guidelines indicate that projects that generate fewer than 500 trips per day can be presumed to have a less than significant impact. Consistent with Office of Planning and Research's Technical Advisory, local-serving public facilities are presumed to have a less than significant impact on VMT. This would include government facilities intended to typically serve the local public, parks, and public elementary schools, public middle schools, and high schools. Since the proposed project would be a public elementary and middle school and would generate a maximum of 176 vehicle trips per day, the proposed project would result in a less-than-significant VMT impact.

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

As the project would comply with DSA design standards, it would not include any design features that would create traffic hazards. Additionally, there are no incompatible uses, including farm operations, in the vicinity that would cause traffic hazards.

The school would include an internal pedestrian pathway system. School development would not create barriers to pedestrians or bicyclists.

The new driveway construction would be subject to approvals by the DSA. Through DSA plan check reviews, the project would comply with all regulations regarding roadway design, thus minimizing any potential impacts from traffic safety hazards. Project impacts would be less than significant.

d. Would the project result in inadequate emergency access?

Project parking lots and vehicular routes, including emergency vehicle access, would be provided near all proposed buildings on-site, according to the proposed project site plan. Emergency access would not be adversely affected as a result of the project. The impact is less than significant.

e. Is the proposed school site within 1,500 feet of a railroad track easement?

The project area is located approximately 2,000 feet south of the existing Burlington Northern Santa Fe (BNSF) line. The proposed project would expand the existing school campus and would not site a new school facility in proximity to the BNSF line. No impact would occur.

f. Is the site easily accessible from arterials and is the minimum peripheral visibility maintained for driveways per Caltrans' Highway Design Manual?

The proposed project site is located on Road 148 and Avenue 280. The primary access to the project site would be provided on Avenue 280, located along the southern boundary of the site. The new driveway construction would be subject to approvals by the DSA. Through DSA plan check reviews, the project would comply with all regulations regarding roadway design, thus maintaining minimum peripheral visibility. Project impacts would be less than significant.

g. Are traffic and pedestrian hazards mitigated per Caltrans' School Area Pedestrian Safety manual?

The proposed project does not include modification to existing pedestrian facilities but would include development and improvement of sidewalk facilities along the frontage of Road 148 and Avenue 280. Other than the sidewalk facilities along the frontage of Road 148, no sidewalks are located in the project vicinity. This impact would be less than significant.

3.17.2 Mitigation Measures

Mitigation Measure TRANS-1: The District shall contribute its fair share toward the cost of the following improvements at the Road 148 / Avenue 280 intersection:

- Modify the northbound left-through-right lane to a through-right lane;
- Add a northbound left-turn lane.

Fair share contributions shall only be made for those facilities, or portion thereof, currently not funded by the responsible agencies' roadway impact fee program(s) or grant funded projects, as appropriate. For those improvements not presently covered by local and regional roadway impact fee programs or grant funding, the District shall contribute its equitable fair share. Payment of the Project's equitable fair share in addition to the local and regional impact fee programs shall satisfy the Project's traffic mitigation measures. The District shall contribute its equitable fair share as listed in Table 8 for the future improvements necessary to maintain an acceptable LOS.

Table 8: Project's Fair Share of Future Roadway Improvements

ID	Intersection	Existing Traffic Volumes	Cumulative Year 2042 plus Project Traffic Volumes (AM Peak)	2042 Project Only Trips (AM Peak)	Project's Fair Share (%)
A	Road 148 / Avenue 280	899	1,056	36	22.93

Source: JLB Traffic Engineering 2021
Note: Project's Fair Share = ((Project Only Trips) / (Cumulative Year 2042 + Project Traffic Volumes-Existing Traffic Volumes)) x 100

3.18 TRIBAL CULTURAL RESOURCES

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

3.18.1 Impact Analysis

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

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

The District requested a Sacred Lands Inventory on file with the Native American Heritage Commission (NAHC), which concluded negative results (i.e., no sacred lands were identified in the project site). Based on the list provided by the NAHC, on September 9, 2021, the District notified 10 Native American tribal representatives consistent with AB 52 requirements; no responses have been received. However, in the unlikely event that unrecorded resources are discovered during construction activities, compliance with the California Public Resources Code would reduce this potential impact to less than significant.

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in

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

The District requested a Sacred Lands Inventory on file with the NAHC, which concluded negative results (i.e., no sacred lands were identified in the project site). Based on the list provided by the NAHC, on September 9, 2021, the District notified 10 Native American tribal representatives consistent with AB 52 requirements; no responses have been received. However, in the unlikely event that unrecorded resources are discovered during construction activities, compliance with the California Public Resources Code would reduce this potential impact to less than significant.

3.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

3.19.1 Impact Analysis

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

The proposed project would not require the relocation or construction of new or expanded water, wastewater, electric power, natural gas, or telecommunications facilities. This impact would be less than significant.

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

The proposed project would include the replacement of existing features, such as the installation of water conserving toilets and irrigation. The proposed project is not expected to exceed the current water usage at the site. This impact would be less than significant.

c. Would the project 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?

The proposed project is not expected to exceed the current wastewater treatment requirements at the site. This impact would be less than significant.

d. Would the project 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?

Project construction would involve site clearing and the generation of various construction wastes, including scrap lumber, scrap finishing materials, various scrap metals, and other recyclable and nonrecyclable construction-related wastes. The 2016 CALGreen Code (Title 24, Part 11 of the California Code of Regulations) requires all construction contractors to reduce construction waste and demolition debris by 65 percent. Code requirements include preparing a construction waste management plan that identifies the materials to be diverted from disposal by efficient usage, recycling, reuse on the project, or salvage for future use or sale; determining whether materials will be sorted on-site or mixed; and identifying diversion facilities where the materials collected will be taken. The code also specifies that the amount of materials diverted should be calculated by weight or volume, but not by both (California Building Standards Commission 2016). In addition, the 2016 CalGreen Code requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting primarily from land clearing be reused or recycled.

Additionally, project operation would result in long-term generation of solid waste, consistent with the existing solid waste generation rates at the project site.

The project would comply with all statues and regulations related to solid waste. Compliance with the CalGreen Code and Assembly Bill 1826 would ensure that sufficient landfill capacity would be available to accommodate solid-waste disposal needs for future development. Therefore, the project would have a less-than-significant impact.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The California Integrated Waste Management Act of 1989 (AB 939) redefined solid waste management in terms of both objectives and planning responsibilities for local jurisdictions and the state. AB 939 was adopted in an effort to reduce the volume and toxicity of solid waste that is landfilled and incinerated, by requiring local governments to prepare and implement plans to improve the management of waste resources. AB 939 required each of the cities and unincorporated portions of the counties throughout California to divert a minimum of 25 percent of the solid waste sent to landfills by 1995 and 50 percent by the year 2000. To attain goals for reductions in disposal, AB 939 established a planning hierarchy using new integrated solid waste management practices.

Section 5.408 of the 2013 California Green Building Standards Code (Title 24, California Code of Regulations, Part 11) requires that at least 50 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. Any businesses, including public entities, generating four cubic yards or more of commercial solid waste per week, must arrange recycling services.

The project would comply with AB 939 (Zero Waste program) and other applicable local, State, and federal solid waste disposal standards, thereby ensuring that the solid waste

stream to regional landfills is reduced in accordance with existing regulations. Therefore, this impact would be less than significant.

3.20 WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐

3.20.1 Impact Analysis

a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Wildland fires occur in geographic areas that contain the types and conditions of vegetation, topography, weather, and structure density susceptible to risks associated with uncontrolled fires that can be started by lightning, improperly managed camp fires, cigarettes, sparks from automobiles, and other ignition sources.

According to the California Department of Forestry and Fire Protection Very High Fire Hazard Severity Zone (VHFHSZ) Map for Tulare County, the project site is not located within a VHFHSZ. Therefore, the proposed project would not expose people to significant risk of loss, injury, or death due to wildland fires and this impact would be less than significant.

As discussed in response 3.9.1(f), implementation of the proposed project would not interfere with an adopted emergency response plan or emergency evacuation plan and would not alter any of the streets within, or adjacent to, the project site. Therefore, implementation of the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant.

b. Would the project, 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?

The project site is not located in or near a VHFHSZ nor is it located in or near a State Responsibility Area (SRA). Therefore, implementation of the proposed project would not exacerbate wildfire risks due to slope and prevailing winds, thereby exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. As a result, a less-than-significant impact would occur, and no mitigation would be required.

c. Would the project 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?

The proposed project would not require the installation or maintenance of infrastructure that may exacerbate fire risk. No impact would occur.

d. Would the project 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?

Landslides and other forms of mass wasting, including mud flows, debris flows, and soil slips, occur as soil moves downslope under the influence of gravity. Landslides are frequently triggered by intense rainfall or seismic shaking but can also occur as a result of erosion and downslope runoff caused by rain following a fire. Because the proposed project site is level, the proposed project would not expose people or structures to potential substantial adverse effects associated with landslides. Further, the proposed project site is not located in or near a VHFHSZ nor is it located in or near a SRA. Therefore, the proposed project would not 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. As a result, a less-than-significant impact would occur, and no mitigation would be required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

3.21.1 Impact Analysis

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

Implementation of the mitigation measures recommended in this IS/MND would ensure that construction and operation of the proposed project would not substantially degrade the quality of the environment; reduce the habitat, population, or range of a plant or animal species; or eliminate important examples of California history or prehistory.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

The potential impacts of the proposed project are individually limited and are not cumulatively considerable. Implementation of mitigation measures recommended in this report would reduce potentially significant impacts that could become cumulatively considerable.

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

The proposed project would be constructed and operated in accordance with all applicable regulations governing hazardous materials, noise, and geotechnical considerations. Because all potentially significant impacts of the proposed project are expected to be mitigated to less-than-significant levels, it is unlikely that implementation of the proposed project would cause substantial adverse effects on human beings. As a result, less-than-significant impacts would occur with implementation of the recommended mitigation measures.

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4.0 REFERENCES

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APPENDIX A

CALEEMOD REPORT

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Blue Oak Academy Growth

Tulare County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	286.00	Student	0.55	23,910.56	0
Junior High School	100.00	Student	0.27	11,756.17	0
Parking Lot	100.00	Space	0.90	40,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	51
Climate Zone	7			**Operational Year**	2024
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Site is 10 acres

Construction Phase - Extended durations for construction of proposed buildings

Demolition -

Area Coating - Estimated parking and exterior/interior square footages

Land Use Change - Estimated 2 acres less grass

Construction Off-road Equipment Mitigation -

Operational Off-Road Equipment -

Stationary Sources - Emergency Generators and Fire Pumps -

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	1.74	1.95
tblEnergyUse	T24E	1.74	1.95
tblEnergyUse	T24NG	10.14	10.24
tblEnergyUse	T24NG	10.14	10.24
tblFleetMix	HHD	0.02	0.08
tblFleetMix	HHD	0.02	0.08
tblFleetMix	HHD	0.02	0.08
tblFleetMix	LDA	0.51	0.54
tblFleetMix	LDA	0.51	0.54
tblFleetMix	LDA	0.51	0.54
tblFleetMix	LDT1	0.05	0.03
tblFleetMix	LDT1	0.05	0.03
tblFleetMix	LDT1	0.05	0.03
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LHD1	0.03	0.02
tblFleetMix	LHD1	0.03	0.02
tblFleetMix	LHD1	0.03	0.02
tblFleetMix	LHD2	7.9960e-003	4.5440e-003
tblFleetMix	LHD2	7.9960e-003	4.5440e-003
tblFleetMix	LHD2	7.9960e-003	4.5440e-003
tblFleetMix	MCY	0.02	4.1210e-003
tblFleetMix	MCY	0.02	4.1210e-003
tblFleetMix	MCY	0.02	4.1210e-003
tblFleetMix	MDV	0.17	0.12
tblFleetMix	MDV	0.17	0.12
tblFleetMix	MDV	0.17	0.12

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFleetMix	MH	3.5920e-003	6.2200e-004
tblFleetMix	MH	3.5920e-003	6.2200e-004
tblFleetMix	MH	3.5920e-003	6.2200e-004
tblFleetMix	MHD	0.01	0.02
tblFleetMix	MHD	0.01	0.02
tblFleetMix	MHD	0.01	0.02
tblFleetMix	OBUS	6.3600e-004	1.8130e-003
tblFleetMix	OBUS	6.3600e-004	1.8130e-003
tblFleetMix	OBUS	6.3600e-004	1.8130e-003
tblFleetMix	SBUS	1.4650e-003	1.0750e-003
tblFleetMix	SBUS	1.4650e-003	1.0750e-003
tblFleetMix	SBUS	1.4650e-003	1.0750e-003
tblFleetMix	UBUS	4.7100e-004	1.1770e-003
tblFleetMix	UBUS	4.7100e-004	1.1770e-003
tblFleetMix	UBUS	4.7100e-004	1.1770e-003
tblGrading	AcresOfGrading	3.00	1.50
tblGrading	AcresOfGrading	1.88	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleEF	HHD	0.02	0.60
tblVehicleEF	HHD	5.6160e-003	0.01
tblVehicleEF	HHD	0.00	0.07
tblVehicleEF	HHD	7.47	1.83
tblVehicleEF	HHD	0.23	0.61
tblVehicleEF	HHD	1.2370e-003	1.88
tblVehicleEF	HHD	1,213.77	5,344.87
tblVehicleEF	HHD	1,328.86	1,503.97

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	HHD	0.01	6.04
tblVehicleEF	HHD	6.15	15.60
tblVehicleEF	HHD	2.44	1.78
tblVehicleEF	HHD	2.31	20.14
tblVehicleEF	HHD	2.6910e-003	5.8610e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.03	6.0080e-003
tblVehicleEF	HHD	0.00	2.8000e-005
tblVehicleEF	HHD	2.5750e-003	5.6080e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.9520e-003	8.9330e-003
tblVehicleEF	HHD	0.03	5.7480e-003
tblVehicleEF	HHD	0.00	2.6000e-005
tblVehicleEF	HHD	1.0000e-006	9.2000e-005
tblVehicleEF	HHD	3.4000e-005	2.9500e-003
tblVehicleEF	HHD	0.51	0.49
tblVehicleEF	HHD	1.0000e-006	4.7000e-005
tblVehicleEF	HHD	0.02	0.08
tblVehicleEF	HHD	1.4000e-005	2.3700e-004
tblVehicleEF	HHD	1.0000e-006	0.04
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.00	9.1000e-005
tblVehicleEF	HHD	1.0000e-006	9.2000e-005
tblVehicleEF	HHD	3.4000e-005	2.9500e-003
tblVehicleEF	HHD	0.58	0.56
tblVehicleEF	HHD	1.0000e-006	4.7000e-005
tblVehicleEF	HHD	0.03	0.10

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	HHD	1.4000e-005	2.3700e-004
tblVehicleEF	HHD	1.0000e-006	0.04
tblVehicleEF	HHD	0.03	0.56
tblVehicleEF	HHD	5.6160e-003	0.01
tblVehicleEF	HHD	0.00	0.06
tblVehicleEF	HHD	7.37	1.33
tblVehicleEF	HHD	0.23	0.61
tblVehicleEF	HHD	1.1510e-003	1.74
tblVehicleEF	HHD	1,198.79	5,662.41
tblVehicleEF	HHD	1,328.86	1,503.97
tblVehicleEF	HHD	0.01	6.04
tblVehicleEF	HHD	5.86	16.10
tblVehicleEF	HHD	2.32	1.69
tblVehicleEF	HHD	2.31	20.13
tblVehicleEF	HHD	2.3670e-003	4.9420e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.03	6.0080e-003
tblVehicleEF	HHD	0.00	2.8000e-005
tblVehicleEF	HHD	2.2640e-003	4.7280e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.9520e-003	8.9330e-003
tblVehicleEF	HHD	0.03	5.7480e-003
tblVehicleEF	HHD	0.00	2.6000e-005
tblVehicleEF	HHD	3.0000e-006	2.0500e-004
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tblVehicleEF	HHD	1.0000e-006	9.6000e-005
tblVehicleEF	HHD	0.02	0.08

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	HHD	1.4000e-005	2.3600e-004
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tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.00	8.9000e-005
tblVehicleEF	HHD	3.0000e-006	2.0500e-004
tblVehicleEF	HHD	4.1000e-005	3.3070e-003
tblVehicleEF	HHD	0.61	0.53
tblVehicleEF	HHD	1.0000e-006	9.6000e-005
tblVehicleEF	HHD	0.03	0.10
tblVehicleEF	HHD	1.4000e-005	2.3600e-004
tblVehicleEF	HHD	1.0000e-006	0.04
tblVehicleEF	HHD	0.02	0.65
tblVehicleEF	HHD	5.6150e-003	0.01
tblVehicleEF	HHD	0.00	0.07
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tblVehicleEF	HHD	0.23	0.60
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tblVehicleEF	HHD	3.1390e-003	7.1310e-003
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tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.03	6.0080e-003
tblVehicleEF	HHD	0.00	2.8000e-005

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	HHD	3.0030e-003	6.8230e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.9520e-003	8.9330e-003
tblVehicleEF	HHD	0.03	5.7480e-003
tblVehicleEF	HHD	0.00	2.6000e-005
tblVehicleEF	HHD	0.00	3.2000e-005
tblVehicleEF	HHD	3.7000e-005	2.9410e-003
tblVehicleEF	HHD	0.47	0.53
tblVehicleEF	HHD	0.00	2.1000e-005
tblVehicleEF	HHD	0.02	0.08
tblVehicleEF	HHD	1.5000e-005	2.6100e-004
tblVehicleEF	HHD	1.0000e-006	0.04
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.00	9.4000e-005
tblVehicleEF	HHD	0.00	3.2000e-005
tblVehicleEF	HHD	3.7000e-005	2.9410e-003
tblVehicleEF	HHD	0.53	0.60
tblVehicleEF	HHD	0.00	2.1000e-005
tblVehicleEF	HHD	0.03	0.10
tblVehicleEF	HHD	1.5000e-005	2.6100e-004
tblVehicleEF	HHD	1.0000e-006	0.05
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tblVehicleEF	LDA	0.53	0.47
tblVehicleEF	LDA	2.06	0.95
tblVehicleEF	LDA	245.88	226.85
tblVehicleEF	LDA	51.10	53.47
tblVehicleEF	LDA	0.03	0.04

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDA	0.17	0.05
tblVehicleEF	LDA	1.2150e-003	1.4750e-003
tblVehicleEF	LDA	1.7260e-003	2.2180e-003
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tblVehicleEF	LDA	1.5870e-003	2.0390e-003
tblVehicleEF	LDA	0.06	0.04
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
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tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	9.1880e-003	0.01
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tblVehicleEF	LDA	2.0250e-003	3.4650e-003
tblVehicleEF	LDA	0.04	3.2670e-003
tblVehicleEF	LDA	0.67	0.60
tblVehicleEF	LDA	1.73	0.79
tblVehicleEF	LDA	270.28	249.80
tblVehicleEF	LDA	50.49	53.47
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.16	0.05
tblVehicleEF	LDA	1.2150e-003	1.4750e-003
tblVehicleEF	LDA	1.7260e-003	2.2180e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDA	1.1190e-003	1.3580e-003
tblVehicleEF	LDA	1.5870e-003	2.0390e-003
tblVehicleEF	LDA	0.14	0.09
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.09	0.06
tblVehicleEF	LDA	7.2730e-003	8.6640e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.16	0.04
tblVehicleEF	LDA	2.6740e-003	2.5020e-003
tblVehicleEF	LDA	5.0000e-004	5.4800e-004
tblVehicleEF	LDA	0.14	0.09
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.09	0.06
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.18	0.05
tblVehicleEF	LDA	1.5960e-003	2.8000e-003
tblVehicleEF	LDA	0.05	4.6500e-003
tblVehicleEF	LDA	0.49	0.43
tblVehicleEF	LDA	2.50	1.15
tblVehicleEF	LDA	235.92	217.47
tblVehicleEF	LDA	51.92	53.47
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.18	0.06
tblVehicleEF	LDA	1.2150e-003	1.4750e-003
tblVehicleEF	LDA	1.7260e-003	2.2180e-003
tblVehicleEF	LDA	1.1190e-003	1.3580e-003
tblVehicleEF	LDA	1.5870e-003	2.0390e-003
tblVehicleEF	LDA	0.02	0.01

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.02	0.01
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tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.23	0.06
tblVehicleEF	LDA	2.3340e-003	2.1770e-003
tblVehicleEF	LDA	5.1400e-004	5.5400e-004
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.10	0.09
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	8.5800e-003	0.01
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.25	0.07
tblVehicleEF	LDT1	6.2930e-003	0.01
tblVehicleEF	LDT1	0.08	0.02
tblVehicleEF	LDT1	1.33	1.31
tblVehicleEF	LDT1	2.34	3.32
tblVehicleEF	LDT1	294.68	286.18
tblVehicleEF	LDT1	63.00	67.73
tblVehicleEF	LDT1	0.12	0.14
tblVehicleEF	LDT1	0.28	0.19
tblVehicleEF	LDT1	1.9340e-003	2.4950e-003
tblVehicleEF	LDT1	2.6610e-003	3.7180e-003
tblVehicleEF	LDT1	1.7810e-003	2.2980e-003
tblVehicleEF	LDT1	2.4460e-003	3.4180e-003
tblVehicleEF	LDT1	0.22	0.22
tblVehicleEF	LDT1	0.28	0.37
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.03	0.03

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDT1	0.12	0.22
tblVehicleEF	LDT1	0.41	0.23
tblVehicleEF	LDT1	2.9160e-003	2.8780e-003
tblVehicleEF	LDT1	6.2300e-004	7.3600e-004
tblVehicleEF	LDT1	0.22	0.22
tblVehicleEF	LDT1	0.28	0.37
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.12	0.22
tblVehicleEF	LDT1	0.44	0.25
tblVehicleEF	LDT1	7.2450e-003	0.01
tblVehicleEF	LDT1	0.07	0.01
tblVehicleEF	LDT1	1.64	1.60
tblVehicleEF	LDT1	1.96	2.76
tblVehicleEF	LDT1	320.26	313.80
tblVehicleEF	LDT1	62.18	67.73
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.27	0.18
tblVehicleEF	LDT1	1.9340e-003	2.4950e-003
tblVehicleEF	LDT1	2.6610e-003	3.7180e-003
tblVehicleEF	LDT1	1.7810e-003	2.2980e-003
tblVehicleEF	LDT1	2.4460e-003	3.4180e-003
tblVehicleEF	LDT1	0.51	0.52
tblVehicleEF	LDT1	0.36	0.47
tblVehicleEF	LDT1	0.31	0.31
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.12	0.22
tblVehicleEF	LDT1	0.34	0.19
tblVehicleEF	LDT1	3.1690e-003	3.1580e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDT1	6.1500e-004	7.2600e-004
tblVehicleEF	LDT1	0.51	0.52
tblVehicleEF	LDT1	0.36	0.47
tblVehicleEF	LDT1	0.31	0.31
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.12	0.22
tblVehicleEF	LDT1	0.37	0.21
tblVehicleEF	LDT1	5.8470e-003	9.6790e-003
tblVehicleEF	LDT1	0.09	0.02
tblVehicleEF	LDT1	1.23	1.21
tblVehicleEF	LDT1	2.85	4.07
tblVehicleEF	LDT1	284.26	274.89
tblVehicleEF	LDT1	64.07	67.73
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.31	0.21
tblVehicleEF	LDT1	1.9340e-003	2.4950e-003
tblVehicleEF	LDT1	2.6610e-003	3.7180e-003
tblVehicleEF	LDT1	1.7810e-003	2.2980e-003
tblVehicleEF	LDT1	2.4460e-003	3.4180e-003
tblVehicleEF	LDT1	0.07	0.07
tblVehicleEF	LDT1	0.28	0.38
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.03	0.02
tblVehicleEF	LDT1	0.14	0.26
tblVehicleEF	LDT1	0.48	0.27
tblVehicleEF	LDT1	2.8130e-003	2.7640e-003
tblVehicleEF	LDT1	6.3400e-004	7.4900e-004
tblVehicleEF	LDT1	0.07	0.07
tblVehicleEF	LDT1	0.28	0.38

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.14	0.26
tblVehicleEF	LDT1	0.52	0.30
tblVehicleEF	LDT2	3.9790e-003	5.2300e-003
tblVehicleEF	LDT2	0.07	7.4350e-003
tblVehicleEF	LDT2	0.92	0.72
tblVehicleEF	LDT2	2.69	1.56
tblVehicleEF	LDT2	313.32	322.14
tblVehicleEF	LDT2	67.38	75.78
tblVehicleEF	LDT2	0.09	0.08
tblVehicleEF	LDT2	0.29	0.12
tblVehicleEF	LDT2	1.3750e-003	1.6190e-003
tblVehicleEF	LDT2	1.8870e-003	2.4820e-003
tblVehicleEF	LDT2	1.2660e-003	1.4890e-003
tblVehicleEF	LDT2	1.7350e-003	2.2820e-003
tblVehicleEF	LDT2	0.13	0.08
tblVehicleEF	LDT2	0.17	0.14
tblVehicleEF	LDT2	0.10	0.06
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.33	0.10
tblVehicleEF	LDT2	3.1000e-003	3.2270e-003
tblVehicleEF	LDT2	6.6700e-004	7.8400e-004
tblVehicleEF	LDT2	0.13	0.08
tblVehicleEF	LDT2	0.17	0.14
tblVehicleEF	LDT2	0.10	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.08

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDT2	0.37	0.11
tblVehicleEF	LDT2	4.6050e-003	6.0190e-003
tblVehicleEF	LDT2	0.06	6.1540e-003
tblVehicleEF	LDT2	1.15	0.90
tblVehicleEF	LDT2	2.26	1.30
tblVehicleEF	LDT2	338.06	353.92
tblVehicleEF	LDT2	66.50	75.78
tblVehicleEF	LDT2	0.08	0.07
tblVehicleEF	LDT2	0.28	0.11
tblVehicleEF	LDT2	1.3750e-003	1.6190e-003
tblVehicleEF	LDT2	1.8870e-003	2.4820e-003
tblVehicleEF	LDT2	1.2660e-003	1.4890e-003
tblVehicleEF	LDT2	1.7350e-003	2.2820e-003
tblVehicleEF	LDT2	0.29	0.18
tblVehicleEF	LDT2	0.20	0.17
tblVehicleEF	LDT2	0.20	0.12
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.28	0.08
tblVehicleEF	LDT2	3.3450e-003	3.5470e-003
tblVehicleEF	LDT2	6.5800e-004	7.8000e-004
tblVehicleEF	LDT2	0.29	0.18
tblVehicleEF	LDT2	0.20	0.17
tblVehicleEF	LDT2	0.20	0.12
tblVehicleEF	LDT2	0.03	0.02
tblVehicleEF	LDT2	0.07	0.07
tblVehicleEF	LDT2	0.31	0.09
tblVehicleEF	LDT2	3.6820e-003	4.8950e-003
tblVehicleEF	LDT2	0.08	8.7730e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDT2	0.85	0.66
tblVehicleEF	LDT2	3.28	1.90
tblVehicleEF	LDT2	303.24	309.15
tblVehicleEF	LDT2	68.52	75.78
tblVehicleEF	LDT2	0.10	0.08
tblVehicleEF	LDT2	0.32	0.13
tblVehicleEF	LDT2	1.3750e-003	1.6190e-003
tblVehicleEF	LDT2	1.8870e-003	2.4820e-003
tblVehicleEF	LDT2	1.2660e-003	1.4890e-003
tblVehicleEF	LDT2	1.7350e-003	2.2820e-003
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.16	0.14
tblVehicleEF	LDT2	0.04	0.02
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.39	0.12
tblVehicleEF	LDT2	3.0000e-003	3.0970e-003
tblVehicleEF	LDT2	6.7800e-004	7.9000e-004
tblVehicleEF	LDT2	0.04	0.03
tblVehicleEF	LDT2	0.16	0.14
tblVehicleEF	LDT2	0.04	0.02
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.43	0.13
tblVehicleEF	LHD1	3.9630e-003	4.1670e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	1.06	1.28

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD1	0.85	2.09
tblVehicleEF	LHD1	9.60	9.60
tblVehicleEF	LHD1	752.00	674.78
tblVehicleEF	LHD1	8.97	24.73
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	1.59	2.29
tblVehicleEF	LHD1	0.26	0.81
tblVehicleEF	LHD1	1.1560e-003	1.1820e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.1200e-004	7.4600e-004
tblVehicleEF	LHD1	1.1060e-003	1.1300e-003
tblVehicleEF	LHD1	2.5670e-003	2.6190e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9500e-004	6.8600e-004
tblVehicleEF	LHD1	3.0740e-003	3.5370e-003
tblVehicleEF	LHD1	0.08	0.10
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	1.2450e-003	1.4430e-003
tblVehicleEF	LHD1	0.14	0.16
tblVehicleEF	LHD1	0.22	0.31
tblVehicleEF	LHD1	0.06	0.21
tblVehicleEF	LHD1	9.3000e-005	9.5000e-005
tblVehicleEF	LHD1	7.3010e-003	6.5920e-003
tblVehicleEF	LHD1	8.9000e-005	2.8700e-004
tblVehicleEF	LHD1	3.0740e-003	3.5370e-003
tblVehicleEF	LHD1	0.08	0.10
tblVehicleEF	LHD1	0.03	0.02
tblVehicleEF	LHD1	1.2450e-003	1.4430e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD1	0.16	0.20
tblVehicleEF	LHD1	0.22	0.31
tblVehicleEF	LHD1	0.07	0.23
tblVehicleEF	LHD1	3.9740e-003	4.1670e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	1.08	1.30
tblVehicleEF	LHD1	0.79	1.95
tblVehicleEF	LHD1	9.60	9.60
tblVehicleEF	LHD1	752.03	674.78
tblVehicleEF	LHD1	8.86	24.73
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	1.50	2.17
tblVehicleEF	LHD1	0.24	0.76
tblVehicleEF	LHD1	1.1560e-003	1.1820e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.1200e-004	7.4600e-004
tblVehicleEF	LHD1	1.1060e-003	1.1300e-003
tblVehicleEF	LHD1	2.5670e-003	2.6190e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9500e-004	6.8600e-004
tblVehicleEF	LHD1	6.9760e-003	8.0210e-003
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	2.6590e-003	3.0700e-003
tblVehicleEF	LHD1	0.14	0.16
tblVehicleEF	LHD1	0.22	0.30

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD1	0.06	0.20
tblVehicleEF	LHD1	9.3000e-005	9.5000e-005
tblVehicleEF	LHD1	7.3010e-003	6.5930e-003
tblVehicleEF	LHD1	8.8000e-005	2.8400e-004
tblVehicleEF	LHD1	6.9760e-003	8.0210e-003
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD1	0.03	0.02
tblVehicleEF	LHD1	2.6590e-003	3.0700e-003
tblVehicleEF	LHD1	0.17	0.20
tblVehicleEF	LHD1	0.22	0.30
tblVehicleEF	LHD1	0.07	0.21
tblVehicleEF	LHD1	3.9520e-003	4.1670e-003
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.16	0.13
tblVehicleEF	LHD1	1.05	1.25
tblVehicleEF	LHD1	0.92	2.28
tblVehicleEF	LHD1	9.60	9.60
tblVehicleEF	LHD1	751.96	674.78
tblVehicleEF	LHD1	9.09	24.73
tblVehicleEF	LHD1	0.10	0.11
tblVehicleEF	LHD1	1.62	2.34
tblVehicleEF	LHD1	0.28	0.86
tblVehicleEF	LHD1	1.1560e-003	1.1820e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.1200e-004	7.4600e-004
tblVehicleEF	LHD1	1.1060e-003	1.1300e-003
tblVehicleEF	LHD1	2.5670e-003	2.6190e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9500e-004	6.8600e-004
tblVehicleEF	LHD1	1.0300e-003	1.1940e-003
tblVehicleEF	LHD1	0.08	0.10
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	5.5500e-004	6.4500e-004
tblVehicleEF	LHD1	0.13	0.16
tblVehicleEF	LHD1	0.25	0.33
tblVehicleEF	LHD1	0.07	0.22
tblVehicleEF	LHD1	9.3000e-005	9.5000e-005
tblVehicleEF	LHD1	7.3000e-003	6.5920e-003
tblVehicleEF	LHD1	9.0000e-005	2.9000e-004
tblVehicleEF	LHD1	1.0300e-003	1.1940e-003
tblVehicleEF	LHD1	0.08	0.10
tblVehicleEF	LHD1	0.03	0.02
tblVehicleEF	LHD1	5.5500e-004	6.4500e-004
tblVehicleEF	LHD1	0.16	0.19
tblVehicleEF	LHD1	0.25	0.33
tblVehicleEF	LHD1	0.07	0.24
tblVehicleEF	LHD2	2.8470e-003	2.9680e-003
tblVehicleEF	LHD2	8.1200e-003	8.9180e-003
tblVehicleEF	LHD2	8.0170e-003	6.6580e-003
tblVehicleEF	LHD2	0.13	0.11
tblVehicleEF	LHD2	0.79	0.73
tblVehicleEF	LHD2	0.53	1.03
tblVehicleEF	LHD2	14.89	14.70
tblVehicleEF	LHD2	769.62	706.54
tblVehicleEF	LHD2	6.79	20.87
tblVehicleEF	LHD2	0.12	0.12

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD2	1.54	1.41
tblVehicleEF	LHD2	0.18	0.45
tblVehicleEF	LHD2	1.5100e-003	1.3590e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	3.4200e-004
tblVehicleEF	LHD2	1.4450e-003	1.3000e-003
tblVehicleEF	LHD2	2.7260e-003	2.7250e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.6000e-005	3.1500e-004
tblVehicleEF	LHD2	1.6240e-003	1.3230e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	6.9800e-004	5.8800e-004
tblVehicleEF	LHD2	0.14	0.13
tblVehicleEF	LHD2	0.11	0.08
tblVehicleEF	LHD2	0.04	0.09
tblVehicleEF	LHD2	1.4200e-004	1.4300e-004
tblVehicleEF	LHD2	7.4150e-003	6.8580e-003
tblVehicleEF	LHD2	6.7000e-005	2.2700e-004
tblVehicleEF	LHD2	1.6240e-003	1.3230e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.9800e-004	5.8800e-004
tblVehicleEF	LHD2	0.16	0.15
tblVehicleEF	LHD2	0.11	0.08
tblVehicleEF	LHD2	0.04	0.10
tblVehicleEF	LHD2	2.8550e-003	2.9680e-003
tblVehicleEF	LHD2	8.1880e-003	9.0220e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD2	7.6070e-003	6.3210e-003
tblVehicleEF	LHD2	0.13	0.11
tblVehicleEF	LHD2	0.80	0.74
tblVehicleEF	LHD2	0.50	0.96
tblVehicleEF	LHD2	14.89	14.70
tblVehicleEF	LHD2	769.63	706.54
tblVehicleEF	LHD2	6.73	20.87
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	1.46	1.33
tblVehicleEF	LHD2	0.17	0.42
tblVehicleEF	LHD2	1.5100e-003	1.3590e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	3.4200e-004
tblVehicleEF	LHD2	1.4450e-003	1.3000e-003
tblVehicleEF	LHD2	2.7260e-003	2.7250e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.6000e-005	3.1500e-004
tblVehicleEF	LHD2	3.6770e-003	2.9790e-003
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.01
tblVehicleEF	LHD2	1.4800e-003	1.2340e-003
tblVehicleEF	LHD2	0.14	0.13
tblVehicleEF	LHD2	0.11	0.08
tblVehicleEF	LHD2	0.04	0.09
tblVehicleEF	LHD2	1.4200e-004	1.4300e-004
tblVehicleEF	LHD2	7.4150e-003	6.8580e-003
tblVehicleEF	LHD2	6.7000e-005	2.2600e-004
tblVehicleEF	LHD2	3.6770e-003	2.9790e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4800e-003	1.2340e-003
tblVehicleEF	LHD2	0.16	0.15
tblVehicleEF	LHD2	0.11	0.08
tblVehicleEF	LHD2	0.04	0.09
tblVehicleEF	LHD2	2.8380e-003	2.9680e-003
tblVehicleEF	LHD2	8.0460e-003	8.8080e-003
tblVehicleEF	LHD2	8.4710e-003	7.0350e-003
tblVehicleEF	LHD2	0.13	0.11
tblVehicleEF	LHD2	0.79	0.73
tblVehicleEF	LHD2	0.58	1.11
tblVehicleEF	LHD2	14.89	14.70
tblVehicleEF	LHD2	769.61	706.54
tblVehicleEF	LHD2	6.87	20.87
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	1.57	1.44
tblVehicleEF	LHD2	0.19	0.47
tblVehicleEF	LHD2	1.5100e-003	1.3590e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.0500e-004	3.4200e-004
tblVehicleEF	LHD2	1.4450e-003	1.3000e-003
tblVehicleEF	LHD2	2.7260e-003	2.7250e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	9.6000e-005	3.1500e-004
tblVehicleEF	LHD2	5.5600e-004	4.5700e-004
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.01

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD2	3.1300e-004	2.6600e-004
tblVehicleEF	LHD2	0.13	0.13
tblVehicleEF	LHD2	0.12	0.09
tblVehicleEF	LHD2	0.04	0.09
tblVehicleEF	LHD2	1.4200e-004	1.4300e-004
tblVehicleEF	LHD2	7.4150e-003	6.8580e-003
tblVehicleEF	LHD2	6.8000e-005	2.2900e-004
tblVehicleEF	LHD2	5.5600e-004	4.5700e-004
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.1300e-004	2.6600e-004
tblVehicleEF	LHD2	0.16	0.15
tblVehicleEF	LHD2	0.12	0.09
tblVehicleEF	LHD2	0.05	0.10
tblVehicleEF	MCY	0.31	0.41
tblVehicleEF	MCY	0.25	0.16
tblVehicleEF	MCY	19.88	19.83
tblVehicleEF	MCY	8.86	10.00
tblVehicleEF	MCY	208.73	163.49
tblVehicleEF	MCY	61.86	46.75
tblVehicleEF	MCY	1.16	1.16
tblVehicleEF	MCY	0.27	0.31
tblVehicleEF	MCY	1.7740e-003	1.7920e-003
tblVehicleEF	MCY	2.8190e-003	3.3300e-003
tblVehicleEF	MCY	1.6600e-003	1.6760e-003
tblVehicleEF	MCY	2.6540e-003	3.1380e-003
tblVehicleEF	MCY	1.71	1.71
tblVehicleEF	MCY	0.98	0.99
tblVehicleEF	MCY	0.88	0.89

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MCY	2.13	2.13
tblVehicleEF	MCY	0.62	0.67
tblVehicleEF	MCY	1.92	2.18
tblVehicleEF	MCY	2.0660e-003	2.0200e-003
tblVehicleEF	MCY	6.1200e-004	6.9500e-004
tblVehicleEF	MCY	1.71	1.71
tblVehicleEF	MCY	0.98	0.99
tblVehicleEF	MCY	0.88	0.89
tblVehicleEF	MCY	2.62	2.62
tblVehicleEF	MCY	0.62	0.67
tblVehicleEF	MCY	2.09	2.37
tblVehicleEF	MCY	0.31	0.40
tblVehicleEF	MCY	0.22	0.14
tblVehicleEF	MCY	20.27	20.22
tblVehicleEF	MCY	8.04	9.13
tblVehicleEF	MCY	209.19	163.49
tblVehicleEF	MCY	59.63	46.75
tblVehicleEF	MCY	1.00	1.00
tblVehicleEF	MCY	0.25	0.29
tblVehicleEF	MCY	1.7740e-003	1.7920e-003
tblVehicleEF	MCY	2.8190e-003	3.3300e-003
tblVehicleEF	MCY	1.6600e-003	1.6760e-003
tblVehicleEF	MCY	2.6540e-003	3.1380e-003
tblVehicleEF	MCY	4.12	4.14
tblVehicleEF	MCY	1.52	1.52
tblVehicleEF	MCY	2.27	2.29
tblVehicleEF	MCY	2.09	2.08
tblVehicleEF	MCY	0.61	0.66
tblVehicleEF	MCY	1.64	1.87

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MCY	2.0700e-003	2.0240e-003
tblVehicleEF	MCY	5.9000e-004	6.7100e-004
tblVehicleEF	MCY	4.12	4.14
tblVehicleEF	MCY	1.52	1.52
tblVehicleEF	MCY	2.27	2.29
tblVehicleEF	MCY	2.56	2.56
tblVehicleEF	MCY	0.61	0.66
tblVehicleEF	MCY	1.78	2.03
tblVehicleEF	MCY	0.33	0.43
tblVehicleEF	MCY	0.30	0.19
tblVehicleEF	MCY	21.25	21.19
tblVehicleEF	MCY	10.27	11.54
tblVehicleEF	MCY	211.26	163.49
tblVehicleEF	MCY	65.36	46.75
tblVehicleEF	MCY	1.26	1.26
tblVehicleEF	MCY	0.29	0.34
tblVehicleEF	MCY	1.7740e-003	1.7920e-003
tblVehicleEF	MCY	2.8190e-003	3.3300e-003
tblVehicleEF	MCY	1.6600e-003	1.6760e-003
tblVehicleEF	MCY	2.6540e-003	3.1380e-003
tblVehicleEF	MCY	0.48	0.48
tblVehicleEF	MCY	0.98	1.00
tblVehicleEF	MCY	0.24	0.24
tblVehicleEF	MCY	2.23	2.23
tblVehicleEF	MCY	0.72	0.78
tblVehicleEF	MCY	2.30	2.60
tblVehicleEF	MCY	2.0910e-003	2.0450e-003
tblVehicleEF	MCY	6.4700e-004	7.3300e-004
tblVehicleEF	MCY	0.48	0.48

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MCY	0.98	1.00
tblVehicleEF	MCY	0.24	0.24
tblVehicleEF	MCY	2.74	2.74
tblVehicleEF	MCY	0.72	0.78
tblVehicleEF	MCY	2.50	2.83
tblVehicleEF	MDV	4.6690e-003	0.01
tblVehicleEF	MDV	0.09	0.02
tblVehicleEF	MDV	0.99	1.22
tblVehicleEF	MDV	3.18	3.11
tblVehicleEF	MDV	403.33	462.97
tblVehicleEF	MDV	85.80	107.40
tblVehicleEF	MDV	0.10	0.16
tblVehicleEF	MDV	0.37	0.28
tblVehicleEF	MDV	1.3780e-003	1.5950e-003
tblVehicleEF	MDV	1.8390e-003	2.3420e-003
tblVehicleEF	MDV	1.2720e-003	1.4710e-003
tblVehicleEF	MDV	1.6910e-003	2.1540e-003
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.20	0.24
tblVehicleEF	MDV	0.12	0.10
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.08	0.14
tblVehicleEF	MDV	0.43	0.24
tblVehicleEF	MDV	3.9870e-003	4.6380e-003
tblVehicleEF	MDV	8.4900e-004	1.1290e-003
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.20	0.24
tblVehicleEF	MDV	0.12	0.10
tblVehicleEF	MDV	0.03	0.04

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MDV	0.08	0.14
tblVehicleEF	MDV	0.47	0.26
tblVehicleEF	MDV	5.4230e-003	0.01
tblVehicleEF	MDV	0.07	0.01
tblVehicleEF	MDV	1.23	1.52
tblVehicleEF	MDV	2.66	2.60
tblVehicleEF	MDV	430.22	507.31
tblVehicleEF	MDV	84.73	107.40
tblVehicleEF	MDV	0.10	0.15
tblVehicleEF	MDV	0.35	0.27
tblVehicleEF	MDV	1.3780e-003	1.5950e-003
tblVehicleEF	MDV	1.8390e-003	2.3420e-003
tblVehicleEF	MDV	1.2720e-003	1.4710e-003
tblVehicleEF	MDV	1.6910e-003	2.1540e-003
tblVehicleEF	MDV	0.33	0.28
tblVehicleEF	MDV	0.23	0.28
tblVehicleEF	MDV	0.25	0.21
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.08	0.13
tblVehicleEF	MDV	0.36	0.20
tblVehicleEF	MDV	4.2530e-003	5.0860e-003
tblVehicleEF	MDV	8.3800e-004	1.1190e-003
tblVehicleEF	MDV	0.33	0.28
tblVehicleEF	MDV	0.23	0.28
tblVehicleEF	MDV	0.25	0.21
tblVehicleEF	MDV	0.03	0.05
tblVehicleEF	MDV	0.08	0.13
tblVehicleEF	MDV	0.39	0.22
tblVehicleEF	MDV	4.3170e-003	0.01

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MDV	0.10	0.02
tblVehicleEF	MDV	0.91	1.12
tblVehicleEF	MDV	3.89	3.79
tblVehicleEF	MDV	392.37	444.85
tblVehicleEF	MDV	87.17	107.40
tblVehicleEF	MDV	0.11	0.17
tblVehicleEF	MDV	0.41	0.31
tblVehicleEF	MDV	1.3780e-003	1.5950e-003
tblVehicleEF	MDV	1.8390e-003	2.3420e-003
tblVehicleEF	MDV	1.2720e-003	1.4710e-003
tblVehicleEF	MDV	1.6910e-003	2.1540e-003
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.19	0.23
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.10	0.16
tblVehicleEF	MDV	0.50	0.28
tblVehicleEF	MDV	3.8790e-003	4.4560e-003
tblVehicleEF	MDV	8.6300e-004	1.1410e-003
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.19	0.23
tblVehicleEF	MDV	0.05	0.04
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.10	0.16
tblVehicleEF	MDV	0.55	0.31
tblVehicleEF	MH	0.01	0.03
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.17	2.13
tblVehicleEF	MH	1.83	5.39

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MH	1,503.36	1,213.74
tblVehicleEF	MH	16.28	55.19
tblVehicleEF	MH	2.13	1.84
tblVehicleEF	MH	0.21	0.81
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.05	0.04
tblVehicleEF	MH	2.2600e-004	1.0380e-003
tblVehicleEF	MH	3.3490e-003	3.2650e-003
tblVehicleEF	MH	0.05	0.04
tblVehicleEF	MH	2.0800e-004	9.5500e-004
tblVehicleEF	MH	1.08	1.42
tblVehicleEF	MH	0.06	0.08
tblVehicleEF	MH	0.28	0.36
tblVehicleEF	MH	0.09	0.11
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.08	0.31
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.6100e-004	6.4600e-004
tblVehicleEF	MH	1.08	1.42
tblVehicleEF	MH	0.06	0.08
tblVehicleEF	MH	0.28	0.36
tblVehicleEF	MH	0.12	0.15
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.09	0.34
tblVehicleEF	MH	0.01	0.03
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.21	2.20
tblVehicleEF	MH	1.67	4.88
tblVehicleEF	MH	1,503.42	1,213.74

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MH	16.00	55.19
tblVehicleEF	MH	2.00	1.72
tblVehicleEF	MH	0.20	0.77
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.05	0.04
tblVehicleEF	MH	2.2600e-004	1.0380e-003
tblVehicleEF	MH	3.3490e-003	3.2650e-003
tblVehicleEF	MH	0.05	0.04
tblVehicleEF	MH	2.0800e-004	9.5500e-004
tblVehicleEF	MH	2.47	3.24
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	0.61	0.78
tblVehicleEF	MH	0.09	0.11
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.08	0.29
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.5800e-004	6.3700e-004
tblVehicleEF	MH	2.47	3.24
tblVehicleEF	MH	0.07	0.10
tblVehicleEF	MH	0.61	0.78
tblVehicleEF	MH	0.12	0.15
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.09	0.32
tblVehicleEF	MH	0.01	0.03
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	1.13	2.05
tblVehicleEF	MH	2.03	6.02
tblVehicleEF	MH	1,503.29	1,213.74
tblVehicleEF	MH	16.61	55.19

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MH	2.19	1.91
tblVehicleEF	MH	0.23	0.87
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.05	0.04
tblVehicleEF	MH	2.2600e-004	1.0380e-003
tblVehicleEF	MH	3.3490e-003	3.2650e-003
tblVehicleEF	MH	0.05	0.04
tblVehicleEF	MH	2.0800e-004	9.5500e-004
tblVehicleEF	MH	0.36	0.47
tblVehicleEF	MH	0.07	0.09
tblVehicleEF	MH	0.15	0.19
tblVehicleEF	MH	0.09	0.11
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.09	0.34
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.6400e-004	6.5700e-004
tblVehicleEF	MH	0.36	0.47
tblVehicleEF	MH	0.07	0.09
tblVehicleEF	MH	0.15	0.19
tblVehicleEF	MH	0.11	0.14
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.10	0.37
tblVehicleEF	MHD	2.6830e-003	0.02
tblVehicleEF	MHD	1.4880e-003	3.2460e-003
tblVehicleEF	MHD	6.8810e-003	0.05
tblVehicleEF	MHD	0.40	0.22
tblVehicleEF	MHD	0.23	0.30
tblVehicleEF	MHD	0.82	3.28
tblVehicleEF	MHD	86.90	194.80

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MHD	1,080.74	1,194.85
tblVehicleEF	MHD	6.83	33.04
tblVehicleEF	MHD	0.50	0.56
tblVehicleEF	MHD	1.63	1.26
tblVehicleEF	MHD	1.84	15.15
tblVehicleEF	MHD	3.5400e-004	1.5100e-004
tblVehicleEF	MHD	8.1280e-003	3.3610e-003
tblVehicleEF	MHD	9.5000e-005	5.4700e-004
tblVehicleEF	MHD	3.3800e-004	1.4400e-004
tblVehicleEF	MHD	7.7720e-003	3.2130e-003
tblVehicleEF	MHD	8.7000e-005	5.0300e-004
tblVehicleEF	MHD	6.2500e-004	1.0120e-003
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.5400e-004	4.1300e-004
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.04	0.20
tblVehicleEF	MHD	8.2300e-004	1.8650e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.8000e-005	3.8800e-004
tblVehicleEF	MHD	6.2500e-004	1.0120e-003
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.5400e-004	4.1300e-004
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.04	0.21
tblVehicleEF	MHD	2.5420e-003	0.02

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MHD	1.5190e-003	3.2860e-003
tblVehicleEF	MHD	6.5390e-003	0.05
tblVehicleEF	MHD	0.35	0.15
tblVehicleEF	MHD	0.23	0.30
tblVehicleEF	MHD	0.76	3.05
tblVehicleEF	MHD	86.63	206.45
tblVehicleEF	MHD	1,080.74	1,194.85
tblVehicleEF	MHD	6.73	33.04
tblVehicleEF	MHD	0.49	0.58
tblVehicleEF	MHD	1.54	1.19
tblVehicleEF	MHD	1.83	15.12
tblVehicleEF	MHD	3.0200e-004	1.2700e-004
tblVehicleEF	MHD	8.1280e-003	3.3610e-003
tblVehicleEF	MHD	9.5000e-005	5.4700e-004
tblVehicleEF	MHD	2.8900e-004	1.2200e-004
tblVehicleEF	MHD	7.7720e-003	3.2130e-003
tblVehicleEF	MHD	8.7000e-005	5.0300e-004
tblVehicleEF	MHD	1.4480e-003	2.3410e-003
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	5.7000e-004	9.2500e-004
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.04	0.19
tblVehicleEF	MHD	8.2100e-004	1.9760e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.7000e-005	3.8400e-004
tblVehicleEF	MHD	1.4480e-003	2.3410e-003
tblVehicleEF	MHD	0.02	0.04

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	5.7000e-004	9.2500e-004
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.04	0.20
tblVehicleEF	MHD	2.8160e-003	0.02
tblVehicleEF	MHD	1.4540e-003	3.2040e-003
tblVehicleEF	MHD	7.2740e-003	0.05
tblVehicleEF	MHD	0.44	0.29
tblVehicleEF	MHD	0.22	0.30
tblVehicleEF	MHD	0.89	3.57
tblVehicleEF	MHD	87.37	178.92
tblVehicleEF	MHD	1,080.73	1,194.85
tblVehicleEF	MHD	6.95	33.04
tblVehicleEF	MHD	0.51	0.53
tblVehicleEF	MHD	1.66	1.28
tblVehicleEF	MHD	1.84	15.18
tblVehicleEF	MHD	4.2500e-004	1.8400e-004
tblVehicleEF	MHD	8.1280e-003	3.3610e-003
tblVehicleEF	MHD	9.5000e-005	5.4700e-004
tblVehicleEF	MHD	4.0600e-004	1.7600e-004
tblVehicleEF	MHD	7.7720e-003	3.2130e-003
tblVehicleEF	MHD	8.7000e-005	5.0300e-004
tblVehicleEF	MHD	2.0000e-004	3.2400e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.0600e-004	1.7300e-004
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.01

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MHD	0.04	0.21
tblVehicleEF	MHD	8.2700e-004	1.7140e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.9000e-005	3.9300e-004
tblVehicleEF	MHD	2.0000e-004	3.2400e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	1.0600e-004	1.7300e-004
tblVehicleEF	MHD	0.02	0.05
tblVehicleEF	MHD	0.02	0.01
tblVehicleEF	MHD	0.04	0.23
tblVehicleEF	OBUS	8.1540e-003	0.01
tblVehicleEF	OBUS	7.1160e-003	8.1040e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.63	0.25
tblVehicleEF	OBUS	0.81	0.58
tblVehicleEF	OBUS	2.53	5.99
tblVehicleEF	OBUS	93.24	149.29
tblVehicleEF	OBUS	1,438.28	1,325.83
tblVehicleEF	OBUS	19.12	64.81
tblVehicleEF	OBUS	0.37	0.34
tblVehicleEF	OBUS	1.42	1.12
tblVehicleEF	OBUS	0.88	3.53
tblVehicleEF	OBUS	1.2400e-004	3.1000e-005
tblVehicleEF	OBUS	8.2930e-003	3.1260e-003
tblVehicleEF	OBUS	2.0300e-004	9.1500e-004
tblVehicleEF	OBUS	1.1800e-004	3.0000e-005
tblVehicleEF	OBUS	7.9170e-003	2.9750e-003
tblVehicleEF	OBUS	1.8600e-004	8.4100e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	OBUS	3.0280e-003	2.7460e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	9.3300e-004	8.3200e-004
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	0.09	0.04
tblVehicleEF	OBUS	0.12	0.36
tblVehicleEF	OBUS	8.8700e-004	1.4360e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.8900e-004	7.5300e-004
tblVehicleEF	OBUS	3.0280e-003	2.7460e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.07	0.05
tblVehicleEF	OBUS	9.3300e-004	8.3200e-004
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.04
tblVehicleEF	OBUS	0.13	0.40
tblVehicleEF	OBUS	8.2510e-003	0.01
tblVehicleEF	OBUS	7.3210e-003	8.3090e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.62	0.24
tblVehicleEF	OBUS	0.83	0.59
tblVehicleEF	OBUS	2.30	5.44
tblVehicleEF	OBUS	92.16	157.22
tblVehicleEF	OBUS	1,438.31	1,325.83
tblVehicleEF	OBUS	18.73	64.81
tblVehicleEF	OBUS	0.35	0.35
tblVehicleEF	OBUS	1.33	1.06
tblVehicleEF	OBUS	0.86	3.47

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	OBUS	1.1000e-004	2.6000e-005
tblVehicleEF	OBUS	8.2930e-003	3.1260e-003
tblVehicleEF	OBUS	2.0300e-004	9.1500e-004
tblVehicleEF	OBUS	1.0500e-004	2.5000e-005
tblVehicleEF	OBUS	7.9170e-003	2.9750e-003
tblVehicleEF	OBUS	1.8600e-004	8.4100e-004
tblVehicleEF	OBUS	6.8660e-003	6.2510e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	1.9540e-003	1.7650e-003
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	0.09	0.04
tblVehicleEF	OBUS	0.11	0.34
tblVehicleEF	OBUS	8.7700e-004	1.5110e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.8500e-004	7.4400e-004
tblVehicleEF	OBUS	6.8660e-003	6.2510e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.07	0.05
tblVehicleEF	OBUS	1.9540e-003	1.7650e-003
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.04
tblVehicleEF	OBUS	0.12	0.37
tblVehicleEF	OBUS	8.0270e-003	0.01
tblVehicleEF	OBUS	6.8910e-003	7.8810e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.63	0.26
tblVehicleEF	OBUS	0.79	0.56
tblVehicleEF	OBUS	2.80	6.64

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	OBUS	94.72	138.35
tblVehicleEF	OBUS	1,438.23	1,325.83
tblVehicleEF	OBUS	19.57	64.81
tblVehicleEF	OBUS	0.39	0.32
tblVehicleEF	OBUS	1.46	1.15
tblVehicleEF	OBUS	0.89	3.59
tblVehicleEF	OBUS	1.4300e-004	3.8000e-005
tblVehicleEF	OBUS	8.2930e-003	3.1260e-003
tblVehicleEF	OBUS	2.0300e-004	9.1500e-004
tblVehicleEF	OBUS	1.3700e-004	3.6000e-005
tblVehicleEF	OBUS	7.9170e-003	2.9750e-003
tblVehicleEF	OBUS	1.8600e-004	8.4100e-004
tblVehicleEF	OBUS	1.0600e-003	9.4500e-004
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.05	0.04
tblVehicleEF	OBUS	5.0200e-004	4.4200e-004
tblVehicleEF	OBUS	0.04	0.06
tblVehicleEF	OBUS	0.09	0.05
tblVehicleEF	OBUS	0.13	0.39
tblVehicleEF	OBUS	9.0100e-004	1.3310e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.9400e-004	7.6400e-004
tblVehicleEF	OBUS	1.0600e-003	9.4500e-004
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.07	0.05
tblVehicleEF	OBUS	5.0200e-004	4.4200e-004
tblVehicleEF	OBUS	0.06	0.07
tblVehicleEF	OBUS	0.09	0.05
tblVehicleEF	OBUS	0.14	0.43

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	SBUS	0.03	0.82
tblVehicleEF	SBUS	5.2510e-003	8.2130e-003
tblVehicleEF	SBUS	3.1900e-003	0.06
tblVehicleEF	SBUS	1.63	4.57
tblVehicleEF	SBUS	0.37	0.52
tblVehicleEF	SBUS	0.41	3.84
tblVehicleEF	SBUS	335.26	1,304.31
tblVehicleEF	SBUS	1,082.40	1,164.22
tblVehicleEF	SBUS	2.57	29.94
tblVehicleEF	SBUS	3.43	11.29
tblVehicleEF	SBUS	5.44	4.34
tblVehicleEF	SBUS	0.90	16.15
tblVehicleEF	SBUS	4.0470e-003	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	1.8000e-005	3.5000e-004
tblVehicleEF	SBUS	3.8720e-003	9.7740e-003
tblVehicleEF	SBUS	2.7960e-003	2.8060e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	1.7000e-005	3.2200e-004
tblVehicleEF	SBUS	9.1700e-004	3.1520e-003
tblVehicleEF	SBUS	5.7220e-003	0.02
tblVehicleEF	SBUS	0.17	0.54
tblVehicleEF	SBUS	2.8900e-004	1.0460e-003
tblVehicleEF	SBUS	0.09	0.11
tblVehicleEF	SBUS	0.01	8.9020e-003
tblVehicleEF	SBUS	0.02	0.20
tblVehicleEF	SBUS	3.1830e-003	0.01
tblVehicleEF	SBUS	0.01	0.01

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	SBUS	2.6000e-005	3.6600e-004
tblVehicleEF	SBUS	9.1700e-004	3.1520e-003
tblVehicleEF	SBUS	5.7220e-003	0.02
tblVehicleEF	SBUS	0.24	0.77
tblVehicleEF	SBUS	2.8900e-004	1.0460e-003
tblVehicleEF	SBUS	0.10	0.12
tblVehicleEF	SBUS	0.01	8.9020e-003
tblVehicleEF	SBUS	0.02	0.22
tblVehicleEF	SBUS	0.03	0.82
tblVehicleEF	SBUS	5.3010e-003	8.3340e-003
tblVehicleEF	SBUS	2.5650e-003	0.05
tblVehicleEF	SBUS	1.60	4.43
tblVehicleEF	SBUS	0.38	0.52
tblVehicleEF	SBUS	0.28	2.57
tblVehicleEF	SBUS	343.92	1,373.02
tblVehicleEF	SBUS	1,082.41	1,164.22
tblVehicleEF	SBUS	2.35	29.94
tblVehicleEF	SBUS	3.50	11.65
tblVehicleEF	SBUS	5.16	4.11
tblVehicleEF	SBUS	0.89	16.13
tblVehicleEF	SBUS	3.4190e-003	8.6120e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	1.8000e-005	3.5000e-004
tblVehicleEF	SBUS	3.2720e-003	8.2400e-003
tblVehicleEF	SBUS	2.7960e-003	2.8060e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	1.7000e-005	3.2200e-004
tblVehicleEF	SBUS	2.0630e-003	7.0430e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	SBUS	6.2630e-003	0.02
tblVehicleEF	SBUS	0.17	0.53
tblVehicleEF	SBUS	5.9300e-004	2.1190e-003
tblVehicleEF	SBUS	0.09	0.11
tblVehicleEF	SBUS	0.01	7.7800e-003
tblVehicleEF	SBUS	0.01	0.16
tblVehicleEF	SBUS	3.2650e-003	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	2.3000e-005	3.4500e-004
tblVehicleEF	SBUS	2.0630e-003	7.0430e-003
tblVehicleEF	SBUS	6.2630e-003	0.02
tblVehicleEF	SBUS	0.23	0.76
tblVehicleEF	SBUS	5.9300e-004	2.1190e-003
tblVehicleEF	SBUS	0.10	0.12
tblVehicleEF	SBUS	0.01	7.7800e-003
tblVehicleEF	SBUS	0.02	0.18
tblVehicleEF	SBUS	0.03	0.82
tblVehicleEF	SBUS	5.2000e-003	8.0900e-003
tblVehicleEF	SBUS	3.8010e-003	0.08
tblVehicleEF	SBUS	1.69	4.77
tblVehicleEF	SBUS	0.37	0.51
tblVehicleEF	SBUS	0.56	5.20
tblVehicleEF	SBUS	323.29	1,209.41
tblVehicleEF	SBUS	1,082.40	1,164.22
tblVehicleEF	SBUS	2.82	29.94
tblVehicleEF	SBUS	3.33	10.79
tblVehicleEF	SBUS	5.55	4.43
tblVehicleEF	SBUS	0.90	16.17
tblVehicleEF	SBUS	4.9130e-003	0.01

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	1.8000e-005	3.5000e-004
tblVehicleEF	SBUS	4.7000e-003	0.01
tblVehicleEF	SBUS	2.7960e-003	2.8060e-003
tblVehicleEF	SBUS	0.03	0.02
tblVehicleEF	SBUS	1.7000e-005	3.2200e-004
tblVehicleEF	SBUS	3.3000e-004	1.1490e-003
tblVehicleEF	SBUS	5.6610e-003	0.02
tblVehicleEF	SBUS	0.17	0.54
tblVehicleEF	SBUS	1.5800e-004	5.7700e-004
tblVehicleEF	SBUS	0.09	0.11
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.02	0.24
tblVehicleEF	SBUS	3.0700e-003	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	2.8000e-005	3.8800e-004
tblVehicleEF	SBUS	3.3000e-004	1.1490e-003
tblVehicleEF	SBUS	5.6610e-003	0.02
tblVehicleEF	SBUS	0.24	0.77
tblVehicleEF	SBUS	1.5800e-004	5.7700e-004
tblVehicleEF	SBUS	0.10	0.12
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.02	0.27
tblVehicleEF	UBUS	1.70	1.44
tblVehicleEF	UBUS	0.04	0.10
tblVehicleEF	UBUS	12.15	8.81
tblVehicleEF	UBUS	2.96	19.31
tblVehicleEF	UBUS	1,522.32	1,859.53

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	UBUS	32.27	145.77
tblVehicleEF	UBUS	0.30	4.27
tblVehicleEF	UBUS	0.29	13.53
tblVehicleEF	UBUS	0.12	0.50
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	2.7170e-003	0.04
tblVehicleEF	UBUS	3.1300e-004	1.4080e-003
tblVehicleEF	UBUS	0.05	0.21
tblVehicleEF	UBUS	3.2170e-003	3.0000e-003
tblVehicleEF	UBUS	2.5690e-003	0.04
tblVehicleEF	UBUS	2.8700e-004	1.2940e-003
tblVehicleEF	UBUS	1.9470e-003	0.01
tblVehicleEF	UBUS	0.02	0.14
tblVehicleEF	UBUS	8.7300e-004	4.2480e-003
tblVehicleEF	UBUS	0.04	0.51
tblVehicleEF	UBUS	3.6540e-003	0.03
tblVehicleEF	UBUS	0.17	1.35
tblVehicleEF	UBUS	8.1620e-003	0.01
tblVehicleEF	UBUS	3.1900e-004	1.8030e-003
tblVehicleEF	UBUS	1.9470e-003	0.01
tblVehicleEF	UBUS	0.02	0.14
tblVehicleEF	UBUS	8.7300e-004	4.2480e-003
tblVehicleEF	UBUS	1.74	2.01
tblVehicleEF	UBUS	3.6540e-003	0.03
tblVehicleEF	UBUS	0.18	1.48
tblVehicleEF	UBUS	1.70	1.45
tblVehicleEF	UBUS	0.03	0.09
tblVehicleEF	UBUS	12.15	8.93
tblVehicleEF	UBUS	2.42	15.71

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	UBUS	1,522.32	1,859.53
tblVehicleEF	UBUS	31.36	145.77
tblVehicleEF	UBUS	0.29	3.98
tblVehicleEF	UBUS	0.27	13.37
tblVehicleEF	UBUS	0.12	0.50
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	2.7170e-003	0.04
tblVehicleEF	UBUS	3.1300e-004	1.4080e-003
tblVehicleEF	UBUS	0.05	0.21
tblVehicleEF	UBUS	3.2170e-003	3.0000e-003
tblVehicleEF	UBUS	2.5690e-003	0.04
tblVehicleEF	UBUS	2.8700e-004	1.2940e-003
tblVehicleEF	UBUS	4.4390e-003	0.03
tblVehicleEF	UBUS	0.02	0.18
tblVehicleEF	UBUS	1.9660e-003	9.5770e-003
tblVehicleEF	UBUS	0.04	0.52
tblVehicleEF	UBUS	3.4810e-003	0.03
tblVehicleEF	UBUS	0.15	1.20
tblVehicleEF	UBUS	8.1620e-003	0.01
tblVehicleEF	UBUS	3.1000e-004	1.7410e-003
tblVehicleEF	UBUS	4.4390e-003	0.03
tblVehicleEF	UBUS	0.02	0.18
tblVehicleEF	UBUS	1.9660e-003	9.5770e-003
tblVehicleEF	UBUS	1.74	2.02
tblVehicleEF	UBUS	3.4810e-003	0.03
tblVehicleEF	UBUS	0.16	1.31
tblVehicleEF	UBUS	1.70	1.44
tblVehicleEF	UBUS	0.04	0.11
tblVehicleEF	UBUS	12.15	8.68

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	UBUS	3.59	23.53
tblVehicleEF	UBUS	1,522.31	1,859.53
tblVehicleEF	UBUS	33.34	145.77
tblVehicleEF	UBUS	0.30	4.41
tblVehicleEF	UBUS	0.31	13.71
tblVehicleEF	UBUS	0.12	0.50
tblVehicleEF	UBUS	0.01	0.01
tblVehicleEF	UBUS	2.7170e-003	0.04
tblVehicleEF	UBUS	3.1300e-004	1.4080e-003
tblVehicleEF	UBUS	0.05	0.21
tblVehicleEF	UBUS	3.2170e-003	3.0000e-003
tblVehicleEF	UBUS	2.5690e-003	0.04
tblVehicleEF	UBUS	2.8700e-004	1.2940e-003
tblVehicleEF	UBUS	6.6400e-004	4.3150e-003
tblVehicleEF	UBUS	0.02	0.15
tblVehicleEF	UBUS	4.1300e-004	2.1460e-003
tblVehicleEF	UBUS	0.04	0.50
tblVehicleEF	UBUS	4.4840e-003	0.04
tblVehicleEF	UBUS	0.19	1.52
tblVehicleEF	UBUS	8.1620e-003	0.01
tblVehicleEF	UBUS	3.3000e-004	1.8750e-003
tblVehicleEF	UBUS	6.6400e-004	4.3150e-003
tblVehicleEF	UBUS	0.02	0.15
tblVehicleEF	UBUS	4.1300e-004	2.1460e-003
tblVehicleEF	UBUS	1.74	1.99
tblVehicleEF	UBUS	4.4840e-003	0.04
tblVehicleEF	UBUS	0.20	1.67
tblVehicleTrips	WD_TR	1.89	1.29
tblVehicleTrips	WD_TR	2.13	1.62

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1376	1.0470	1.0737	2.0700e-003	0.0473	0.0480	0.0953	0.0165	0.0460	0.0626	0.0000	176.3915	176.3915	0.0275	2.8000e-003	177.9137
2023	0.3235	0.4879	0.5688	1.1000e-003	0.0183	0.0209	0.0391	4.9200e-003	0.0201	0.0250	0.0000	93.5149	93.5149	0.0136	1.5300e-003	94.3098
Maximum	**0.3235**	**1.0470**	**1.0737**	**2.0700e-003**	**0.0473**	**0.0480**	**0.0953**	**0.0165**	**0.0460**	**0.0626**	**0.0000**	**176.3915**	**176.3915**	**0.0275**	**2.8000e-003**	**177.9137**

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					
2022	0.1376	1.0470	1.0737	2.0700e-003	0.0387	0.0480	0.0867	0.0121	0.0460	0.0581	0.0000	176.3913	176.3913	0.0275	2.8000e-003	177.9136
2023	0.3235	0.4879	0.5688	1.1000e-003	0.0183	0.0209	0.0391	4.9200e-003	0.0201	0.0250	0.0000	93.5148	93.5148	0.0136	1.5300e-003	94.3097
Maximum	**0.3235**	**1.0470**	**1.0737**	**2.0700e-003**	**0.0387**	**0.0480**	**0.0867**	**0.0121**	**0.0460**	**0.0581**	**0.0000**	**176.3913**	**176.3913**	**0.0275**	**2.8000e-003**	**177.9136**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**13.13**	**0.00**	**6.40**	**20.52**	**0.00**	**5.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-1-2022**	**8-31-2022**	0.5254	0.5254
2	**9-1-2022**	**11-30-2022**	0.4909	0.4909
3	**12-1-2022**	**2-28-2023**	0.4632	0.4632
4	**3-1-2023**	**5-31-2023**	0.5156	0.5156
		Highest	0.5254	0.5254

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	0.1679	4.0000e-005	4.4600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.6800e-003	8.6800e-003	2.0000e-005	0.0000	9.2500e-003
Energy	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	20.3654	20.3654	3.9000e-004	3.7000e-004	20.4865
Mobile	0.1063	0.8688	1.2184	5.8300e-003	0.4360	3.6300e-003	0.4397	0.1171	3.3900e-003	0.1205	0.0000	540.1615	540.1615	0.0189	0.0364	551.4855
Waste						0.0000	0.0000		0.0000	0.0000	14.3007	0.0000	14.3007	0.8452	0.0000	35.4294
Water						0.0000	0.0000		0.0000	0.0000	0.2969	0.0000	0.2969	0.0305	7.2000e-004	1.2737
Total	**0.2762**	**0.8876**	**1.2386**	**5.9400e-003**	**0.4360**	**5.0700e-003**	**0.4411**	**0.1171**	**4.8300e-003**	**0.1219**	**14.5976**	**560.5357**	**575.1332**	**0.8950**	**0.0375**	**608.6843**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1679	4.0000e-005	4.4600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.6800e-003	8.6800e-003	2.0000e-005	0.0000	9.2500e-003
Energy	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	20.3654	20.3654	3.9000e-004	3.7000e-004	20.4865
Mobile	0.1063	0.8688	1.2184	5.8300e-003	0.4360	3.6300e-003	0.4397	0.1171	3.3900e-003	0.1205	0.0000	540.1615	540.1615	0.0189	0.0364	551.4855
Waste						0.0000	0.0000		0.0000	0.0000	14.3007	0.0000	14.3007	0.8452	0.0000	35.4294
Water						0.0000	0.0000		0.0000	0.0000	0.2969	0.0000	0.2969	0.0305	7.2000e-004	1.2737
Total	**0.2762**	**0.8876**	**1.2386**	**5.9400e-003**	**0.4360**	**5.0700e-003**	**0.4411**	**0.1171**	**4.8300e-003**	**0.1219**	**14.5976**	**560.5357**	**575.1332**	**0.8950**	**0.0375**	**608.6843**

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	-8.6200
Total	**-8.6200**

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	Demolition	6/1/2022	6/28/2022	5	20	
2	Site Preparation	Site Preparation	6/29/2022	6/30/2022	5	2	
3	Grading	Grading	7/1/2022	7/6/2022	5	4	
4	Building Construction	Building Construction	7/7/2022	4/12/2023	5	200	
5	Paving	Paving	4/13/2023	4/26/2023	5	10	
6	Architectural Coating	Architectural Coating	4/27/2023	5/10/2023	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.9

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 53,500; Non-Residential Outdoor: 17,833; Striped Parking Area: 2,400 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	32.00	12.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

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	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2120
Total	**0.0169**	**0.1662**	**0.1396**	**2.4000e-004**		**8.3800e-003**	**8.3800e-003**		**7.8300e-003**	**7.8300e-003**	**0.0000**	**21.0777**	**21.0777**	**5.3700e-003**	**0.0000**	**21.2120**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

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	6.5000e-004	5.2000e-004	5.6700e-003	1.0000e-005	1.6100e-003	1.0000e-005	1.6200e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.3088	1.3088	4.0000e-005	4.0000e-005	1.3219
Total	**6.5000e-004**	**5.2000e-004**	**5.6700e-003**	**1.0000e-005**	**1.6100e-003**	**1.0000e-005**	**1.6200e-003**	**4.3000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**1.3088**	**1.3088**	**4.0000e-005**	**4.0000e-005**	**1.3219**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2119
Total	**0.0169**	**0.1662**	**0.1396**	**2.4000e-004**		**8.3800e-003**	**8.3800e-003**		**7.8300e-003**	**7.8300e-003**	**0.0000**	**21.0777**	**21.0777**	**5.3700e-003**	**0.0000**	**21.2119**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	5.2000e-004	5.6700e-003	1.0000e-005	1.6100e-003	1.0000e-005	1.6200e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.3088	1.3088	4.0000e-005	4.0000e-005	1.3219
Total	**6.5000e-004**	**5.2000e-004**	**5.6700e-003**	**1.0000e-005**	**1.6100e-003**	**1.0000e-005**	**1.6200e-003**	**4.3000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**1.3088**	**1.3088**	**4.0000e-005**	**4.0000e-005**	**1.3219**

3.3 Site Preparation - 2022

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					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0146	7.0900e-003	2.0000e-005		6.2000e-004	6.2000e-004		5.7000e-004	5.7000e-004	0.0000	1.5115	1.5115	4.9000e-004	0.0000	1.5238
Total	**1.3100e-003**	**0.0146**	**7.0900e-003**	**2.0000e-005**	**5.8000e-003**	**6.2000e-004**	**6.4200e-003**	**2.9500e-003**	**5.7000e-004**	**3.5200e-003**	**0.0000**	**1.5115**	**1.5115**	**4.9000e-004**	**0.0000**	**1.5238**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

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	4.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0805	0.0805	0.0000	0.0000	0.0814
Total	**4.0000e-005**	**3.0000e-005**	**3.5000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0805**	**0.0805**	**0.0000**	**0.0000**	**0.0814**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6100e-003	0.0000	2.6100e-003	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0146	7.0900e-003	2.0000e-005		6.2000e-004	6.2000e-004		5.7000e-004	5.7000e-004	0.0000	1.5115	1.5115	4.9000e-004	0.0000	1.5238
Total	**1.3100e-003**	**0.0146**	**7.0900e-003**	**2.0000e-005**	**2.6100e-003**	**6.2000e-004**	**3.2300e-003**	**1.3300e-003**	**5.7000e-004**	**1.9000e-003**	**0.0000**	**1.5115**	**1.5115**	**4.9000e-004**	**0.0000**	**1.5238**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0805	0.0805	0.0000	0.0000	0.0814
Total	**4.0000e-005**	**3.0000e-005**	**3.5000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0805**	**0.0805**	**0.0000**	**0.0000**	**0.0814**

3.4 Grading - 2022

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					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1700e-003	0.0240	0.0119	3.0000e-005		1.0300e-003	1.0300e-003		9.5000e-004	9.5000e-004	0.0000	2.4763	2.4763	8.0000e-004	0.0000	2.4963
Total	**2.1700e-003**	**0.0240**	**0.0119**	**3.0000e-005**	**9.8300e-003**	**1.0300e-003**	**0.0109**	**5.0500e-003**	**9.5000e-004**	**6.0000e-003**	**0.0000**	**2.4763**	**2.4763**	**8.0000e-004**	**0.0000**	**2.4963**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

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	8.0000e-005	6.0000e-005	7.0000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1611	0.1611	0.0000	1.0000e-005	0.1627
Total	**8.0000e-005**	**6.0000e-005**	**7.0000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1611**	**0.1611**	**0.0000**	**1.0000e-005**	**0.1627**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.4200e-003	0.0000	4.4200e-003	2.2700e-003	0.0000	2.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1700e-003	0.0240	0.0119	3.0000e-005		1.0300e-003	1.0300e-003		9.5000e-004	9.5000e-004	0.0000	2.4763	2.4763	8.0000e-004	0.0000	2.4963
Total	**2.1700e-003**	**0.0240**	**0.0119**	**3.0000e-005**	**4.4200e-003**	**1.0300e-003**	**5.4500e-003**	**2.2700e-003**	**9.5000e-004**	**3.2200e-003**	**0.0000**	**2.4763**	**2.4763**	**8.0000e-004**	**0.0000**	**2.4963**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	7.0000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1611	0.1611	0.0000	1.0000e-005	0.1627
Total	**8.0000e-005**	**6.0000e-005**	**7.0000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1611**	**0.1611**	**0.0000**	**1.0000e-005**	**0.1627**

3.5 Building Construction - 2022

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	0.1047	0.7939	0.8081	1.4000e-003		0.0374	0.0374		0.0361	0.0361	0.0000	115.3013	115.3013	0.0201	0.0000	115.8034
Total	**0.1047**	**0.7939**	**0.8081**	**1.4000e-003**		**0.0374**	**0.0374**		**0.0361**	**0.0361**	**0.0000**	**115.3013**	**115.3013**	**0.0201**	**0.0000**	**115.8034**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

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	1.5800e-003	0.0394	0.0117	1.5000e-004	4.5600e-003	4.4000e-004	4.9900e-003	1.3200e-003	4.2000e-004	1.7400e-003	0.0000	14.0174	14.0174	1.0000e-004	2.1100e-003	14.6499
Worker	0.0102	8.2000e-003	0.0886	2.2000e-004	0.0252	1.3000e-004	0.0253	6.6900e-003	1.2000e-004	6.8100e-003	0.0000	20.4569	20.4569	6.1000e-004	6.4000e-004	20.6624
Total	**0.0117**	**0.0476**	**0.1003**	**3.7000e-004**	**0.0297**	**5.7000e-004**	**0.0303**	**8.0100e-003**	**5.4000e-004**	**8.5500e-003**	**0.0000**	**34.4743**	**34.4743**	**7.1000e-004**	**2.7500e-003**	**35.3124**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1047	0.7939	0.8081	1.4000e-003		0.0374	0.0374		0.0361	0.0361	0.0000	115.3012	115.3012	0.0201	0.0000	115.8033
Total	**0.1047**	**0.7939**	**0.8081**	**1.4000e-003**		**0.0374**	**0.0374**		**0.0361**	**0.0361**	**0.0000**	**115.3012**	**115.3012**	**0.0201**	**0.0000**	**115.8033**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

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	1.5800e-003	0.0394	0.0117	1.5000e-004	4.5600e-003	4.4000e-004	4.9900e-003	1.3200e-003	4.2000e-004	1.7400e-003	0.0000	14.0174	14.0174	1.0000e-004	2.1100e-003	14.6499
Worker	0.0102	8.2000e-003	0.0886	2.2000e-004	0.0252	1.3000e-004	0.0253	6.6900e-003	1.2000e-004	6.8100e-003	0.0000	20.4569	20.4569	6.1000e-004	6.4000e-004	20.6624
Total	**0.0117**	**0.0476**	**0.1003**	**3.7000e-004**	**0.0297**	**5.7000e-004**	**0.0303**	**8.0100e-003**	**5.4000e-004**	**8.5500e-003**	**0.0000**	**34.4743**	**34.4743**	**7.1000e-004**	**2.7500e-003**	**35.3124**

3.5 Building Construction - 2023

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	0.0556	0.4274	0.4603	8.1000e-004		0.0188	0.0188		0.0181	0.0181	0.0000	66.2837	66.2837	0.0113	0.0000	66.5651
Total	**0.0556**	**0.4274**	**0.4603**	**8.1000e-004**		**0.0188**	**0.0188**		**0.0181**	**0.0181**	**0.0000**	**66.2837**	**66.2837**	**0.0113**	**0.0000**	**66.5651**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

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	4.7000e-004	0.0184	5.7900e-003	8.0000e-005	2.6200e-003	1.1000e-004	2.7300e-003	7.6000e-004	1.1000e-004	8.7000e-004	0.0000	7.7638	7.7638	4.0000e-005	1.1700e-003	8.1128
Worker	5.3300e-003	4.0900e-003	0.0459	1.2000e-004	0.0145	7.0000e-005	0.0145	3.8500e-003	7.0000e-005	3.9100e-003	0.0000	11.3790	11.3790	3.1000e-004	3.3000e-004	11.4862
Total	**5.8000e-003**	**0.0225**	**0.0517**	**2.0000e-004**	**0.0171**	**1.8000e-004**	**0.0173**	**4.6100e-003**	**1.8000e-004**	**4.7800e-003**	**0.0000**	**19.1428**	**19.1428**	**3.5000e-004**	**1.5000e-003**	**19.5991**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0556	0.4274	0.4603	8.1000e-004		0.0188	0.0188		0.0181	0.0181	0.0000	66.2836	66.2836	0.0113	0.0000	66.5650
Total	**0.0556**	**0.4274**	**0.4603**	**8.1000e-004**		**0.0188**	**0.0188**		**0.0181**	**0.0181**	**0.0000**	**66.2836**	**66.2836**	**0.0113**	**0.0000**	**66.5650**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

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	4.7000e-004	0.0184	5.7900e-003	8.0000e-005	2.6200e-003	1.1000e-004	2.7300e-003	7.6000e-004	1.1000e-004	8.7000e-004	0.0000	7.7638	7.7638	4.0000e-005	1.1700e-003	8.1128
Worker	5.3300e-003	4.0900e-003	0.0459	1.2000e-004	0.0145	7.0000e-005	0.0145	3.8500e-003	7.0000e-005	3.9100e-003	0.0000	11.3790	11.3790	3.1000e-004	3.3000e-004	11.4862
Total	**5.8000e-003**	**0.0225**	**0.0517**	**2.0000e-004**	**0.0171**	**1.8000e-004**	**0.0173**	**4.6100e-003**	**1.8000e-004**	**4.7800e-003**	**0.0000**	**19.1428**	**19.1428**	**3.5000e-004**	**1.5000e-003**	**19.5991**

3.6 Paving - 2023

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	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329
Paving	1.1800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-003**	**0.0312**	**0.0440**	**7.0000e-005**		**1.5400e-003**	**1.5400e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**5.8862**	**5.8862**	**1.8700e-003**	**0.0000**	**5.9329**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

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	3.0000e-004	2.3000e-004	2.5500e-003	1.0000e-005	8.1000e-004	0.0000	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6333	0.6333	2.0000e-005	2.0000e-005	0.6392
Total	**3.0000e-004**	**2.3000e-004**	**2.5500e-003**	**1.0000e-005**	**8.1000e-004**	**0.0000**	**8.1000e-004**	**2.1000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.6333**	**0.6333**	**2.0000e-005**	**2.0000e-005**	**0.6392**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329
Paving	1.1800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.4000e-003**	**0.0312**	**0.0440**	**7.0000e-005**		**1.5400e-003**	**1.5400e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**5.8862**	**5.8862**	**1.8700e-003**	**0.0000**	**5.9329**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.3000e-004	2.5500e-003	1.0000e-005	8.1000e-004	0.0000	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6333	0.6333	2.0000e-005	2.0000e-005	0.6392
Total	**3.0000e-004**	**2.3000e-004**	**2.5500e-003**	**1.0000e-005**	**8.1000e-004**	**0.0000**	**8.1000e-004**	**2.1000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.6333**	**0.6333**	**2.0000e-005**	**2.0000e-005**	**0.6392**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2563					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.2573**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	1.1000e-004	1.1800e-003	0.0000	3.7000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2923	0.2923	1.0000e-005	1.0000e-005	0.2950
Total	**1.4000e-004**	**1.1000e-004**	**1.1800e-003**	**0.0000**	**3.7000e-004**	**0.0000**	**3.7000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2923**	**0.2923**	**1.0000e-005**	**1.0000e-005**	**0.2950**

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	0.2563					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.2573**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	1.1000e-004	1.1800e-003	0.0000	3.7000e-004	0.0000	3.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2923	0.2923	1.0000e-005	1.0000e-005	0.2950
Total	**1.4000e-004**	**1.1000e-004**	**1.1800e-003**	**0.0000**	**3.7000e-004**	**0.0000**	**3.7000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2923**	**0.2923**	**1.0000e-005**	**1.0000e-005**	**0.2950**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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	0.1063	0.8688	1.2184	5.8300e-003	0.4360	3.6300e-003	0.4397	0.1171	3.3900e-003	0.1205	0.0000	540.1615	540.1615	0.0189	0.0364	551.4855
Unmitigated	0.1063	0.8688	1.2184	5.8300e-003	0.4360	3.6300e-003	0.4397	0.1171	3.3900e-003	0.1205	0.0000	540.1615	540.1615	0.0189	0.0364	551.4855

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	368.94	0.00	0.00	789,315	789,315
Junior High School	162.00	0.00	0.00	365,013	365,013
Parking Lot	0.00	0.00	0.00		
Total	530.94	0.00	0.00	1,154,328	1,154,328

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Elementary School	14.70	6.60	6.60	65.00	30.00	5.00	63	25	12
Junior High School	14.70	6.60	6.60	72.80	22.20	5.00	63	25	12
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.541226	0.031357	0.176167	0.121135	0.017229	0.004544	0.020399	0.079136	0.001813	0.001177	0.004121	0.001075	0.000622

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Junior High School	0.541226	0.031357	0.176167	0.121135	0.017229	0.004544	0.020399	0.079136	0.001813	0.001177	0.004121	0.001075	0.000622
Parking Lot	0.541226	0.031357	0.176167	0.121135	0.017229	0.004544	0.020399	0.079136	0.001813	0.001177	0.004121	0.001075	0.000622

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	20.3654	20.3654	3.9000e-004	3.7000e-004	20.4865
NaturalGas Unmitigated	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	20.3654	20.3654	3.9000e-004	3.7000e-004	20.4865

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Elementary School	255843	1.3800e-003	0.0125	0.0105	8.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	13.6528	13.6528	2.6000e-004	2.5000e-004	13.7339
Junior High School	125791	6.8000e-004	6.1700e-003	5.1800e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7127	6.7127	1.3000e-004	1.2000e-004	6.7526
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		**2.0600e-003**	**0.0187**	**0.0157**	**1.2000e-004**		**1.4200e-003**	**1.4200e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**20.3655**	**20.3655**	**3.9000e-004**	**3.7000e-004**	**20.4865**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Elementary School	255843	1.3800e-003	0.0125	0.0105	8.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	13.6528	13.6528	2.6000e-004	2.5000e-004	13.7339
Junior High School	125791	6.8000e-004	6.1700e-003	5.1800e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7127	6.7127	1.3000e-004	1.2000e-004	6.7526
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		**2.0600e-003**	**0.0187**	**0.0157**	**1.2000e-004**		**1.4200e-003**	**1.4200e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**20.3655**	**20.3655**	**3.9000e-004**	**3.7000e-004**	**20.4865**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	175504	0.0000	0.0000	0.0000	0.0000
Junior High School	86290.3	0.0000	0.0000	0.0000	0.0000
Parking Lot	14000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	175504	0.0000	0.0000	0.0000	0.0000
Junior High School	86290.3	0.0000	0.0000	0.0000	0.0000
Parking Lot	14000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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	0.1679	4.0000e-005	4.4600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.6800e-003	8.6800e-003	2.0000e-005	0.0000	9.2500e-003
Unmitigated	0.1679	4.0000e-005	4.4600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.6800e-003	8.6800e-003	2.0000e-005	0.0000	9.2500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0256					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1419					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1000e-004	4.0000e-005	4.4600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.6800e-003	8.6800e-003	2.0000e-005	0.0000	9.2500e-003
Total	**0.1679**	**4.0000e-005**	**4.4600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**8.6800e-003**	**8.6800e-003**	**2.0000e-005**	**0.0000**	**9.2500e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0256					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1419					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.1000e-004	4.0000e-005	4.4600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.6800e-003	8.6800e-003	2.0000e-005	0.0000	9.2500e-003
Total	**0.1679**	**4.0000e-005**	**4.4600e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**8.6800e-003**	**8.6800e-003**	**2.0000e-005**	**0.0000**	**9.2500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.2969	0.0305	7.2000e-004	1.2737
Unmitigated	0.2969	0.0305	7.2000e-004	1.2737

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0.693333 / 1.78286	0.2200	0.0226	5.3000e-004	0.9437
Junior High School	0.242424 / 0.623376	0.0769	7.9000e-003	1.9000e-004	0.3300
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.2969**	**0.0305**	**7.2000e-004**	**1.2737**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0.693333 / 1.78286	0.2200	0.0226	5.3000e-004	0.9437
Junior High School	0.242424 / 0.623376	0.0769	7.9000e-003	1.9000e-004	0.3300
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.2969**	**0.0305**	**7.2000e-004**	**1.2737**

8.0 Waste Detail

8.1 Mitigation Measures Waste

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	14.3007	0.8452	0.0000	35.4294
Unmitigated	14.3007	0.8452	0.0000	35.4294

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	52.2	10.5961	0.6262	0.0000	26.2515
Junior High School	18.25	3.7046	0.2189	0.0000	9.1780
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**14.3007**	**0.8451**	**0.0000**	**35.4294**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	52.2	10.5961	0.6262	0.0000	26.2515
Junior High School	18.25	3.7046	0.2189	0.0000	9.1780
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**14.3007**	**0.8451**	**0.0000**	**35.4294**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
	0	0	0	0	0.73	

Boilers

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

User Defined Equipment

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-8.6200	0.0000	0.0000	-8.6200

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	6 / 4	-8.6200	0.0000	0.0000	-8.6200
Total		**-8.6200**	**0.0000**	**0.0000**	**-8.6200**

APPENDIX B

SITE PLANS

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SITE PLAN NEW CONSTRUCTION

SCALE : 1" = 30'

KEYNOTES

1. CURB PAINTED RED w/ "NO PARKING - FIRE LANE" EVERY 30 FEET. IN WHITE LETTERS.
2. 6' HIGH CHAIN LINK FENCE w/ MOW STRIP AND 12' WIDE DBL. LEAF CHAIN LINK GATE WITH PRIVACY SLATS.
3. SIGN SIMILAR TO 4/AS4 TO READ "SAFE DISPERSAL AREA"
4. NEW KNOX BOX ON PEDESTAL, SEE DETAIL1/AS1.
5. TRASH ENCLOSURE SEE DETAILS 7, 8, & 4 /AS6
6. SCHOOL SIGN MONUMENT TO REMAIN, PROTECT FROM DAMAGE DURING COURSE OF WORK
7. 6' HIGH x 20' WIDE DBL. LEAF CHAIN LINK GATE w/ MOW STRIP.
8. STRIPED AREA, 12'-0" WIDE w/ 24" WHITE PAINTED LETTERS TO READ "DELIVERIES ONLY"
9. TIE IN NEW FENCE TO THE NEAREST (E) FENCE POST.
10. (N) LOCATION OF (E) CONCRETE PICNIC TABLE / BENCHES
11. (N) TRUNCATED DOMES, SEE DETAIL 5/AS4

LEGEND

- NEW BUILDING
- NEW CONCRETE
- NEW ASPHALT PAVING
- EXISTING BUILDING
- EXISTING CONCRETE
- EXISTING ASPHALT PAVING, FOG SEAL ADDED
- CMU WALL w/ ANTI-GRAFFITI COATING, SEE STRUCTURAL DRAWINGS
- FH — FIRE HYDRANT. SEE CIVIL DRAWINGS (HYDRANTS ON PLAN ARE SHOWN EXAGGERATED IN SIZE FOR CLARITY).
- PROPERTY LINE
- (E) CHAIN LINK FENCING
- CHAIN LINK FENCING
- (N) BUILDING OVERHANG
- (E) BUILDING OVERHANG
- PHASE LINE

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LICENSED ARCHITECT
DOUGLAS K. JANZEN
C-14260
EXP. JUN 5 31, 2023
STATE OF CALIFORNIA

DRAWN BY:	TL
DATE:	3/22/22
REVISED:	

BLUE OAK ACADEMY
VISALIA UNIFIED SCHOOL DISTRICT
28050 ROAD 148, VISALIA, CA. 93292
TULARE COUNTY

PROJECT NUMBER: 2020017.20

DRAWING TITLE
SITE PLAN
NEW CONSTRUCTION

DRAWING NUMBER
AS3

APPENDIX C

TITLE V ENVIRONMENTAL REVIEW

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padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

TITLE V ENVIRONMENTAL HAZARDS REVIEW

BLUE OAK ACADEMY EXPANSION PROJECT
28050 ROAD 148, VISALIA
TULARE COUNTY, CALIFORNIA

Prepared for:

VISALIA UNIFIED SCHOOL DISTRICT

JUNE 2021

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

June 8, 2021
Project No. 2001-1401

Mr. Gerry Lemus, Director of Facilities
Visalia Unified School District
5000 West Cypress Avenue
Visalia, California 93277

Subject: **Title V Environmental Hazards Review**
Blue Oak Academy Expansion Project

Dear Mr. Lemus:

Padre Associates, Inc. (Padre), on behalf of Visalia Unified School District, has prepared this Title V Environmental Hazards Review for the 1.2-acre expansion property located adjacent to the Blue Oak Academy, 28050 Road 148, in Visalia, Tulare County, California (Project Site).

The Title V environmental hazards review was completed in general accordance with the requirements of the California Department of Education (CDE), School Facilities Planning Division (SFPD), school site selection criteria per California Code of Regulations (CCR), Title V, Section 14001.

Padre appreciates the opportunity to provide environmental consulting services to Visalia Unified School District. If you have any questions or require additional information, please contact the undersigned at (916) 333-5920, Ext. 240.

Sincerely,

PADRE ASSOCIATES, INC.

Matt Miller, G.I.T.
Staff Geologist

Alan J. Klein, R.E.P.A., C.P.E.S.C., QSD/QSP
Senior Environmental Scientist

Cc: Mr. Robert Gröeber, Assistant Superintendent, Visalia Unified School District
Mr. C. John Dominguez, President, School Site Solutions, Inc.

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Introduction

Padre Associates, Inc. (Padre), on behalf of Visalia Unified School District (District), completed a Title V environmental hazards review for the Blue Oak Academy Expansion Project located at 28050 Road 148 in Visalia, Tulare County, California (Project Site). Refer to **Plate 1** - Site Location and **Plate 2** - Site Map.

This document has been prepared based on the Title V Environmental Hazards Checklist used by the California Department of Education (CDE) School Facilities Planning Division (SFPD) staff for site-review purposes. The scope of services provided does not include the completion of a Phase I Environmental Site Assessment and/or a Geologic Hazards Report.

Site Location and Description

The Project Site is located in Section 2, Township 19 South, Range 25 East, of the Visalia, California USGS 7½-Minute Series, Topographic Map, 1949 (photorevised 1969). The Project Site lies at an approximate elevation 343-feet above mean sea level (amsl), and the approximate latitude and longitude near the center of the Project Site are identified to be:

Latitude (North)	36°17'54.9" N (36.298576),
Longitude (West)	119°14'32.1" W (-119.242249)

The Project Site (1.12-ac) represents the southwest corner of the school property (10.06-ac) parcel of land identified by the County of Tulare Assessor's Office as Assessor's Parcel Number (APN): 127-050-013. The school property is bordered to the north and east by tree orchards; to the south by Avenue 280 and to the west by Road 148.

The school property was formerly occupied by Union Elementary School until it was closed in the 1990's. The Tulare County Office of Education currently operates a school program on a portion of the property, while Blue Oak Academy occupies another portion of the property and is a Charter School associated with Visalia Unified School District.

Site Reconnaissance

On May 5, 2021, Mr. Matt Miller with Padre conducted a site reconnaissance at the Project Site. The Project Site consists of approximately 1.12 acres and consists of a landscaped grass field, parking lot, play field, and asphalt basketball courts. A solar array is mounted over a carport in the parking lot and no other buildings were identified on the Project Site.

The school's cafeteria building is located to the west and north of the Project Site. A school storage shed located adjacent to the lower northwest corner of the Project Site was inspected and found to contain standard landscaping and maintenance equipment a jerry can of gasoline, paint, cleaning products, and unlabeled spray containers. No evidence of spills or surface staining was observed. Site photographs are presented in **Appendix A**.

Title V Environmental Hazards Review

Facilities with Hazardous Air Emissions

Padre submitted a letter of inquiry to the San Joaquin Valley Air Pollution Control District (SJVAPCD) requesting information regarding facilities located within a ¼-mile radius of the Project Site, which might reasonably be anticipated to emit hazardous air. According to Matthew Cegielski, SJVAPCD, there are no permitted facilities located within a ¼ mile of the Project Site. A copy of the SJVAPCD correspondence is presented in **Appendix B**.

Hazardous Materials Handlers

On May 18, 2021, Padre reviewed the California Environmental Protection Agency (CalEPA) Department of Toxic Substances Control (DTSC) EnviroStor database, which lists federal superfund sites; state response sites; corrective action sites; and hazardous waste facilities. The Project Site is not listed on the EnviroStor database, and no facilities were identified within a ¼-mile radius of the Project Site.

On May 22, 2021, Padre reviewed the California State Water Resources Control Board (SWRCB) GeoTracker database, which lists leaking underground storage tank (LUST) sites; landfill disposal sites; and military sites. The Project Site is listed on the SWRCB GeoTracker database as a LUST site and one other facility is identified within a ¼-mile radius of the Project Site.

The Union Elementary School (28050 Road 148, Visalia, Ca.) is identified on the LUST database. In January 1988 a gasoline leak was discovered to have occurred at the site and a historical enforcement order was issued August 1988. The site is listed as Completed – Case Closed as of 8/29/1996 on GeoTracker however, no further details were available.

The Southern California Edison (SCE) Reactor Substation Site is located approximately 1,200 feet north-northwest of the Project Site at 28361 Road 148, Visalia, CA. The site has historically housed several large oil tanks and cooling towers used to generate energy. In April 2003 an environmental investigation performed by SCE found that the Site had been impacted by petroleum hydrocarbons and lead. In September 2003 groundwater samples were collected and analyzed for TPH and CAM 17 metals. TPH was not detected in groundwater although iron and selenium were detected at levels exceeding the California Department of Health and Human Services maximum contaminant level (MCL) for drinking water. In October 2003 approximately 496 tons of impacted soil was excavated from site. The soil was remediated, replaced, and compacted. In a letter dated, February 11, 2004, the Central Valley Water Quality Control Board stated that they "… will issue a closure letter for the soil and water pipelines…" and "We do not consider the exceedance of the selenium and iron MCLs in the water sample from the on-site water supply well to be related to site activities." The site is listed as "Completed – Case Closed as of 5/1/2003" on GeoTracker.

High Volume Water Pipelines

Padre contacted California Water Service of Visalia, California with a public information request regarding the presence of high-volume water pipelines (≥12-inch diameter) located within 1,500 feet of the Project Site. According to Laura John, Operations Clerk, California Water Service has a 12-inch diameter water line beneath Road 148 which terminates approximately 900 feet north of the Project Site.

Padre contacted the City of Visalia, Public Works Department, with a public information request regarding the presence of high-volume water pipelines (≥12-inch diameter) or City sewer services located within 1,500 feet of the Project Site. According to the City of Visalia Public Works Department there are no City managed high-volume water pipelines located within 1,500 feet of the Project Site.

High Pressure Natural Gas and Fuel Transmission Pipelines

According to the Southern California Gas (SCG) Pipeline Interactive Map (https://www.socalgas.com/stay-safe/pipeline-and-storage-safety/natural-gas-pipeline-map) there is a high-pressure natural gas distribution pipeline located along Avenue 280 south of the Project Site. A copy of the Interactive Map is presented in **Appendix C**.

Padre contacted the SCG Distribution Department to inquire about the identified natural gas pipeline. The request for information included: year of construction; pipeline diameter; pipeline pressure; and distance between upstream/downstream shutoff valves. At the time of this report preparation, the SCG Distribution Department has not responded to our request for information.

The SCG Transmission Department has indicated that they do not operate any facilities within 1,500 feet of the Project Site. A copy of the SCG correspondence is presented in **Appendix C**.

According to the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration website (https://www.npms.phmsa.dot.gov/), there are no hazardous liquid pipelines located within 1,500 feet of the Project Site. A copy of the National Pipeline Mapping System for the Project Site area is presented in **Appendix C**.

High Voltage Electric Power Lines

In consultation with the State Department of Health Services (DHS) and electric power companies, CDE has established the following limits for locating any part of a school site property line near the edge of easements for high-voltage power transmission lines:

- 100-feet from the edge of an easement for a 50-133 kilovolt (kV) line;
- 150-feet from the edge of an easement for 220-230 kV line; and
- 350-feet from the edge of an easement for a 500-550 kV line.

Padre contacted Southern California Edison (SCE) to inquire about the presence of high voltage power transmission lines located within 350-feet of the proposed school site. According to Christian Bright, Sr. Planning Specialist at SCE, there are two tower transmission lines 220kV line located along Road 148, approximately 80-feet and 170-feet west of the Project Site. Refer to Photo No.5 presented in **Appendix A**.

Flood Hazard

According to the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Maps, the Project Site is located within Community *Panel Number: 06107C0965E (June 16, 2009).* This Panel indicates that the Project Site is located in Zone X - 0.2% Annual Chance Flood Hazard (500-year flood): Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile. A copy of the FEMA flood hazard map is presented in **Appendix D.**

Dam Inundation

Catastrophic failure of dams is rare and is most likely to occur following significant seismic events. The Terminus Dam (Lake Kaweah) is located approximately 15.5 miles northeast of the Project Site. The Terminus Dam is an earthfill dam situated on the western shore of Lake Kaweah. The dam is approximately 255-feet high, was constructed in 1962, and has a capacity of 185,000 acre-feet. According to dam inundation maps provided by the California Office of Emergency Services (CalOES) and dated September 1962 (revised 1967), catastrophic failure of the Terminus Dam could result in flood waters reaching the Project in approximately 2-3 hours. Elevations not provided.

Earthquake Fault Zones

In 1972 the State of California passed the Alquist-Priolo Earthquake Fault Zoning Act (AP Act) to mitigate the hazard of surface faulting to structures utilized for human occupancy. The AP Act's primary purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The AP Act defines three categories of fault activity; active (demonstrated movement within the last 11,000 years), potentially active (movement within the past 11,000 to 2,000,000 years), and inactive (no movement within the past 2,000,000 years).

Since 1972 the California Geological Survey (CGS, formerly the California Division of Mines and Geology) has issued a series of 1"=2,000' scale maps delineating Earthquake Fault Zones (EFZs). Structures proposed within mapped EFZs require geologic investigations to demonstrate that the structures will not be constructed across active faults. If an active fault is identified within the boundaries of the Project Site, the proposed structures must be set back from the EFZ, generally a distance of 50-feet on either side of the identified fault location. The CGS mapping program is ongoing, and areas not currently identified as being within an EFZ may be included at some later time.

According to Earthquake Fault Zone (EFZ) maps issued by the California Geological Survey (CGS, formerly the California Division of Mines and Geology), the Project Site is not located within the boundaries of an Alquist-Priolo Earthquake Fault Zone, and no active faults are known to cross the Project Site (Jennings 2010).

Aboveground Water and/or Fuel Storage Tanks

During the Padre site reconnaissance conducted on May 5, 2021, two water aboveground storage tanks (ASTs) were observed on the Blue Oak Academy school site. Neither of the ASTs are located on the Project Site. Refer to Photos No.7 and No.8 in **Appendix A**.

According to information provided by Mr. Joe Haley with Visalia Unified School District, there is a 3,000-gallon capacity water AST located approximately 150-feet north of the Project Site. The 3,000-gallon capacity water AST contains potable water for Blue Oak Academy and is supplied by an onsite groundwater well. In addition, there is a 10,000-gallon capacity water AST located approximately 325-feet north of the Project Site. The 10,000-gallon capacity water AST is supplied by a second onsite groundwater well and is used for irrigation water and as a reserve for fire fighting at Blue Oak Academy.

No aboveground fuel storage tanks were observed at the Project Site or surrounding property.

Traffic Corridor

CDE defines freeways or busy traffic corridors as 100,000 vehicles per day in urban areas. Padre reviewed the California Department of Transportation (Caltrans) 2017 Annual Average Daily Traffic (AADT) Volume database for information regarding traffic corridors within 500-feet of the Project Site. No busy traffic corridors were identified within 500-feet of the Project Site.

Railroads

Padre conducted a site reconnaissance on May 5, 2021; reviewed the Google Earth satellite image dated February 21, 2021; and reviewed a USGS topographic map of the Visalia Quadrangle, 1949 (photorevised 1969). Based on a review of these sources, no railroad tracks were identified within 1,500-feet of the Project Site.

Airports

Padre reviewed the Caltrans Division of Aeronautics – Public Use Airports and Federal Airfields Map and reviewed the Google Earth satellite image dated February 21, 2021. Based on a review of these sources no airport or airfield was identified within 2-nautical miles of the Project Site.

Oil and Gas wells

According to the California Department of Conservation, Geologic Energy Management Division, Well Finder an online database and interactive map, there are no reported active, inactive, plugged or abandoned oil wells, natural gas wells, and/or geothermal wells located within a one-mile radius of the Project Site. The online database can be accessed at https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx.

Summary of Findings

Padre makes the following conclusions and recommendations based on the results of this Title V environmental hazards review:

- According to SJVAPCD, there are no facilities located within a ¼-mile of the Project Site that are permitted to emit hazardous air emissions;
- According to the DTSC Envirostor database, and the SWRCB GeoTracker data base, there was a LUST site located at the parent address of the Project Site. The case was closed in August 1996;
- According to Cal Water Services a 12-inch water pipeline terminates approximately 900 feet north of the Project Site along Road 148;
- According to the City of Visalia, there are no pressurized sanitary sewer lines within 1,500 feet of the Project Site;
- According to SCG there is an active distribution natural gas pipeline located along Road 280, adjacent and south of the Project Site.
- According to SCE there are two tower transmission lines 220kV line located along Road 148, approximately 80-feet and 170-feet west of the Project Site.
- The Project Site is located in Zone X - 0.2% Annual Chance Flood Hazard (500-year flood): Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile;
- According to the dam inundation map obtained from OES for Terminus Dam (1962, revised 1967), the Project Site may experience inundation from flood waters in approximately 2-3 hours in the event of a catastrophic dam failure;
- At this time, the Project Site is not located within the boundaries of an Alquist-Priolo Earthquake Fault Zone, and no active faults are known to traverse the Project Site;
- There are two water ASTs (3,000-gal and 10,000-gal) located north and adjacent to the Project Site. No aboveground fuel storage tanks were observed at the Project Site or surrounding properties;
- There are no high-volume traffic corridors identified within 500-feet of the Project Site;

- There are no railroads identified within 1,500-feet of the Project Site;
- There are no airports or airfields identified within 2-nautical miles of the Project Site;
- According to CalGEM, there are no active, inactive, plugged or abandoned oil wells, natural gas wells, and/or geothermal wells located within a one-mile radius of the Project Site.

A summary of the Title V environmental hazards review is presented in **Table 1**. This report was prepared in general accordance with California *Education Code* §17212.

Table 1 – Title V Environment Hazards Summary

Site Identification	Power Lines within 350-ft or Cell Towers on or near the site	Natural Gas pipeline(s) (>80 psig)	Hazardous Liquid Pipeline(s)	Facilities with hazardous air emissions within ¼ mile	High Volume Water Pipeline(s) (≥12-inches)	Flood Hazard
Expansion Project	**Yes**[1]	**Yes**[2]	No	No	**Yes**[3]	No
Site Identification	**Dam Inundation**	**Large aboveground water/fuel tanks**	**Earthquake Fault Zone (EFZ)**	**Freeway or other busy traffic corridor within 500-ft**	**Railroad tracks within 1500-ft**	**Airports within 2-nautical miles**
Expansion Project	**Yes**[4]	**Yes**[5]	No	No	No	No

Notes:
Yes – Additional studies/information will/may be required by CDE.
No – Additional studies do not appear necessary.
Pending – Information will be provided separate cover when received.
1 – Two sets of 220kv towers located along Road 148.
2 – SoCal Gas high-pressure distribution line located along Avenue 280.
3 – 12-inch water line located along Road 148 approx. 900 feet north of the Project Site.
4 – Potential Dam inundation in approx. 2-3 hours from catastrophic failure of Terminus Dam.
5 – Two water ASTs (3,000-gal and10,000-gal) located north and adjacent to the Project Site.

Limitations

This report has been prepared by Padre Staff for the Visalia Unified School District under the professional supervision of the principal and/or senior staff whose signatures and/or seals(s) appear hereon. Neither Padre, nor any employee assigned to this assessment program, has an interest or contemplated interest, financial or otherwise, in the subject site or surrounding properties, or in any entity that owns, leases, or occupies the subject site or surrounding properties or that may be responsible for environmental issues identified during the course of this assessment, or a personal bias with respect to the parties involved.

The information contained in this report has received appropriate technical review and approval. The conclusions represent professional judgment and are founded upon the findings of the assessment activities identified in the report and the interpretation of such data, based on our experience and expertise according to the existing standard of care. No other warranty or limitation exists, either expressed or implied.

In expressing the opinions stated in this report, Padre has exercised the degree of skill and care ordinarily exercised by a reasonable, prudent environmental professional in the same community and in the same time frame, given the same or similar facts and circumstances. Documentation and data provided by others, or from the public domain, and referred to in the preparation of this assessment, have been used and referenced with the understanding that Padre does not assume responsibility or liability for their accuracy.

-- o –

REFERENCES

California Department of Conservation, Geologic Energy Management Division, Well Finder https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx.

California Department of Toxic Substances Control, Envirostor Database.

California Geological Survey, Earthquake Fault Zones (EFZs) online Mapping.

California Water Service, Laura John, Operations Clerk.

Federal Emergency Management Agency (FEMA), Flood Insurance Rate Maps.

Google Earth.

Jennings and Bryant, 2010, Fault Activity Map of California, California Geological Survey.

Office of Emergency Services, Dam Inundation Maps.

Pipeline and Hazardous Materials Safety Administration, National Pipeline Mapping System.

San Joaquin Valley Air Pollution Control District.

Southern California Edison, maprequests@SCE.com.

Southern California Gas (SCG) Gas Transmission Pipeline Interactive Map (https://www.socalgas.com/stay-safe/pipeline-and-storage-safety/natural-gas-pipeline-map).

Southern California Gas Company, Kris McCarthy, Pipeline Integrity Manager, Inquiries@semprautilities.com.

State Water Resources Control Board Geotracker website (http://geotracker.swrcb.ca.gov)

Tulare, County of, Assessor's Office.

U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, website: https://www.npms.phmsa.dot.gov/.

U.S. Geological Survey, Topographic Map; Visalia, California, 1949 (photorevised 1969).

Visalia, City of, Public Works Department, Adrian Rubalcaba, Associate Engineer.

PLATES

U.S.G.S. 7.5 MINUTE QUADRANGLES

0 5000'
SCALE

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

BLUE OAK ACADEMY EXPANSION PROJECT
28050 ROAD 148
VISALIA, TULARE COUNTY, CALIFORNIA

PROJECT NO.	DATE	DR. BY	APP. BY
2101-1401	4/28/21	AC	AJK

PLATE 1

SITE LOCATION

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

GOOGLE EARTH IMAGERY (02/18)

0 250
FEET

BLUE OAK ACADEMY EXPANSION PROJECT
28050 ROAD 148
VISALIA, TULARE COUNTY, CALIFORNIA

PROJECT NO.	DATE	DR. BY	APP. BY
2101-1401	4/28/21	AC	AJK

PLATE 2

SITE MAP

APPENDIX A

SITE PHOTOGRAPHS

Photo No.1 – Looking southwest across the Project Site.	Photo No.2 – Looking northeast across the Project Site.
Photo No.3 – Looking southeast across the Project Site at parking lot and solar array carport.	Photo No.4 – Looking northeast across the Project Site from the intersection of Road 148 and Avenue 280.

Inspection Date: 5-5-21

Photo No.5 – Powerlines west and north of the Project Site.	Photo No.6 – Inside storage shed located adjacent to the northwest corner of the Project Site.
Photo No.7 – Reported 3,000-gallon Water Tank, located approx. 150-feet north of the Project Site.	Photo No.8 – Reported 10,000-gallon Water Tank, located approx. 325-feet northwest of the Project Site.

Inspection Date: 5-5-21

APPENDIX B

SJVAPCD CORRESPONDENCE

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

PUBLIC RECORD RELEASE REQUEST
FOR

Visalia Unified School District
PRR Request #: S-2021-4-13

Proposed Location:
The proposed school is to be located in the northeast corner of Avenue 280 and Avenue 148 (LatLong 36.298523, -119.242260) in Visalia.

The San Joaquin Valley Air Pollution District has reviewed the location according to Public Resource Code 21151.8 and makes the following conclusions:

Permitted Facilities:

- No Permitted facilities are located within a ¼ mile.

Freeway, High Volume Roadways, & Railways:

- The District recommends the PRR applicant contact CALTRANs and/or their local transportation agency to identify freeways and busy traffic corridors as defined in the Health and Safety Code.
- No Railways are located within a ¼ mile.

Other Facilities:

- There are agricultural facilities within ¼ mile of the proposed school site. These sources may reasonably be anticipated to emit hazardous compounds or handle hazardous materials from the operation of internal combustion engines driving irrigation pumps, gasoline dispensing tanks, application of pesticides, or other agricultural-related operations.

Prepared by
Matthew Cegielski
San Joaquin Valley Air Pollution Control District

APPENDIX C

PIPELINE INFORMATION

Gas Transmission Pipeline Interactive Map - Tulare

-119.238 36.304 Degrees

Transmission Technical
Services Department

9400 Oakdale Ave
Chatsworth, CA 91311
SC9314

May 3, 2021

Matt Miller
Padre Associates, Inc
mmiller@padreinc.com

Subject: **Blue Oak Academy, Visalia**

DCF: **0816-21NC**

The Transmission Department of SoCalGas does not operate any facilities within your proposed improvement. However, the Distribution Department of SoCalGas may maintain and operate facilities within your project scope.

To assure no conflict with the Distribution's pipeline system, please e-mail them at:

NorthwestDistributionUtilityRequest@semprautilities.com

Best Regards,

SoCalGas Transmission Technical Services
SoCalGasTransmissionUtilityRequest@semprautilities.com

Pipeline and Hazardous Materials Safety Administration

NATIONAL PIPELINE MAPPING SYSTEM

Legend

- Gas Transmission Pipelines
- Hazardous Liquid Pipelines

1000 m
2000 ft

Pipelines depicted on this map represent gas transmission and hazardous liquid lines only. Gas gathering and gas distribution systems are not represented.

This map should never be used as a substitute for contacting a one-call center prior to excavation activities. Please call 811 before any digging occurs.

Questions regarding this map or its contents can be directed to npms@dot.gov.

Projection: Geographic

Datum: NAD83

Map produced by the Public Viewer application at www.npms.phmsa.dot.gov

Date Printed: Apr 28, 2021

811 Know what's below. Call before you dig.

APPENDIX D

FEMA FLOOD MAP

National Flood Hazard Layer FIRMette

FEMA

119°14'52"W 36°18'11"N

119°14'14"W 36°17'42"N

0 250 500 1,000 1,500 2,000 Feet 1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/28/2021 at 5:22 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX D

NATIVE AMERICAN HERITAGE COMMISSION CORRESPONDENCE

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Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Blue Oak Academy Modernization Project

County: Tulare

USGS Quadrangle Name: Exeter

Township: 19S **Range:** 25E **Section(s):** 2

Company/Firm/Agency: School Site Solutions, Inc.

Street Address: 2015 H Street

City: Sacramento, CA **Zip:** 95811

Phone: 916-930-0736

Fax: 916-784-0470

Email: john@schoolsitesolutions.com

Project Description:

The Visalia Unified School District (District) proposes to construct a new administration and classroom building, expand the existing parking lot, provide off-site improvements, and remodel all facilities on the existing Blue Oak Academy campus on Assessor's Parcel Number (APN) 127-050-013 (Figure 2).

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

EXETER QUADRANGLE
CALIFORNIA - TULARE COUNTY
7.5-MINUTE SERIES

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and 1 000-meter grid:Universal Transverse Mercator, Zone 11S
This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery	NAIP, June 2016 – October 2016	
Roads	U.S. Census Bureau,	2016
Names	GNIS,	1981 - 2018
Hydrography	National Hydrography Dataset,	2006 - 2018
Contours	National Elevation Dataset,	2008
Boundaries	Multiple sources; see metadata file	2016 - 2017
Public Land Survey System	BLM,	2018
Wetlands	FWS National Wetlands Inventory	1984

MN
GN
1°18'
23 MILS
12°41'
226 MILS
UTM GRID AND 2017 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000-meter Square ID
KA LA
Grid Zone Designation
11S

SCALE 1:24 000
KILOMETERS 1 0.5 0 1 2
METERS 1000 500 0 1000 2000
MILES 1 0.5 0 1
FEET 1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18

CALIFORNIA
QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

1 Monson
2 Ivanhoe
3 Woodlake
4 Visalia
5 Rocky Hill
6 Tulare
7 Cairns Corner
8 Lindsay
ADJOINING QUADRANGLES

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

EXETER, CA
2018

NGA REF NO. USGS X2K14740

Figure 1: Project Location

Figure 2: Project Site

Native American Heritage Commission
Native American Contacts List
May 28, 2021

Big Sandy Rancheria of Western Mono Indians
Elizabeth D. Kipp, Chairperson
PO. Box 337
Auberry ,CA 93602
lkipp@bsrnation.com
(559) 374-0066
(559) 374-0055
Western Mono

Dunlap Band of Mono Indians
Benjamin Charley Jr., Tribal Chair
P.O. Box 14
Dunlap ,CA 93621
ben.charley@yahoo.com
(760) 258-5244
Mono

Dunlap Band of Mono Indians
Dirk Charley, Tribal Secretary
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Fresno ,CA 93727
dcharley2016@gmail.com
(559) 554-5433
Mono

Kern Valley Indian Community
Julie Turner, Secretary
P.O. Box 1010
Lake Isabella ,CA 93240
(661) 340-0032 Cell
Kawaiisu
Tubatulabal

Kern Valley Indian Community
Robert Robinson, Chairperson
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Lake Isabella ,CA 93240
bbutterbredt@gmail.com
(760) 378-2915 Cell
Tubatulabal
Kawaiisu

Kern Valley Indian Community
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krazykendricks@hotmail.com
(661) 821-1733
(661) 972-0445
Kawaiisu
Tubatulabal

Santa Rosa Rancheria Tachi Yokut Tribe
Leo Sisco, Chairperson
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Lemoore ,CA 93245
(559) 924-1278
(559) 924-3583 Fax
Tache
Tachi
Yokut

Tubatulabals of Kern Valley
Robert L. Gomez, Jr., Tribal Chairperson
P.O. Box 226
Lake Isabella ,CA 93240
(760) 379-4590
(760) 379-4592 Fax
Tubatulabal

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589
Porterville ,CA 93258
neil.peyron@tulerivertribe-nsn.gov
(559) 781-4271
(559) 781-4610 Fax
Yokuts

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas ,CA 93906
kwood8934@aol.com
(831) 443-9702
Foothill Yokuts
Mono
Wuksache

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans Tribes for the proposed:
Blue Oak Modernization Project, Tulare County.

.

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[**Vacant**]

COMMISSIONER
[**Vacant**]

COMMISSIONER
[**Vacant**]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

May 28, 2021

John Dominguez, President

School Site Solutions, Inc.

Via Email to: john@schoolsitesolutions.com

Re: Blue Oak Modernization Project, Tulare County

Dear Mr. Dominguez:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,

Nancy Gonzalez-Lopez
Cultural Resources Analyst

Attachment

APPENDIX E

TRAFFIC IMPACT ANALYSIS

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Traffic Impact Analysis Report

Blue Oak Academy Modernization

Located on the Northeast Corner of Road 148 and Avenue 280

In the County of Tulare, California

Prepared for:

Visalia Unified School District
5000 West Cypress Avenue
Visalia, CA 93277

February 04, 2022

Project No. 018-003

JLB TRAFFIC ENGINEERING, INC.

Traffic Engineering, Transportation Planning, & Parking Solutions
516 W. Shaw Ave., Ste. 103
Fresno, CA 93704
Phone: (559) 570-8991
www.JLBtraffic.com

Traffic Engineering, Transportation Planning, & Parking Solutions

Traffic Impact Analysis Report

For the Blue Oak Academy Project located on the Northeast Corner of Road 148 and Avenue 280

In the County of Tulare, CA

February 04, 2022

This Traffic Impact Analysis Report has been prepared under the direction of a licensed Traffic Engineer. The licensed Traffic Engineer attests to the technical information contained therein and has judged the qualifications of any technical specialists providing engineering data from which recommendations, conclusions and decisions are based.

Prepared by:

Jose Luis Benavides, PE, TE

President

REGISTERED PROFESSIONAL ENGINEER
JOSE LUIS BENAVIDES
No.T 2328
Exp:06/30/23
TRAFFIC
STATE OF CALIFORNIA

Traffic Engineering, Transportation Planning, & Parking Solutions
516 W. Shaw Ave., Ste. 103
Fresno, CA 93704
Phone: (559) 570-8991
www.JLBtraffic.com

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Introduction and Summary

Introduction

This Report describes a Traffic Impact Analysis (TIA) prepared by JLB Traffic Engineering, Inc. (JLB) for the Blue Oak Academy (Project) located on the northeast corner of Road 148 and Avenue 280 in the County of Tulare. The Project proposes to modernize the current Blue Oak Academy campus by constructing a new administration/classroom building, expanding the existing parking lot, providing off-site improvements such as adding a driveway access point to Avenue 280 and remodeling all facilities on the existing campus. Figure 1 shows the location of the proposed Project site relative to the surrounding roadway network.

The purpose of the TIA is to evaluate the potential on-site and off-site traffic impacts, identify short-term and long-term roadway needs, determine potential roadway improvement measures and identify any critical traffic issues that should be addressed in the ongoing planning process. The TIA primarily focused on evaluating traffic conditions at study intersections that may potentially be impacted by the proposed Project. The Scope of Work was prepared via consultation with City of Visalia, County of Tulare and Caltrans staff.

Summary

The potential traffic impacts of the proposed Project were evaluated in accordance with the standards set forth by the Level of Service (LOS) policies of the County of Tulare.

Existing Traffic Conditions

- JLB conducted a search of the Statewide Integrated Traffic Records System (SWITRS) to obtain collision reports for the most recent three-year period. Based on a review of the collision reports, a total of six (6) collisions were reported within the influence zone of the existing study intersection. Of the six collisions, two were determined to be susceptible to correction during any twelve-month period. Therefore, the number of collisions susceptible to correction experienced at the existing study intersection is considered less than significant.
- At present, all study intersections operate at an acceptable LOS during both peak periods.

Opening Year plus Project Traffic Conditions

- The Project proposes to have two (2) access points. One access point along the east side of Road 148 approximately 150 feet north of Avenue 280. The other access point will be along the north side of Avenue 280 approximately 300 feet east of Road 148. Both of these access points are proposed as full access.
- At buildout, the proposed Project is estimated to generate a maximum of 176 daily trips, 56 AM peak hour trips and 30 PM peak hour trips.
- Under this scenario, all study intersections are projected to continue operating at an acceptable LOS during both peak periods.

Cumulative Year 2042 No Project Traffic Conditions

- Under this scenario, the intersection of Road 148 and Avenue 280 is projected to exceed its LOS threshold during the AM peak period. To improve the LOS at this intersection, the addition of a turn pocket is recommended. Additional details as to the recommended improvements for the intersection are presented later in this Report.

Cumulative Year 2042 plus Project Traffic Conditions

- Under this scenario, the intersection of Road 148 and Avenue 280 is projected to exceed its LOS threshold during AM peak period. To improve the LOS at this intersection, the addition of a turn pocket is recommended. Additional details as to the recommended improvements for the intersection are presented later in this Report.

Project Equitable Fair Share Impact Analysis

- It is recommended that the Project contribute its equitable fair share as presented in Table XIII.

Queuing Analysis

- It is recommended that the County consider adding a northbound left turn with a minimum storage capacity as indicated in the Queuing Analysis.

Scope of Work

The TIA focused on evaluating traffic conditions at study intersections that may potentially be impacted by the proposed Project. On October 27, 2021, a Draft Scope of Work for the preparation of a Traffic Impact Analysis for this Project was provided to the City of Visalia, County of Tulare and Caltrans for their review and comment. Any comments to the proposed Scope of Work were to be provided by November 19, 2021.

On October 27, 2021, the County of Tulare replied to the scope of work that they had no comments. However, they requested that the CEQA Checklist be completed. The CEQA Checklist will be completed by the Environmental Consultant. On October 28, 2021, Caltrans replied to the Scope of Work that they had no comments. On November 12, 2021, the City of Visalia replied to the scope of work that they had no comments. The Draft Scope of Work and the comments received from the lead agency and responsible agencies are included in Appendix A.

Study Facilities

The existing intersection peak hour turning movement and segment volume counts were conducted at the study intersections and segments between November and December 2021, while schools in the vicinity of the Project site were in session. The intersection turning movement counts included pedestrian and bicycle volumes. In the Draft Scope of Work, JLB determined that the traffic counts collected for this Project would not need to be escalated upward as a result of the business restrictions and limitations imposed by the State of California or local government entities due to the pandemic. The traffic counts for the existing study intersections and segments are contained in Appendix B. The existing intersection turning movement volumes, intersection geometrics and traffic controls are illustrated in Figure 2.

Study Intersections

Location

1. Avenue 280 / Road 148
2. Avenue 280 / Future Driveway

Study Scenarios

Existing Traffic Conditions

This scenario evaluates the Existing Traffic Conditions based on existing traffic volumes and roadway conditions from traffic counts and field surveys conducted in November and December 2021.

Opening Year plus Project Traffic Conditions

This scenario evaluates total traffic volumes and roadway conditions based on the Opening Year plus Project Traffic Conditions. For purposes of this TIA, it is assumed that the project will be fully operational by 2023. The Opening Year plus Project traffic volumes were obtained by first expanding the Base Year 2021 traffic volumes by an average annual growth rate for two (2) years to the year 2023 and then adding the Project Only Trips. Based on a review of the Tulare County Association of Governments (TCAG) models, traffic in the vicinity of the Project is projected to grow at an average annual growth rate of 1.63 percent. The Project Only Trips to the study facilities were developed based on existing travel patterns, the existing roadway network, engineering judgment, data provided by the developer such as student density maps, knowledge of the study area, existing residential and commercial densities, and the County of Tulare *General Plan 2030 Update*'s Circulation Element. The TCAG models are contained in Appendix C.

Cumulative Year 2042 No Project Traffic Conditions

This scenario evaluates total traffic volumes and roadway conditions based on the Cumulative Year 2042 No Project Traffic Conditions. The Cumulative Year 2042 No Project traffic volumes were obtained by using the Tulare CAG model (Base Year 2019 and Cumulative Year 2035) and the existing traffic counts. Under this scenario, the increment method, as recommended by the Model Steering Committee was utilized to determine the Cumulative Year 2035 increment. The Cumulative Year 2035 increment was expanded by the model derived growth rate of 1.63% for 7 years to create the Cumulative Year 2042 increment. The Cumulative Year 2042 increment was added to the Baseline Volumes to create the Cumulative Year 2042 No Project traffic volumes. The Tulare CAG models are contained in Appendix C.

Cumulative Year 2042 plus Project Traffic Conditions

This scenario evaluates total traffic volumes and roadways conditions based on the Cumulative Year 2042 plus Project Traffic Conditions. The Cumulative Year 2042 plus Project traffic volumes were obtained by adding the Project Only Trips to the Cumulative Year 2042 No Project scenario.

LOS Methodology

LOS is a qualitative index of the performance of an element of the transportation system. LOS is a rating scale running from "A" to "F", with "A" indicating no congestion of any kind and "F" indicating unacceptable congestion and delays. LOS in this study describes the operating conditions for signalized and unsignalized intersections.

The *Highway Capacity Manual* (HCM) 6th Edition is the standard reference published by the Transportation Research Board and contains the specific criteria and methods to be used in assessing LOS. Synchro software was used to define LOS in this study. Details regarding these calculations are included in Appendix D.

While LOS is no longer the criteria of significance for traffic impacts in the state of California, the County of Tulare continues to apply congestion-related conditions or requirements for land development projects through planning approval processes outside of CEQA Guidelines in order to continue the implementation of the County of Tulare *General Plan 2030 Update*'s policies.

LOS Thresholds

The City of Visalia *General Plan Update*'s Circulation Element has established LOS D as the acceptable level of traffic congestion on most major streets. Therefore, LOS D is used to evaluate the potential significance of LOS impacts to City of Visalia roadway facilities.

The County of Tulare *General Plan 2030 Update*'s Circulation Element has established LOS D as the acceptable level of traffic congestion on county roads. Therefore, LOS D is used to evaluate the potential significance of LOS impacts to Tulare County intersections. In this case, since all study intersections fall within the County of Tulare, the County of Tulare LOS threshold of LOS D was utilized as the criteria of significance for this TIA.

Caltrans endeavors to maintain a target LOS at the transition between LOS C and D on State highway facilities consistent with the *Guide for The Preparation of Traffic Impact Studies* (Caltrans 2002). However, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. In this TIA, however, all study intersections fall within the County of Tulare. Therefore, the County of Tulare LOS thresholds are utilized.

Operational Analysis Assumptions and Defaults

The following operational analysis values, assumptions and defaults were used in this study to ensure a consistent analysis of LOS among the various scenarios.

- At existing intersections, the heavy vehicle factor observed for each intersection, or a minimum of 3 percent, was utilized under all scenarios.
- The number of observed pedestrians at existing intersections was utilized under all study scenarios.
- At all study intersections, the observed Peak Hour Factor (PHF) for the intersection of Road 148 and Avenue 280 was utilized in the Existing and Opening Year plus Project scenarios.
- For the Cumulative Year 2042 scenario, the following PHF was utilized to reflect traffic operations and an increase in future traffic volumes. As roadways start to reach their saturated flow rates, PHF's tend to increase to 0.90 or higher in urban settings. The PHF's were established based on historical traffic counts collected by JLB for intersections in proximity of school sites.
  - A PHF of 0.86, or the existing PHF if higher, is utilized during the AM peak.
  - A PHF of 0.90, or the existing PHF if higher, is utilized during the PM peak.

Existing Traffic Conditions

Roadway Network

The Project site and surrounding study area are illustrated in Figure 1. Important roadways serving the Project are discussed below.

Road 148 is an existing north-south two-lane undivided roadway adjacent to the proposed Project site. In this area, Road 148 extends south of Walnut Avenue to Avenue 272. Road 148 is a two-lane undivided local road between Walnut Avenue to Avenue 272. The County of Tulare *General Plan 2030 Update*'s Circulation Element designates Road 148 as a local road between Walnut Avenue and the County of Tulare southern boundary.

Avenue 280 is an existing east-west two-lane undivided roadway adjacent to the proposed Project site. In this area, Avenue 280 extends east of State Route 99 through the County of Tulare. Avenue 280 is a four-lane divided collector between State Route 99 to Akers Street, a four-lane major arterial between Akers Street to Lovers Lane and a two-lane collector between Lovers Lane to Farmersville Boulevard. The County of Tulare *General Plan 2030 Update'*s Circulation Element designates Avenue 280 as a collector between State Route 99 and Akers Street, a major arterial between Akers Street and Lovers Lane and a collector between Lovers Lane to Farmersville Boulevard.

Collision Analysis

JLB conducted a search of SWITRS to obtain collision reports for the most recent three-year period (January 1st, 2018 to December 31st, 2020). The SWITRS "is a database that serves as a means to collect and process data gathered from a collision scene. The internet SWITRS application is a tool by which the California Highway Patrol (CHP) staff and members of its Allied Agencies throughout California can request various types of statistical reports in an electronic format." All collision reports between January 1st, 2018 and December 31st, 2020 were included in the collision analysis. The SWITRS collision data are found in Appendix E.

In the three-year period, a total of six (6) collisions were reported within the influence zone (within 250 feet) of the existing study intersection. To satisfy Warrant 7, Crash Experience, five or more reported crashes susceptible to correction by a traffic control signal have to occur within a 12-month period. After a review of the collision data from this three-year period, a total of two (2) collision were determined to be susceptible to correction with the implementation of an all-way stop or traffic signal control. One (1) collision deemed correctable by a change in traffic control was the highest within any twelve month period analyzed. Table I summarizes the type of collision, severity, violation and identifies involvement with another vehicle, a pedestrian/bicyclist or a fixed object. Based on the three-year collision data contained within SWITRS, all study intersections have experienced a relatively low number and severity of collisions per year. The number of correctable collisions experienced at this intersection is considered less than significant. Based on the number of correctable collisions, JLB does not recommend any changes to the existing traffic control at the existing study intersection.

Table I: Three-Year (2018-2020) Intersection Collision Analysis

ID	Intersection	Number of Collisions	Type of Collision						Severity					Type of Violation						Motor Vehicle Involved with...			
			Broadside	Rear End	Head-On	Hit Object	Sideswipe	Other	Fatal	Severe Injury	Other Visible Injury	Complaint of Pain/Injury	Property Damage Only	Traffic Signals & Signs	Right of Way	Unsafe Speed	Improper Turning	Driving Under Influence	Other	Pedestrian/Bicyclist	Other Motor Vehicle	Fixed Object	Other
1	Road 148 / Avenue 280	**6**	2	4	-	-	-	-	-	-	1	2	3	1	1	4	-	-	-	-	6	-	-
Totals		**6**	**2**	**4**	**-**	**-**	**-**	**-**	**-**	**-**	**1**	**2**	**3**	**1**	**1**	**4**	**-**	**-**	**-**	**-**	**6**	**-**	**-**

Traffic Signal Warrants

The CA MUTCD indicates that an engineering study of traffic conditions, pedestrian characteristics and physical features of an intersection shall be conducted to determine whether the installation of traffic signal controls are justified. The CA MUTCD provides a total of nine (9) warrants to evaluate the need for traffic signal controls. These warrants include 1) Eight-Hour Vehicular Volume, 2) Four-Hour Vehicular Volume, 3) Peak Hour, 4) Pedestrian Volume, 5) School Crossing, 6) Coordinated Signal System, 7) Crash Experience, 8) Roadway Network and 9) Intersection Near a Grade Crossing. Signalization of an intersection may be appropriate if one or more of the signal warrants is satisfied. However, the CA MUTCD also states that "[t]he satisfaction of a signal warrant or warrants shall not in itself require the installation of a traffic control signal" (Caltrans 2020).

If traffic signal warrants are satisfied when a LOS threshold impact is identified at an unsignalized intersection, then installation of a traffic signal control may serve as an improvement measure. For instances where traffic signal warrants are satisfied, a traffic signal control is not considered to be the default improvement measure. Since the installation of a traffic signal control typically requires the construction of additional lanes, an attempt is made to improve the intersection approach lane geometrics in order to improve its LOS while maintaining the existing intersection controls. If the additional lanes did not result in acceptable LOS at the intersection, then in those cases implementation of a traffic signal control would be considered.

Warrants 1 and 3 were prepared for the unsignalized study intersection under the Existing Traffic Conditions scenario. These warrants are contained in Appendix J. Under this scenario, the unsignalized study intersection does not satisfy either Warrant 1 or 3. Based on the traffic signal warrants, operational analysis and engineering judgment, it is not recommended that the County consider implementing traffic signal controls at the unsignalized study intersection especially since it operates at an acceptable LOS during both peak periods under stop sign control.

Results of Existing Level of Service Analysis

Figure 2 illustrates the Existing Traffic Conditions turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Existing Traffic Conditions scenario are provided in Appendix F. Table II presents a summary of the Existing peak hour LOS at the study intersections.

At present, all study intersections operate at an acceptable LOS during both peak periods.

Table II: Existing Intersection LOS Results

ID	*Intersection*	*Intersection Control*	*AM (7 - 9) Peak Hour*		*PM (2 - 4) Peak Hour*	
			Average Delay (sec/veh)	*LOS*	*Average Delay (sec/veh)*	*LOS*
1	Road 148 / Avenue 280	Two-Way Stop	28.1	D	24.2	C
2	Project Driveway / Avenue 280	Does Not Exist	-	-	-	-

Note: LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

Blue Oak Academy Modernization - County of Tulare
Vicinity Map

Figure 1

LEGEND

= STUDY INTERSECTION

N

Not To Scale

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Blue Oak Academy Modernization - County of Tulare
Existing - Traffic Volumes, Geometrics, and Controls

Figure 2

LEGEND

- # = STUDY INTERSECTION
- XX = AM PEAK HOUR TRIPS
- (XX) = PM PEAK HOUR TRIPS
- = STOP SIGN

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Opening Year plus Project Traffic Conditions

Project Description

The Project proposes to modernize the current Blue Oak Academy campus by constructing a new administration/classroom building, expanding the existing parking lot, providing off-site improvements such as adding a driveway access point to Avenue 280 and remodeling all facilities on the existing campus. Figure 3 illustrates the latest Project Site Plan.

Project Access

Based on the Project Site Plan, access to and from the Project site will be from two (2) access points. An access point is proposed along the east side of Road 148 approximately 150 feet north of Avenue 280. The second access point is proposed along the north side of Avenue 280 approximately 300 feet east of Road 148. Both access points are proposed as full access.

JLB analyzed the location of the existing and proposed roadways and access points relative to those in the vicinity of the Project site. A review of the existing and proposed roadways and access points indicates that they are located at points that minimize traffic operational impacts to existing and future roadway networks. A Project Site Plan can be found in Figure 3.

Project Trip Generation

The trip generation rates for the proposed Project were obtained from the 11th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE). Table III presents the trip generation for the proposed Project with trip generation rates for a Middle School / Junior High School (ITE Code 522) adding 88 students and an Elementary School (ITE Code 520) removing 4 students. At buildout, the proposed Project is estimated to generate a maximum of 176 daily trips, 56 AM peak hour trips and 30 PM peak hour trips.

Table III: Project Trip Generation

Land Use (ITE Code)	*Size*	*Unit*	*Daily*		*AM (7-9) Peak Hour*						*PM (2-4) Peak Hour*					
			Rate	*Total*	*Trip Rate*	*In*	*Out*	*In*	*Out*	*Total*	*Trip Rate*	*In*	*Out*	*In*	*Out*	*Total*
						%						*%*				
Elementary School (520)	-4	students	2.27	-9	0.74	54	46	-2	-1	-3	0.45	46	54	-1	-1	-2
Middle School / Junior High School (522)	88	students	2.10	185	0.67	54	46	32	27	59	0.36	46	54	15	17	32
Total Driveway Trips				**176**				**30**	**26**	**56**				**14**	**16**	**30**

Trip Distribution

The trip distribution assumptions were developed based on existing travel patterns, the existing roadway network, engineering judgment, data provided by the VUSD such as student density maps, knowledge of the study area, existing residential and commercial densities, and the Tulare County *General Plan 2030 Update*'s Transportation and Circulation Element in the vicinity of the Project site. Figure 4 illustrates the Project Only Trips at the study intersections.

Traffic Signal Warrants

Warrant 3 was prepared for the unsignalized intersections under the Opening Year plus Project Traffic Conditions scenario. These warrants are contained in Appendix J. Under this scenario, no unsignalized study intersection is projected to satisfy Warrant 3. Based on the traffic signal warrants, operational analysis and engineering judgment, it is not recommended that the City consider implementing traffic signal controls at any of the unsignalized study intersections, especially since these are projected to operate at an acceptable LOS during both peak periods under stop sign control.

Results of Opening Year plus Project Level of Service Analysis

The Opening Year plus Project Traffic Conditions scenario assumes the existing roadway geometrics and traffic controls will remain in place with the addition of an access point along the north side of Avenue 280. Figure 5 illustrates the Opening Year plus Project turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Opening Year plus Project Traffic Conditions scenario are provided in Appendix G. Table IV presents a summary of the Opening Year plus Project peak hour LOS at the study intersections.

Under this scenario, all study intersections are projected to continue operating at an acceptable LOS during both peak periods.

Table IV: Opening Year plus Project Intersection LOS Results

ID	Intersection	Intersection Control	AM (7 - 9) Peak Hour		PM (2 - 4) Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	Road 148 / Avenue 280	Two-Way Stop	32.6	D	26.0	D
2	Project Driveway / Avenue 280	One-Way Stop	12.8	B	13.3	B

Note: LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

Blue Oak Academy Modernization - County of Tulare
Project Site Plan

Figure 3

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Blue Oak Academy Modernization - County of Tulare
Project Only Trips

Figure 4

LEGEND

# = STUDY INTERSECTION
XX = AM PROJECT ONLY TRIPS
(XX) = PM PROJECT ONLY TRIPS

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Blue Oak Academy Modernization - County of Tulare
Opening Year plus Project - Traffic Volumes, Geometrics, and Controls

Figure 5

LEGEND

- # = STUDY INTERSECTION
- XX = AM PEAK HOUR TRIPS
- (XX) = PM PEAK HOUR TRIPS
- = STOP SIGN

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Cumulative Year 2042 No Project Traffic Conditions

Traffic Signal Warrants

Warrant 3 was prepared for the unsignalized study intersection under the Cumulative Year 2042 No Project Traffic Conditions scenario. This warrant is contained in Appendix J. Under this scenario, the unsignalized study intersection is not projected to satisfy Warrant 3. Based on the traffic signal warrant and engineering judgment, it is not recommended that the County consider implementing traffic signal controls at the unsignalized study intersection.

Results of Cumulative Year 2042 No Project Level of Service Analysis

The Cumulative Year 2042 No Project Traffic Conditions scenario assumes the existing roadway geometrics and traffic controls will remain in place. Figure 6 illustrates the Cumulative Year 2042 No Project turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Cumulative Year 2042 No Project Traffic Conditions scenario are provided in Appendix H. Table V presents a summary of the Cumulative Year 2042 No Project peak hour LOS at the study intersections.

Under this scenario, the intersection of Road 148 and Avenue 280 is projected to exceed its LOS threshold during the AM peak period. To improve the LOS at this intersection, it is recommended that the following improvements be considered for implementation.

- Road 148 / Avenue 280
  - Modify the northbound left-through-right lane to a through-right lane;
  - Add a northbound left-turn lane.

Table V: Cumulative Year 2042 No Project Intersection LOS Results

ID	*Intersection*	*Intersection Control*	*AM (7 - 9) Peak Hour*		*PM (2 - 4) Peak Hour*	
			Average Delay (sec/veh)	*LOS*	*Average Delay (sec/veh)*	*LOS*
1	Road 148 / Avenue 280	Two-Way Stop	**35.4**	**E**	28.0	D
		Two-Way Stop (Improved)	29.7	D	28.0	D
2	Project Driveway / Avenue 280	Does Not Exist	-	-	-	-

Note: LOS for two-way and one-way STOP controlled intersections are based on the worst approach/movement of the minor street.

Blue Oak Academy Modernization - County of Tulare
Cumulative Year 2042 No Project - Traffic Volumes, Geometrics, and Controls

Figure 6

LEGEND

- # = STUDY INTERSECTION
- XX = AM PEAK HOUR TRIPS
- (XX) = PM PEAK HOUR TRIPS
- = STOP SIGN

N

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Cumulative Year 2042 plus Project Traffic Conditions

Traffic Signal Warrants

Warrant 3 was prepared for the unsignalized study intersections under the Cumulative Year 2042 plus Project Traffic Conditions scenario. These warrants are contained in Appendix J. Under this scenario, the unsignalized study intersections are not projected to satisfy Warrant 3. Based on the traffic signal warrants and engineering judgement, it is not recommended that the County consider implementing traffic signal controls at any of the unsignalized study intersections.

Results of Cumulative Year 2042 plus Project Level of Service Analysis

The Cumulative Year 2042 plus Project Traffic Conditions scenario assumes the Opening Year plus Project roadway geometrics and traffic controls will remain in place. Figure 7 illustrates the Cumulative Year 2042 plus Project turning movement volumes, intersection geometrics and traffic controls. LOS worksheets for the Cumulative Year 2042 plus Project Traffic Conditions scenario are provided in Appendix I. Table VI presents a summary of the Cumulative Year 2042 plus Project peak hour LOS at the study intersections.

Under this scenario, the intersection of Road 148 and Avenue 280 is projected to exceed its LOS threshold during the AM peak period. To improve the LOS at this intersection, it is recommended that the following improvements be considered for implementation.

- Road 148 / Avenue 280
  - Modify the northbound left-through-right lane to a through-right lane;
  - Add a northbound left-turn lane.

Table VI: Cumulative Year 2042 plus Project Intersection LOS Results

ID	*Intersection*	*Intersection Control*	*AM (7 - 9) Peak Hour*		*PM (2 - 4) Peak Hour*	
			Average Delay (sec/veh)	*LOS*	*Average Delay (sec/veh)*	*LOS*
1	Road 148 / Avenue 280	Two-Way Stop	**39.0**	**E**	28.9	D
		Two-Way Stop (Improved)	33.5	D	28.9	D
2	Project Driveway / Avenue 280	One-Way Stop	13.6	B	14.5	B

Note: LOS for two-way STOP controlled intersections are based on the worst approach/movement of the minor street.

Blue Oak Academy Modernization - County of Tulare
Figure 7
Cumulative Year 2042 plus Project - Traffic Volumes, Geometrics, and Controls

LEGEND

- # = STUDY INTERSECTION
- XX = AM PEAK HOUR TRIPS
- (XX) = PM PEAK HOUR TRIPS
- = STOP SIGN

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Queuing Analysis

Table VII provides a queue length summary for left-turn and right-turn lanes at the study intersections under all study scenarios. The queuing analyses for the study intersections are contained in the LOS worksheets for the respective scenarios. Appendix D contains the methodologies used to evaluate these intersections. Queuing analyses were completed using SimTraffic output information. Synchro provides both 50th and 95th percentile maximum queue lengths (in feet). According to the Synchro manual, "the 50th percentile maximum queue is the maximum back of queue on a typical cycle and the 95th percentile queue is the maximum back of queue with 95th percentile volumes" (*Synchro Studio 10 User Guide* 2017). The queues shown in Table VII are the 95th percentile queue lengths for the respective lane movements.

The *California Highway Design Manual* (CA HDM) provides guidance for determining deceleration lengths for the left-turn and right-turn lanes based on design speeds. According to the CA HDM, tapers for right-turn lanes are "usually unnecessary since main line traffic need not be shifted laterally to provide space for the right-turn lane. If, in some rare instances, a lateral shift were needed, the approach taper would use the same formula as for a left-turn lane" (Caltrans 2019). Therefore, a bay taper length pursuant to the CA HDM would need to be added, as necessary, to the recommended storage lengths presented in Table VII.

The storage capacity for the Cumulative Year 2042 plus Project Traffic Conditions shall be based on the SimTraffic output files and engineering judgment. The values presented in Table VII are the projected queue lengths that will likely need to be accommodated by the Cumulative Year 2042 plus Project Traffic Conditions scenario.

Table VII: Queuing Analysis

ID	***Intersection***	***Existing Queue Storage Length (ft.)***		***Existing***		***Opening Year plus Project***		***Cumulative Year 2042 No Project***		***Cumulative Year 2042 plus Project***	
				AM	***PM***	***AM***	***PM***	***AM***	***PM***	***AM***	***PM***
1	Road 148 / Avenue 280	EB LTR	>500	64	51	67	68	45	59	71	81
		WB LTR	>500	12	33	32	27	18	26	41	15
		NB LTR	>500	69	40	75	39	*	*	*	*
		NB L	*	*	*	*	*	33	18	32	17
		NB TR	*	*	*	*	*	48	70	53	69
		SB LTR	>500	64	60	80	70	65	69	109	86
2	Project Driveway / Avenue 280	EB LT	*	*	*	23	14	*	*	38	30
		SB LR	*	*	*	26	14	*	*	23	20

Note: * = Does not exist or is not projected to exist

Project's Pro-Rata Fair Share of Future Transportation Improvements

The Project's fair share percentage impact to study intersections projected to fall below their LOS threshold and which are not covered by an existing impact fee program is provided in Table VIII. The Project's fair share percentage impacts were calculated pursuant to the Caltrans Guide for the Preparation of Traffic Impact Studies. The Project's pro-rata fair shares were calculated utilizing the Existing volumes, 2042 Project Only Trips and Cumulative Year 2042 plus Project volumes. Figure 2 illustrates the Existing traffic volumes, Figure 4 illustrates the 2042 Project Only Trips and Figure 7 illustrates the Cumulative Year 2042 plus Project traffic volumes. Since the critical peak period for the study facilities was determined to be during the AM peak, the AM peak volumes are utilized to determine the Project's prorate fair share.

It is recommended that the Project contribute its equitable fair share as listed in Table VIII for the future improvements necessary to maintain an acceptable LOS. However, fair share contributions should only be made for those facilities, or portion thereof, currently not funded by the responsible agencies' roadway impact fee program(s) or grant funded projects, as appropriate. For those improvements not presently covered by local and regional roadway impact fee programs or grant funding, it is recommended that the Project contribute its equitable fair share. Payment of the Project's equitable fair share in addition to the local and regional impact fee programs would satisfy the Project's traffic mitigation measures.

This study does not provide construction costs for the recommended improvement measures; therefore, if the recommended improvement measures are implemented, it is recommended that VUSD work with the County of Tulare to develop the estimated construction cost.

Table VIII: Project's Fair Share of Future Roadway Improvements

ID	*Intersection*	*Existing Traffic Volumes (AM Peak)*	*Cumulative Year 2042 plus Project Traffic Volumes (AM Peak)*	*2042 Project Only Trips (AM Peak)*	*Project's Fair Share (%)*
1	Road 148 / Avenue 280	899	1,056	36	22.93

Note: Project's Fair Share = ((Project Only Trips) / (Cumulative Year 2042 + Project Traffic Volumes-Existing Traffic Volumes)) x 100

Conclusions and Recommendations

Conclusions and recommendations regarding the proposed Project are presented below.

Existing Traffic Conditions

- JLB conducted a search of the Statewide Integrated Traffic Records System (SWITRS) to obtain collision reports for the most recent three-year period. Based on a review of the collision reports, a total of six (6) collisions were reported within the influence zone of the existing study intersection. Of the six collisions, two were determined to be susceptible to correction during any twelve month period. Therefore, the number of collisions susceptible to correction experienced at the existing study intersection during the highest twelve month period is considered less than significant.
- At present, all study intersections operate at an acceptable LOS during both peak periods.

Opening Year plus Project Traffic Conditions

- The Project proposes to have one (1) access point along the east side of Road 148 and one (1) along the north side of Avenue 280.
- At buildout, the proposed Project is estimated to generate a maximum of 176 daily trips, 56 AM peak hour trips and 30 PM peak hour trips.
- Under this scenario, all study intersections are projected to continue operating at an acceptable LOS during both peak periods.

Cumulative Year 2042 No Project Traffic Conditions

- Under this scenario, the intersection of Road 148 and Avenue 280 is projected to exceed its LOS threshold during the AM peak period. To improve the LOS at this intersection, it is recommended that the following improvements be considered for implementation.
  - Road 148 / Avenue 280
    - Modify northbound left-through-right lane to a through-right lane;
    - Add a northbound left-turn lane.

Cumulative Year 2042 plus Project Traffic Conditions

- Under this scenario, the intersection of Road 148 and Avenue 280 is projected to exceed its LOS threshold during the AM peak period. To improve the LOS at this intersection, it is recommended that the following improvements be considered for implementation.
  - Road 148 / Avenue 280
    - Modify northbound left-through-right lane to a through-right lane;
    - Add a northbound left-turn lane.

Project Equitable Fair Share Impact Analysis

- It is recommended that the Project contribute its equitable fair share as presented in Table XIII.

Queuing Analysis

- It is recommended that the County consider adding a northbound left turn with a minimum storage capacity as indicated in the Queuing Analysis.

Study Participants

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Carlos Ayala, EIT	Engineer I/II
Jesus Garcia	Engineer I/II
Adrian Benavides	Engineering Aide
Christian Sanchez	Engineering Aide

Persons Consulted:

Leslie Blaire, P.E.	City of Visalia
Hector Guerra	County of Tulare
David Deel	Caltrans, District 6
Steven Pena	Visalia Unified School District
John Dominguez	School Site Solutions, Inc.

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Appendix A: Scope of Work

October 27, 2021

Hector Guerra
Chief Environmental Agency
County of Tulare
5961 S. Mooney Boulevard
Visalia, CA 93292

Via Email Only: hguerra@tularecounty.ca.gov

Subject: ***Proposed Scope of Work for the Preparation of a Traffic Impact Analysis in Support of the Modernization of Blue Oak Academy located on the northeast corner of Road 148 and Avenue 280 in Tulare County (JLB Project 018-003)***

Dear Mr. Guerra,

JLB Traffic Engineering, Inc. (JLB) hereby submits this Draft Scope of Work for the preparation of a Traffic Impact Analysis (TIA) for the Visalia Unified School District (District) Blue Oak Academy Modernization (Project) located on the northeast corner of Road 148 and Avenue 280. Based on information provided to JLB, the District proposes to modernize Blue Oak Academy campus to include the construction of a new administration/classroom building, expand the existing parking lot, provide off-site improvements that includes adding a driveway access point to Avenue 280 and remodel all facilities on the existing campus. Upon completion of the Project, it is estimated that an additional 84 students would be accommodated. Based on County of Tulare Draft Vehicle Miles Travelled (VMT) guidelines, it is currently projected that the Project would have less than significant transportation VMT impact due to project size and project type. As a result, this draft scope of work assumes that a detailed VMT analysis will not be required and therefore not included. An aerial of the Project vicinity is shown in Exhibit A. The latest Project Site Plan is presented in Exhibit B.

The purpose of this TIA is to evaluate the potential on-site and off-site traffic impacts of the proposed Project, identify short-term roadway and circulation needs, determine potential mitigation measures and identify any critical traffic issues that should be address in the on-going planning process. To evaluate on-site and off-site traffic impacts of the proposed Project, JLB proposes the following Scope of Work.

Scope of Work

- JLB will calculate a future trip generation for the proposed Project land use designation based on information contained within the operational statement, Project site plan, data provided by the District, data from the Institute of Transportation Engineers (ITE) Trip Generation Handbook's Latest Edition and other trip generation sources readily available.
- JLB will request a Tulare Council of Governments (TCAG) traffic model for the base year and cumulative year in order to forecast traffic volumes to the Opening Year and Cumulative Year 2042 scenarios.

- JLB will review and define the traffic impact analysis zone (TAZ) boundaries and link segments in the model for the Existing and Cumulative scenarios.
- JLB utilized data from the District to derive the Project's trip distribution in the vicinity of the Project under the Opening Year plus Project and Cumulative Year 2042 plus Project scenarios. The trip distribution assumptions were developed based on existing travel patterns, communication with District staff, traffic engineering judgement, knowledge of the study area and the existing and proposed roadway network in the vicinity of the Project. Project Only Trips are displayed in Exhibit C.
- JLB will obtain recent or schedule and conduct new traffic counts at the study facility(ies) as necessary. These counts will include pedestrians and vehicles. Traffic counts are proposed to be collected in November of 2021. JLB compared VMT data prior to the pandemic (week of 3/2/2020) to current (week of 9/20/2021) VMT data from the TIMS website. From the TIMS VMT data, the prior VMT was 2,789.33 million and the current was 2,812.84 million, an increase of 0.84%. Based on this data, JLB has determined that current traffic counts will not need to be escalated upward as a result of business restrictions and limitations imposed by the State of California or local government entities due to the pandemic. See attached VMT data from TIMS in Exhibit D. JLB would like to receive concurrence from the County of Tulare on not escalating current traffic counts as a result of the pandemic.
- JLB will perform a site visit to observe existing traffic conditions, especially during the AM and PM peak hours. Existing roadway conditions including intersection geometrics and traffic controls will be verified.
- JLB will evaluate on-site circulation and provide recommendations as necessary to improve circulation to and within the Project site.
- JLB will conduct a thorough evaluation of the existing and planned circulation network to include the study intersections, roadway segments and study facilities. To perform this evaluation, JLB staff will conduct a site reconnaissance of the study facilities.
- JLB will prepare California Manual on Uniform Traffic Control Devices (CA MUTCD) Warrant 1 “8-hour” for existing unsignalized study intersections under the Existing scenario.
- JLB will prepare CA MUTCD Warrant 3 “Peak Hour” for existing and future unsignalized study intersections under all scenarios.
- JLB will evaluate existing and forecasted levels of service (LOS) at the study intersection(s). JLB will use HCM 6th or HCM 2000 methodologies (as appropriate) within Synchro to perform this analysis for the AM and PM peak hours. JLB will identify the causes of poor LOS.
- JLB will prepare a three-year collision analysis based on the Statewide Integrated Traffic Reporting System (SWITRS) database for all existing study facilities.
- JLB will provide a table with the Project's pro-rata fair share allocation to improvement measures identified (if any) that are not currently funded by an existing funding source.

Study Scenarios

1. Existing Traffic Conditions with needed improvements (if any);
2. Opening Year plus Project Traffic Conditions with proposed improvement measures (if any);
3. Cumulative Year 2042 No Project Traffic Conditions with proposed improvement measures (if any); and
4. Cumulative Year 2042 plus Project Traffic Conditions with proposed mitigation measures (if any).

Weekday peak hours to be analyzed (Tuesday, Wednesday or Thursday only):

1. 7 - 9 AM peak hour
2. 2 - 4 PM peak hour

Study Intersections

1. Avenue 280 / Road 148
2. Avenue 280 at Future Driveway (300 feet east of Road 148)

Queuing analysis is included in the proposed Scope of Work for the study intersection(s) listed above under all study scenarios. This analysis will be utilized to recommend minimum storage lengths for left- and right-turn lanes at all study intersections.

Study Segments:

1. None

Project Only Trip Assignment to State Facilities:

1. None

Project Trip Generation

The trip generation rates for the proposed Project were obtained from the 11th Edition of the Trip Generation Manual published by the Institute of Transportation Engineers (ITE). Table I presents the trip generation for the proposed Project with trip generation rates for a Middle School / Junior High School (ITE Code 522) adding 88 students and an Elementary School (ITE Code 520) removing 4 students. At buildout, the proposed Project is estimated to generate a maximum of 176 daily trips, 56 AM peak hour trips and 30 PM peak hour trips.

Table I: Project Trip Generation

Land Use (ITE Code)	Size	Unit	Daily		AM Peak (7 AM - 9 AM)						PM Peak (Peak Hour Generator)					
			Rate	Total	Trip Rate	In %	Out %	In	Out	Total	Trip Rate	In %	Out %	In	Out	Total
Elementary School (520)	-4	students	2.27	-9	0.74	54	46	-2	-1	-3	0.45	46	54	-1	-1	-2
Middle School / Junior High School (522)	88	students	2.10	185	0.67	54	46	32	27	59	0.36	46	54	15	17	32
Total Driveway Trips				**176**				**30**	**26**	**56**				**14**	**16**	**30**

Near Term Projects to be Included

Based on our local knowledge of the study area, JLB will identify near term projects in the vicinity of the proposed Project to include under the Cumulative Year Traffic Conditions scenarios.

Near Term Projects the County or City has knowledge and for which it is anticipated that said project(s) is/are projected to be whole or partially built by the Project Year 2029. City, County and Caltrans as appropriate would provide JLB with project details such as a project description, location, proposed land uses with breakdowns and type of residential units and number of square footages for non-residential uses.

The Scope of Work is based on our understanding of this Project and our experience with similar TIAs. We kindly ask that all responsible agencies submit any comments by November 19, 2021. If you have any questions or require additional information, please contact me by phone at (559) 317-6243, or via email at marndt@jlbtraffic.com.

Sincerely,

Matthew Arndt
JLB Traffic Engineering, Inc.

cc: Leslie Blair, City of Visalia
David Deel, Caltrans District 6
Gerry Lemus, Visalia Unified School District
Jose Luis Benavides, JLB Traffic Engineering, Inc.

Exhibit A – Project Aerial

Exhibit B – Project Site Plan

Exhibit C - Project Trips

LEGEND

# = STUDY INTERSECTION
XX = AM PROJECT ONLY TRIPS
(XX) = PM PROJECT ONLY TRIPS

N

Not To Scale

JLB TRAFFIC ENGINEERING, INC.
516 W. Shaw Ave., Ste. 103, Fresno, CA 93704
PHONE:(559) 570-8991, EMAIL: info@JLBtraffic.com, www.JLBtraffic.com

018-003 - 10/27/21 - CS/AB

Exhibit D – TIMS VMT Data

TIMS VMT Data	
Date	**Vehicle Miles Traveled (Millions)**
3/2/2020	2,789.33
9/20/2021	2,812.84
Percent Change	0.84%

*Data derived from TIMS - Transportation Injury Mapping System

Matt Arndt

From: Hector Guerra <HGuerra@tularecounty.ca.gov>
Sent: Wednesday, October 27, 2021 3:09 PM
To: Matt Arndt
Cc: Leslie Blair; david.deel@dot.ca.gov; Jose Benavides; Lemus, Gerry
Subject: RE: Blue Oak Academy TIA - Draft Scope of Work

Matt,

The Scope appears reasonable to me.

The one thing we do ask any consultant is that when they prepare a technical study, is that CEQA Checklist items relative to the study are answered. Your Scope did a nice job of writing why the project is likely exempt from a VMT analysis. However, we will need, as in every Checklist item, to have evidence (in the form of your analysis) to substantiate your conclusion. For example, in addressing an Aesthetics question of being within a Scenic route, we can access Caltrans' list of Scenic Routes and verify that only a very short segment of SR 180 is within Tulare County, as such, SRs 99, 198. 65, 63, etc. are not Scenic routes.

Looking forward to receiving the study when it is available.

Best Regards,

Hector

From: Matt Arndt <marndt@jlbtraffic.com>
Sent: Wednesday, October 27, 2021 2:48 PM
To: Hector Guerra <HGuerra@tularecounty.ca.gov>
Cc: Leslie Blair <Leslie.Blair@visalia.city>; david.deel@dot.ca.gov; Jose Benavides <jbenavides@jlbtraffic.com>; Lemus, Gerry <glemus@vusd.org>
Subject: Blue Oak Academy TIA - Draft Scope of Work

Hello,

Attached you will find a Draft Scope of Work for the expansion of Blue Oak Academy located on the northeast corner of Road 148 and Avenue 280 in the County of Tulare. We kindly ask that you take a moment to review and comment on the proposed Scope of Work. In the absence of comments by November 19, 2021, it will be assumed that the proposed Scope of Work is acceptable to the agency(ies) that have not submitted any comments.

If you have any questions or require additional information, please contact me by phone at 559.317.6243 or email at marndt@jlbtraffic.com . Look forward to hearing back from you.

Sincerely,

Matthew Arndt

Traffic Engineering, Transportation Planning and Parking Solutions
Certified Disadvantaged Business Enterprise (DBE) and Small Business Enterprise (SBE)

516 W. Shaw Ave., Ste. 103
Fresno, CA 93704
Office: (559) 570-8991
Direct: (559) 317-6243
www.JLBtraffic.com

Matt Arndt

From: Leslie Blair <Leslie.Blair@visalia.city>
Sent: Friday, November 12, 2021 12:22 PM
To: Matt Arndt
Subject: RE: Blue Oak Academy TIA - Draft Scope of Work

Hi Matt,

The City has no comments.

Regards,
Leslie Blair, PE
Senior Civil Engineer
City of Visalia
(559)713-4633
leslie.blair@visalia.city

From: Matt Arndt <marndt@jlbtraffic.com>
Sent: Friday, November 12, 2021 9:14 AM
To: Leslie Blair <Leslie.Blair@visalia.city>
Subject: RE: Blue Oak Academy TIA - Draft Scope of Work

Hello,

Just want to follow up with this draft scope of work to see if you've had a chance to review. Please let me know if you have any questions or comments.

Sincerely,

Matthew Arndt

Traffic Engineering, Transportation Planning and Parking Solutions
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From: Matt Arndt
Sent: Wednesday, October 27, 2021 2:48 PM
To: hguerra@co.tulare.ca.us
Cc: Leslie Blair <Leslie.Blair@visalia.city>; david.deel@dot.ca.gov; Jose Benavides <jbenavides@jlbtraffic.com>; Lemus, Gerry <glemus@vusd.org>
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Matthew Arndt

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Fresno, CA 93704
Office: (559) 570-8991
Direct: (559) 317-6243
www.JLBtraffic.com

Matt Arndt

From: Deel, David@DOT <david.deel@dot.ca.gov>
Sent: Thursday, October 28, 2021 8:22 AM
To: Matt Arndt
Cc: Leslie Blair; Jose Benavides; Lemus, Gerry; Hector Guerra; Mendibles, Lorena@DOT; Lau, Scott@DOT; Mendoza, Lupita@DOT; Isla, Nicholas@DOT
Subject: RE: Blue Oak Academy TIA - Draft Scope of Work - Caltrans No Comments
Attachments: Visalia Unified School District - Blue Oak Academy Modernization - L10272021 Draft Scope of Work.pdf

Matt –

After further review of the TIS Scope for the Visalia Unified School District - Blue Oak Academy Modernization (Project),
Caltrans determined that the School Modernization Project will not impact the State Highway System and therefore has NO COMMENTS.
The Project is located on the NEC of Road 148 and Avenue 280, approximately 2 miles south of SR 198, 4 miles east of SR 63 and 2 miles west of Farmersville, CA.

Respectfully,
DAVID DEEL | CALTRANS D6 | Office: 559.981.1041

From: Hector Guerra <HGuerra@tularecounty.ca.gov>
Sent: Wednesday, October 27, 2021 3:09 PM
To: Matt Arndt <marndt@jlbtraffic.com>
Cc: Leslie Blair <Leslie.Blair@visalia.city>; Deel, David@DOT <david.deel@dot.ca.gov>; Jose Benavides <jbenavides@jlbtraffic.com>; Lemus, Gerry <glemus@vusd.org>
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Sincerely,

Matthew Arndt

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Appendix B: Traffic Counts

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:

JLB Traffic Engineering, Inc.
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

LOCATION Ave 280 @ Rd 148 **LATITUDE** 36.298183°

COUNTY Tulare **LONGITUDE** -119.243044°

COLLECTION DATE Tuesday, November 16, 2021 **WEATHER** Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:00 AM - 7:15 AM	0	2	3	7	6	0	3	0	2	0	0	3	36	1	4	0	0	35	0	0
7:15 AM - 7:30 AM	0	5	2	3	1	0	4	0	2	0	0	11	41	1	0	0	1	44	1	2
7:30 AM - 7:45 AM	0	6	3	3	1	0	10	7	10	0	0	23	67	1	0	0	0	81	8	0
7:45 AM - 8:00 AM	0	5	3	1	0	0	9	5	28	0	0	33	62	1	0	0	3	100	14	0
8:00 AM - 8:15 AM	0	5	8	1	1	0	9	2	28	0	0	28	59	3	1	0	2	87	17	3
8:15 AM - 8:30 AM	0	5	5	1	0	0	7	1	7	0	0	4	43	5	3	0	2	78	9	1
8:30 AM - 8:45 AM	0	2	2	0	0	0	2	4	1	0	0	2	40	7	0	0	2	57	0	1
8:45 AM - 9:00 AM	0	3	2	2	0	0	1	0	4	0	0	2	53	4	1	0	1	78	1	3
TOTAL	**0**	**33**	**28**	**18**	**9**	**0**	**45**	**19**	**82**	**0**	**0**	**106**	**401**	**23**	**9**	**0**	**11**	**560**	**50**	**10**

	Northbound					Southbound					Eastbound					Westbound				
Time	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
2:00 PM - 2:15 PM	0	2	1	1	0	0	2	6	3	1	0	2	107	3	3	0	1	70	2	0
2:15 PM - 2:30 PM	0	2	5	2	0	0	2	3	5	0	0	2	97	3	0	0	2	80	4	1
2:30 PM - 2:45 PM	0	2	2	2	0	0	0	1	2	1	0	3	89	2	1	0	1	85	4	2
2:45 PM - 3:00 PM	0	2	5	1	0	0	3	1	2	0	0	14	101	6	2	0	3	81	10	0
3:00 PM - 3:15 PM	0	0	2	6	0	0	7	2	3	0	0	11	86	7	1	0	0	80	14	1
3:15 PM - 3:30 PM	0	2	2	7	0	0	0	1	5	0	0	12	118	4	0	0	2	93	11	2
3:30 PM - 3:45 PM	0	2	0	5	0	0	4	2	45	0	0	23	116	7	0	0	3	108	9	1
3:45 PM - 4:00 PM	0	0	4	4	1	0	6	7	8	2	0	7	102	2	1	0	3	81	1	1
TOTAL	**0**	**12**	**21**	**28**	**1**	**0**	**24**	**23**	**73**	**4**	**0**	**74**	**816**	**34**	**8**	**0**	**15**	**678**	**55**	**8**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**	**U-Turn**	**Left**	**Thru**	**Right**	**Trucks**
7:30 AM - 8:30 AM	0	21	19	6	2	0	35	15	73	0	0	88	231	10	4	0	7	346	48	4
2:45 PM - 3:45 PM	0	6	9	19	0	0	14	6	55	0	0	60	421	24	3	0	8	362	44	4

	PHF	Trucks
AM	0.851	1.1%
PM	0.793	0.7%

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
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Turning Movement Report

Prepared For:

JLB Traffic Engineering, Inc.
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

LOCATION Ave 280 @ Rd 148

LATITUDE 36.298183°

COUNTY Tulare

LONGITUDE -119.243044°

COLLECTION DATE Tuesday, November 16, 2021

WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
2:00 PM - 2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM - 2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
3:00 PM - 3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
3:15 PM - 3:30 PM	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 3:45 PM	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**1**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**	**Left**	**Thru**	**Right**	**Peds**
7:30 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2:45 PM - 3:45 PM	0	0	1	12	0	0	0	0	0	0	0	0	1	1	0	0

	Bikes	Peds
AM Peak Total	0	1
PM Peak Total	**3**	**12**

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

24 Hour Count Report

Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Rd 148
SEGMENT North of Ave 280
COLLECTION DATE Tuesday, December 7, 2021
NUMBER OF LANES 2

LATITUDE 36.298471°
LONGITUDE -119.243052°
WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	1	0	0	1	**2**	2	2	0	0	**4**	**6**
1:00 AM	1	0	0	2	**3**	0	0	0	0	**0**	**3**
2:00 AM	0	0	0	1	**1**	0	0	0	0	**0**	**1**
3:00 AM	1	2	0	1	**4**	0	1	1	0	**2**	**6**
4:00 AM	1	1	2	1	**5**	0	1	2	4	**7**	**12**
5:00 AM	1	4	7	5	**17**	0	2	2	3	**7**	**24**
6:00 AM	5	8	3	5	**21**	5	2	8	6	**21**	**42**
7:00 AM	3	16	30	46	**95**	0	3	21	39	**63**	**158**
8:00 AM	58	18	7	4	**87**	35	11	8	7	**61**	**148**
9:00 AM	7	6	5	8	**26**	4	3	7	6	**20**	**46**
10:00 AM	7	3	3	6	**19**	1	3	6	4	**14**	**33**
11:00 AM	3	8	5	4	**20**	6	2	4	8	**20**	**40**
12:00 PM	6	10	10	9	**35**	4	6	7	2	**19**	**54**
1:00 PM	17	18	11	9	**55**	6	11	20	6	**43**	**98**
2:00 PM	6	10	8	20	**44**	4	6	4	8	**22**	**66**
3:00 PM	27	36	29	8	**100**	12	13	55	10	**90**	**190**
4:00 PM	13	9	16	11	**49**	16	10	18	7	**51**	**100**
5:00 PM	12	14	8	7	**41**	10	12	11	5	**38**	**79**
6:00 PM	10	3	7	3	**23**	8	0	5	1	**14**	**37**
7:00 PM	7	4	5	4	**20**	4	2	1	1	**8**	**28**
8:00 PM	6	1	2	2	**11**	0	1	2	0	**3**	**14**
9:00 PM	4	4	1	5	**14**	2	1	1	0	**4**	**18**
10:00 PM	0	1	1	2	**4**	1	1	1	1	**4**	**8**
11:00 PM	1	1	2	0	**4**	1	0	1	0	**2**	**6**
Total	**57.5%**				**700**	**42.5%**				**517**	
	1217										

AM%	**42.6%**	**AM Peak**	**258**	**7:30 am to 8:30 am**	**AM P.H.F.**	**0.69**
PM%	**57.4%**	**PM Peak**	**200**	**2:45 pm to 3:45 pm**	**PM P.H.F.**	**0.60**

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
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24 Hour Count Report

Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Ave 280
SEGMENT West of Rd 148
COLLECTION DATE Tuesday, December 7, 2021
NUMBER OF LANES 2

LATITUDE 36.298130°
LONGITUDE -119.243591°
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	7	7	5	2	**21**	6	6	3	6	**21**	**42**
1:00 AM	8	7	2	2	**19**	4	3	1	2	**10**	**29**
2:00 AM	4	3	4	1	**12**	2	3	4	2	**11**	**23**
3:00 AM	4	5	2	6	**17**	1	7	7	5	**20**	**37**
4:00 AM	2	2	9	6	**19**	5	8	14	12	**39**	**58**
5:00 AM	11	15	15	19	**60**	14	22	30	39	**105**	**165**
6:00 AM	20	20	33	44	**117**	31	42	47	38	**158**	**275**
7:00 AM	35	64	83	80	**262**	48	66	90	122	**326**	**588**
8:00 AM	88	51	41	56	**236**	126	72	75	59	**332**	**568**
9:00 AM	42	50	59	54	**205**	63	74	88	83	**308**	**513**
10:00 AM	55	53	65	65	**238**	76	75	88	96	**335**	**573**
11:00 AM	68	71	102	76	**317**	79	93	84	94	**350**	**667**
12:00 PM	90	75	92	92	**349**	91	83	86	72	**332**	**681**
1:00 PM	97	126	78	76	**377**	73	75	104	83	**335**	**712**
2:00 PM	113	106	70	96	**385**	72	78	111	87	**348**	**733**
3:00 PM	109	126	116	114	**465**	94	94	146	109	**443**	**908**
4:00 PM	112	120	143	126	**501**	100	113	118	79	**410**	**911**
5:00 PM	120	113	94	107	**434**	100	111	97	88	**396**	**830**
6:00 PM	101	79	80	72	**332**	79	68	68	64	**279**	**611**
7:00 PM	77	72	53	56	**258**	44	38	39	29	**150**	**408**
8:00 PM	61	60	55	44	**220**	32	34	38	23	**127**	**347**
9:00 PM	31	45	29	34	**139**	16	15	18	21	**70**	**209**
10:00 PM	19	30	21	19	**89**	20	12	12	12	**56**	**145**
11:00 PM	20	11	15	3	**49**	6	7	6	4	**23**	**72**
Total	**50.7%**				**5121**	**49.3%**				**4984**	
	10105										

AM%	**35.0%**	**AM Peak**	**667**	**11:00 am to 12:00 pm**	**AM P.H.F.**	**0.90**
PM%	**65.0%**	**PM Peak**	**930**	**3:30 pm to 4:30 pm**	**PM P.H.F.**	**0.89**

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24 Hour Count Report

Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Ave 280
SEGMENT East of Rd 148
COLLECTION DATE Tuesday, December 7, 2021
NUMBER OF LANES 2

LATITUDE 36.298138°
LONGITUDE -119.242598°
WEATHER Clear

	Eastbound					Westbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	7	7	6	2	**22**	5	6	3	7	**21**	**43**
1:00 AM	9	7	2	2	**20**	5	3	2	4	**14**	**34**
2:00 AM	4	3	4	1	**12**	2	3	3	2	**10**	**22**
3:00 AM	4	4	2	5	**15**	2	6	6	6	**20**	**35**
4:00 AM	2	3	10	8	**23**	4	8	14	9	**35**	**58**
5:00 AM	10	14	14	19	**57**	13	20	29	41	**103**	**160**
6:00 AM	22	14	33	49	**118**	34	40	47	36	**157**	**275**
7:00 AM	36	58	68	66	**228**	49	60	78	105	**292**	**520**
8:00 AM	58	44	43	56	**201**	110	73	74	61	**318**	**519**
9:00 AM	43	47	55	53	**198**	63	76	83	85	**307**	**505**
10:00 AM	51	52	63	62	**228**	75	74	86	97	**332**	**560**
11:00 AM	69	71	100	78	**318**	77	94	90	92	**353**	**671**
12:00 PM	89	73	90	81	**333**	92	77	85	74	**328**	**661**
1:00 PM	87	124	83	77	**371**	75	75	94	89	**333**	**704**
2:00 PM	113	103	63	83	**362**	76	77	110	86	**349**	**711**
3:00 PM	95	106	105	107	**413**	100	94	113	111	**418**	**831**
4:00 PM	114	108	145	123	**490**	99	113	117	79	**408**	**898**
5:00 PM	118	105	96	100	**419**	100	109	95	89	**393**	**812**
6:00 PM	97	75	76	71	**319**	80	69	69	61	**279**	**598**
7:00 PM	72	71	50	55	**248**	47	38	42	32	**159**	**407**
8:00 PM	57	58	54	44	**213**	33	37	39	26	**135**	**348**
9:00 PM	32	41	28	26	**127**	17	16	16	21	**70**	**197**
10:00 PM	19	29	19	16	**83**	20	12	11	12	**55**	**138**
11:00 PM	20	10	14	3	**47**	7	8	5	4	**24**	**71**
Total	**49.8%**				**4865**	**50.2%**				**4913**	
	9778										

AM%	**34.8%**	**AM Peak**	**671**	**11:00 am to 12:00 pm**	**AM P.H.F.**	**0.88**
PM%	**65.2%**	**PM Peak**	**914**	**3:45 pm to 4:45 pm**	**PM P.H.F.**	**0.87**

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24 Hour Count Report

Prepared For: **JLB Traffic Engineering, Inc.**
516 W. Shaw Ave, Suite 103
Fresno, CA 93704

STREET Rd 148

SEGMENT South of Ave 280

COLLECTION DATE Tuesday, December 7, 2021

NUMBER OF LANES 2

LATITUDE 36.297869°

LONGITUDE -119.243058°

WEATHER Clear

	Northbound					Southbound					Hourly
Hour	1st	2nd	3rd	4th	**Total**	1st	2nd	3rd	4th	**Total**	**Totals**
12:00 AM	1	1	1	0	**3**	1	3	0	0	**4**	**7**
1:00 AM	1	0	0	0	**1**	0	0	1	0	**1**	**2**
2:00 AM	0	0	1	1	**2**	0	0	0	0	**0**	**2**
3:00 AM	0	1	0	0	**1**	0	0	0	1	**1**	**2**
4:00 AM	2	1	1	2	**6**	0	0	0	0	**0**	**6**
5:00 AM	1	3	7	3	**14**	0	0	2	3	**5**	**19**
6:00 AM	6	7	0	9	**22**	7	5	5	3	**20**	**42**
7:00 AM	4	17	11	19	**51**	1	4	5	9	**19**	**70**
8:00 AM	12	9	6	2	**29**	3	10	4	7	**24**	**53**
9:00 AM	9	0	2	10	**21**	5	2	3	11	**21**	**42**
10:00 AM	5	4	4	4	**17**	2	4	7	6	**19**	**36**
11:00 AM	6	9	4	7	**26**	6	4	11	7	**28**	**54**
12:00 PM	8	11	11	6	**36**	8	3	9	12	**32**	**68**
1:00 PM	7	14	8	6	**35**	8	9	2	8	**27**	**62**
2:00 PM	4	12	3	10	**29**	6	10	5	10	**31**	**60**
3:00 PM	6	16	7	9	**38**	11	13	11	20	**55**	**93**
4:00 PM	10	8	12	11	**41**	10	21	11	10	**52**	**93**
5:00 PM	5	7	8	7	**27**	5	11	7	13	**36**	**63**
6:00 PM	4	3	4	8	**19**	7	5	7	4	**23**	**42**
7:00 PM	1	4	2	2	**9**	6	3	4	3	**16**	**25**
8:00 PM	6	2	2	0	**10**	5	7	4	1	**17**	**27**
9:00 PM	2	2	1	1	**6**	0	4	0	4	**8**	**14**
10:00 PM	0	0	3	1	**4**	1	1	4	3	**9**	**13**
11:00 PM	1	0	1	0	**2**	2	1	0	0	**3**	**5**
Total	**49.9%**				**449**	**50.1%**				**451**	
	900										

AM%	**37.2%**	**AM Peak**	**80**	**7:15 am to 8:15 am**	**AM P.H.F.**	**0.71**
PM%	**62.8%**	**PM Peak**	**101**	**3:45 pm to 4:45 pm**	**PM P.H.F.**	**0.87**

Appendix C: Traffic Modeling

Base Year 2019
AM, PM and Daily Volumes

cube

(Licensed to JLB Traffic Engineering, Inc)

Cumulative Year 2035
AM, PM and Daily Volumes

cube

(Licensed to JLB Traffic Engineering, Inc)

Appendix D: Methodology

Levels of Service Methodology

The description and procedures for calculating capacity and level of service (LOS) are found in the Transportation Research Board, Highway Capacity Manual (HCM). The HCM 6th Edition represents the research on capacity and quality of service for transportation facilities.

Quality of service requires quantitative measures to characterize operational conditions within a traffic stream. Level of service is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience.

Six levels of service are defined for each type of facility that has analysis procedures available. Letters designate each level of service (LOS), from A to F, with LOS A representing the best operating conditions and LOS F the worst. Each LOS represents a range of operating conditions and the driver's perception of these conditions. Safety is not included in the measures that establish an LOS.

Intersection Levels of Service

One of the more important elements limiting and often interrupting the flow of traffic on a highway is the intersection. Flow on an interrupted facility is usually dominated by points of fixed operation such as traffic signals, stop signs and yield signs.

Signalized Intersections – Performance Measures

For signalized intersections, the performance measures include automobile volume-to-capacity ratio, automobile delay, queue storage length, ratio of pedestrian delay, pedestrian circulation area, pedestrian perception score, bicycle delay and bicycle perception score. LOS is also considered a performance measure. For the automobile mode, the average control delay per vehicle per approach is determined for the peak hour. A weighted average of control delay per vehicle is then determined for the intersection. An LOS designation is given to the weighted average control delay to better describe the level of operation. A description of LOS for signalized intersections is found in Table A-1.

Table A-1: Signalized Intersection Levels of Service Description (Automobile Mode)

Level of Service	*Description*	*Average Control Delay (Seconds per Vehicle)*
A	Operations with a control delay of 10 seconds/vehicle or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is really low and either progression is exceptionally favorable or the cycle length is very short. If it's due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Operations with control delay between 10.1 to 20.0 seconds/vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.	>10.0 to 20.0
C	Operations with average control delays between 20.1 to 35.0 seconds/vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio no greater than 1.0, the progression is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 to 35
D	Operations with control delay between 35.1 to 55.0 seconds/vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.	>35 to 55
E	Operations with control delay between 55.1 to 80.0 seconds/vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable and the cycle length is long. Individual cycle failures are frequent.	>55 to 80
F	Operations with unacceptable control delay exceeding 80.0 seconds/vehicle and a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor and the cycle length is long. Most cycles fail to clear the queue.	>80

Note: Source: Highway Capacity Manual 6th Edition

Unsignalized Intersections

The HCM 6th Edition procedures use control delay as a measure of effectiveness to determine level of service. Delay is a measure of driver discomfort, frustration, fuel consumption and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, i.e., in the absence of traffic control, geometric delay, any incidents and any other vehicles. Control delay is the increased time of travel for a vehicle approaching and passing through an unsignalized intersection, compared with a free-flow vehicle if it were not required to slow or stop at the intersection.

All-Way Stop Controlled Intersections

All-way stop controlled intersections are a form of traffic controls in which all approaches to an intersection are required to stop. Similar to signalized intersections, at all-way stop controlled intersections the average control delay per vehicle per approach is determined for the peak hour. A weighted average of control delay per vehicle is then determined for the intersection as a whole. In other words, the delay measured for all-way stop controlled intersections is a measure of the average delay for all vehicles passing through the intersection during the peak hour. An LOS designation is given to the weighted average control delay to better describe the level of operation.

Two-Way Stop Controlled Intersections

Two-way stop controlled (TWSC) intersections in which stop signs are used to assign the right-of-way, are the most prevalent type of intersection in the United States. At TWSC intersections the stop-controlled approaches are referred to as the minor street approaches and can be either public streets or private driveways. The approaches that are not controlled by stop signs are referred to as the major street approaches.

The capacity of movements subject to delay are determined using the "critical gap" method of capacity analysis. Expected average control delay based on movement volume and movement capacity is calculated. An LOS for a TWSC intersection is determined by the computed or measured control delay for each minor movement. LOS is not defined for the intersection as a whole for three main reasons: (a) major-street through vehicles are assumed to experience zero delay; (b) the disproportionate number of major-street through vehicles at the typical TWSC intersection skews the weighted average of all movements, resulting in a very low overall average delay from all vehicles; and (c) the resulting low delay can mask important LOS deficiencies for minor movements. Table A-2 provides a description of LOS at unsignalized intersections.

Table A-2: Unsignalized Intersection Levels of Service Description (Automobile Mode)

Control Delay (Seconds per Vehicle)	***LOS by Volume-to-Capacity Ratio***	
	v/c ≤ 1.0	***v/c > 1.0***
≤10	A	F
>10 to 15	B	F
>15 to 25	C	F
>25 to 35	D	F
>35 to 50	E	F
>50	F	F

Note: Source: HCM 6th Edition, Exhibit 20-2.

Roundabout Controlled Intersections

Roundabouts are intersections with a generally circular shape, characterized by yield on entry and circulation around a central island. Roundabouts have been used successfully throughout the world and are being used increasingly in the United States, especially since 1990. The procedure used to calculate LOS incorporates a combination of lane-based regression models and gap acceptance models for both single-lane and multi-lane roundabouts. As a result, the capacity models focus on one entry of a roundabout at a time. Table A-3 provides a description of LOS at roundabout intersections.

Table A-3: Roundabout Intersection Level of Service Description (Automobile Mode)

Control Delay (Seconds per Vehicle)	***LOS by Volume-to-Capacity Ratio***	
	v/c ≤ 1.0	***v/c > 1.0***
≤10	A	F
>10 to 15	B	F
>15 to 25	C	F
>25 to 35	D	F
>35 to 50	E	F
>50	F	F

Note: Source: HCM 6th Edition, Exhibit 22-8.

Segment Levels of Service

Segments are portions of roads without any interruption of flow. These are typically studied as urban streets, basic freeways, multilane highways or two-lane highways. Each of these categories has further classification and the level of service analysis can differ between them.

Basic Freeway and Multilane Highway Segments

For segments of multilane highways and basic freeways outside the influence of merging, diverging and weaving maneuvers, LOS is defined by density. Density describes a motorist's proximity to other vehicles and is related to a motorist's freedom to maneuver within the traffic stream. Chapter 12 of the Highway Capacity Manual categorizes each LOS as follows:

LOS A describes free-flow operations. FFS prevails on the freeway or multilane highway, and vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream. The effects of incidents or point breakdowns are easily absorbed.

LOS B represents reasonably free-flow operations, and FFS on the freeway or multilane highway is maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high. The effects of minor incidents are still easily absorbed.

LOS C provides for flow with speeds near the FFS of the freeway or multilane highway. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver. Minor incidents may still be absorbed, but the local deterioration in service quality will be significant. Queues may be expected to form behind any significant blockages.

LOS D is the level at which speeds begin to decline with increasing flows, with density increasing more quickly. Freedom to maneuver within the traffic stream is seriously limited, and drivers experience reduced physical and psychological comfort levels. Even minor incidents can be expected to create queuing, because the traffic stream has little space to absorb disruptions.

LOS E describes operation at or near capacity. Operations on the freeway or multilane highway at this level are highly volatile because there are virtually no usable gaps within the traffic stream, leaving little room to maneuver within the traffic stream. Any disruption to the traffic stream, such as vehicles entering from a ramp or an access point or a vehicle changing lanes, can establish a disruption wave that propagates throughout the upstream traffic stream. Toward the upper boundary of LOS E, the traffic stream has no ability to dissipate even the most minor disruption, and any incident can be expected to produce a serious breakdown and substantial queuing. The physical and psychological comfort afforded to drivers is poor.

LOS F describes unstable flow. Such conditions exist within queues forming behind bottlenecks. Breakdowns occur for a number of reasons:

- Traffic incidents can temporarily reduce the capacity of a short segment so that the number of vehicles arriving at a point is greater than the number of vehicles that can move through it.
- Points of recurring congestion, such as merge or weaving segments and lane drops, experience very high demand in which the number of vehicles arriving is greater than the number of vehicles that can be discharged.
- In analyses using forecast volumes, the projected flow rate can exceed the estimated capacity of a given location.

Basic Freeway

Basic Freeway segments generally have four to eight lanes and posted speed limits between 50 and 75 mi/hr. The performance measures include capacity, free flow speed, demand and volume-to-capacity ratio, space mean speed, average density and LOS. The LOS is dependent on the number of lanes, base free-flow speed, lane width, right side lateral clearance, total ramp density, hourly demand volume, peak hour factor and total truck percentage. Table A-4 provides a description of LOS for Basic Freeway Segments.

Multilane Highway

Multilane Highway segments generally have four to six lanes and posted speed limits between 40 and 55 mi/hr. The performance measures include capacity, free flow speed, demand and volume-to-capacity ratio, space mean speed, average density and LOS. The LOS is dependent on the number of lanes, base free-flow speed, lane width, right side lateral clearance, left side lateral clearance, access point density, terrain type, median type, hourly demand volume, peak hour factor and total truck percentage. Table A-4 provides a description of LOS for Multilane Highway Segments.

Table A-4: Basic Freeway and Multilane Highway Segment Level of Service Description

Level of Service	*Density (Passenger Cars per Mile per Lane)*
A	≤11
B	>11 to 18
C	>18 to 26
D	>26 to 35
E	>35 to 45
F	>45 or Demand Exceeds Capacity

Note: Source: HCM 6th Edition, Exhibit 12-15.

Two-Lane Highway Segments

Two-Lane Highways generally have one lane per direction and only allow passing maneuvers to take place in the opposing lane of traffic. If allowed, passing maneuvers are limited by the availability of gaps in the opposing traffic stream and by the availability of sufficient sight distance for a driver to discern the approach of an opposing vehicle safely. A principal measure of LOS is percent time spent following and follower density. This is the average percent of time that vehicles must travel in platoons behind slower vehicles due to the inability to pass. Chapter 15 of the Highway Capacity Manual categorizes each LOS as follows:

At **LOS A**, motorists experience high operating speeds on Class I highways and little difficulty in passing. Platoons of three or more vehicles are rare. On Class II highways, speed is controlled primarily by roadway conditions, but a small amount of platooning would be expected. On Class III highways, motorists can maintain operating speeds at or near the facility's FFS.

At **LOS B**, passing demand and passing capacity are balanced. On both Class I and Class II highways, the degree of platooning becomes noticeable. Some speed reductions are present on Class I highways. On Class III highways, maintenance of FFS operation becomes difficult, but the speed reduction is still relatively small.

At **LOS C**, most vehicles travel in platoons. Speeds are noticeably curtailed on all three classes of highways.

At **LOS D**, platooning increases significantly. Passing demand is high on both Class I and Class II facilities, but passing capacity approaches zero. A high percentage of vehicles travels in platoons, and PTSF is noticeable. On Class III highways, the fall-off from FFS is significant.

At **LOS E**, demand is approaching capacity. Passing on Class I and II highways is virtually impossible, and PTSF is more than 80%. Speeds are seriously curtailed. On Class III highways, speed is less than two-thirds of the FFS. The lower limit of LOSE represents capacity.

LOS F exists whenever demand flow in one or both directions exceeds the segment's capacity. Operating conditions are unstable and heavy congestion exists on all classes of two-lane highways.

Two-Lane Highway

The performance measures include average travel speed, segment travel time, percent followers, volume to capacity ratio, follower density and LOS. The LOS is dependent on Highway Class (I, II, or III), lane width, shoulder width, access point density, terrain type, free flow speed, passing lane length, demand flow rate, opposing demand flow rate peak hour factor and total truck percentage. Tables A-5 and A-6 provide a description of LOS for Two-Lane Highway Segments.

Table A-5: Two-Lane Highway Segment Level of Service Description

LOS	***Class I Highways***		***Class II Highways***	***Class III Highways***
	ATS (Mile per Hour)	***PTSF (%)***	***PTSF (%)***	***PFFS (%)***
A	>55	≤35	≤40	>91.7
B	>50 to 55	>35 to 50	>40 to 55	>83.3 to 91.7
C	>45 to 50	>50 to 65	>55 to 70	>75.0 to 83.3
D	>40 to 45	>65 to 80	>70 to 85	>66.7 to 75.0
E	≤40	>80	>85	≤66.7
F	Demand exceeds capacity			

Note: ATS = Average Travel Speed
PTSF = Percent Time Spent Following
PFFS = Percent of Free Flow Speed
Source: HCM 6th Edition, Exhibit 15-3.

Table A-6: Two-Lane Highway Segment Level of Service Description

LOS	***Follower Density (Followers per Mile per Lane)***	
	High Speed Highways Posted Speed Limit ≥ 50 miles per hour	***High Speed Highways Posted Speed Limit < 50 miles per hour***
A	≤2.0	≤2.0
B	>2.0 to 4.0	>2.5 to 5.0
C	>4.0 to 8.0	>5.0 to 10.0
D	>8.0 to 12.0	>10.0 to 15.0
E	>12.0	>15.0

Note: Source: NCHRP 'Improved Analysis of Two-Lane Highway Capacity and Operational Performance, Table 3-23.

Urban Streets (Automobile Mode)

The term "urban streets" refers to urban arterials and collectors, including those in downtown areas. Arterial streets are roads that primarily serve longer through trips. However, providing access to abutting commercial and residential land uses is also an important function of arterials. Collector streets provide both land access and traffic circulation within residential, commercial and industrial areas. Their access function is more important than that of arterials and unlike arterials their operation is not always dominated by traffic signals. Downtown streets are signalized facilities that often resemble arterials.

They not only move through traffic but also provide access to local businesses for passenger cars, transit buses and trucks. Pedestrian conflicts and lane obstructions created by stopping or standing taxicabs, buses, trucks and parking vehicles that cause turbulence in the traffic flow are typical of downtown streets.

Flow Characteristics

The speed of vehicles on urban streets is influenced by three main factors, street environment, interaction among vehicles and traffic control.

The street environment includes the geometric characteristics of the facility, the character of roadside activity and adjacent land uses. Thus, the environment reflects the number and width of lanes, type of median, driveway/access point density, spacing between signalized intersections, existence of parking, level of pedestrian and bicyclist activity and speed limit.

The interaction among vehicles is determined by traffic density, the proportion of trucks and buses and turning movements. This interaction affects the operation of vehicles at intersections and, to a lesser extent, between signals.

Traffic controls (including signals and signs) force a portion of all vehicles to slow or stop. The delays and speed changes caused by traffic control devices reduce vehicle speeds; however, such controls are needed to establish right-of-way.

Urban Street Segments LOS

The average travel speed for through vehicles along an urban street is the determinant of the operating level of service (LOS). The travel speed along a segment, section or entire length of an urban street is dependent on the running speed between signalized intersections and the amount of control delay incurred at signalized intersections. Table A-7 provides a description of LOS for Urban Street Segments.

LOS A describes primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at signalized intersections is minimal. Travel speeds exceed 80 percent of the base free flow speed (FFS).

LOS B describes reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67 and 80 percent of the base FFS.

LOS C describes stable operations. The ability to maneuver and change lanes in midblock location may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50 and 67 percent of the base FFS.

LOS D indicates a less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volumes or inappropriate signal timing at the boundary intersections. The travel speed is between 40 and 50 percent of the base FFS.

LOS E is characterized as an unstable operation and has significant delay. Such operations may be due to some combination of adverse progression, high volume and inappropriate signal timing at the boundary intersections. The travel speed is between 30 and 40 percent of the base FFS.

LOS F is characterized by street flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30 percent or less of the base FFS.

Table A-7: Urban Street Levels of Service (Automobile Mode)

LOS	***Travel Speed Threshold by Base Free-Flow Speed (miles/hour)***							***Volume-to-Capacity Ratio***
	55	**50**	**45**	**40**	**35**	**30**	**25**	
A	>44	>40	>36	>32	>28	>24	>20	≤ 1.0
B	>37	>34	>30	>27	>23	>20	>17	
C	>28	>25	>23	>20	>18	>15	>13	
D	>22	>20	>18	>16	>14	>12	>10	
E	>17	>15	>14	>12	>11	>9	>8	
F	≤17	≤15	≤14	≤12	≤11	≤9	≤8	
F	Any							> 1.0

Note: a = The Critical volume-to-capacity ratio is based on consideration of the through movement-to-capacity ratio at each boundary intersection in the subject direction of travel. The critical volume-to-capacity ratio is the largest ratio of those considered.
Source: Highway Capacity Manual 6th Edition, Exhibit 16-3.

Appendix E: Collision Data

Intersection Collision Data Year 2018 to 2020

ID	Intersection	Number of Collisions	Type of Collision						Severity					Type of Violation								Involved With…		
			Broadside	Rear End	Head-On	Hit Object	Sideswipe	Other	Fatal	Severe Injury	Other Visible Injury	Complaint of Pain Injury	Property Damage Only	Traffic Signals & Signs	Right of Way	Unsafe Speed	Improper Turning	Driving Under Influence	Too Close	Pedestrian Violation	Other	Pedestrian / Bicyclist	Other Motor Vehicle	Fixed Object / Other
1	Avenue 280 / Road 148	6	2	4	-	-	-	-	-	-	1	2	3	1	1	4	-	-	-	-	-	-	6	-

Primary Rd **AVENUE 280** *Distance (ft)* **3829** *Direction* **E** *Secondary Rd* **ROAD 140** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **006** *Type* **3** *CalTrans* *Badge* **019349** *Collision Date* **20180706** *Time* **1510** *Day* **FRI**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **HEAD-ON** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20180718**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	18	M	H	HNBD		OTHER	E	D	2200	FORD	1997	-	3	N	-	L G								
2	DRVR	47	F	H	HNBD		PROC ST	W	A	0100	TOYO	2012	-	3	N	-	L G	DRVR	POSSIBL	47	F	1	0	L	G

Primary Rd **AVENUE 280** *Distance (ft)* **1584** *Direction* **E** *Secondary Rd* **ROAD 140** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **006** *Type* **3** *CalTrans* *Badge* **017291** *Collision Date* **20180912** *Time* **2130** *Day* **WED**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **OTHER** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20180924**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **ANIMAL** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	56	M	H	HNBD		PROC ST	W	C	0200	HD	2013	-	3	N	-	- W	DRVR	POSSIBL	56	M	1	1	P	W

Primary Rd **AVENUE 280** *Distance (ft)* **20** *Direction* **E** *Secondary Rd* **ROAD 140** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **006** *Type* **3** *CalTrans* *Badge* **019697** *Collision Date* **20181221** *Time* **1855** *Day* **FRI**
Primary Collision Factor **LANE CHANGE** *Violation* **21658A** *Collision Type* **SIDESWIPE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20181228**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DUSK/DAWN** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	19	F	H	HNBD		CHANG LN	E	A	0100	MAZD	1993	-	3	N	-	M G								
2	DRVR	24	F	H	HNBD		PROC ST	E	A	0100	HOND	2018	-	3	N	-	M G								

Primary Rd **AVENUE 280** *Distance (ft)* **0** *Direction* *Secondary Rd* **ROAD 148** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **006** *Type* **3** *CalTrans* *Badge* **015282** *Collision Date* **20180816** *Time* **1600** *Day* **THU**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20180830**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	33	M	W	HNBD		SLOWING	E	D	2200	RAM	2017	-	3	N	-	M G								
2	DRVR	41	F	W	HNBD		STOPPED	E	A	0700	CHEV	2018	-	3	N	-	M G								

Primary Rd **AVENUE 280** *Distance (ft)* **50** *Direction* **W** *Secondary Rd* **ROAD 156** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **006** *Type* **3** *CalTrans* *Badge* **013656** *Collision Date* **20180108** *Time* **1725** *Day* **MON**
Primary Collision Factor **STRTNG|BCKNG** *Violation* **22106** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20180111**
Weather1 **RAINING** *Weather2* *Rdwy Surface* **WET** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	29	M	H	HNBD		STOPPED	E	A	0100	GMC	2015	-	3	N	-	M G								
2F	DRVR	55	F	W	HNBD		PROC ST	E	A	0100	KIA	2017	-	3	N	-	M G								

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Primary Rd **AVENUE 272** *Distance (ft)* **50** *Direction* **W** *Secondary Rd* **ROAD 128** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **006** *Type* **3** *CalTrans* *Badge* **013656** *Collision Date* **20190531** *Time* **0935** *Day* **FRI**
Primary Collision Factor **STRTNG\|BCKNG** *Violation* **22106** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20190617**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **1**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1	DRVR	61	F	W	HNBD		STOPPED	W	H	1600	CHEV	2010	-	3	N	-	M G
2F	DRVR	45	F	H	HNBD		RGT TURN	W	A	0700	CHEV	2015	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **AVENUE 272** *Distance (ft)* **0** *Direction* *Secondary Rd* **ROAD 128** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **001** *Type* **3** *CalTrans* *Badge* **019111** *Collision Date* **20190612** *Time* **1349** *Day* **WED**
Primary Collision Factor **STOP SGN\|SIG** *Violation* **22450A** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20190620**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	26	M	H	HNBD		RAN OFF RD	S	A	0100	MERC	2010	-	3	A	22350	- L G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **AVENUE 280** *Distance (ft)* **15** *Direction* **W** *Secondary Rd* **DRIVE 85B** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **006** *Type* **3** *CalTrans* *Badge* **019111** *Collision Date* **20190811** *Time* **1715** *Day* **SUN**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20190815**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	36	M	H	HNBD		PROC ST	E	A	0100	CHRYS	2008	-	3	N	-	M G
2	DRVR	29	F	W	HNBD		STOPPED	E	A	0100	HOND	2015	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **AVENUE 280** *Distance (ft)* **50** *Direction* **W** *Secondary Rd* **ROAD 148** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **006** *Type* **3** *CalTrans* *Badge* **019349** *Collision Date* **20190502** *Time* **1645** *Day* **THU**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20190508**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	34	M	W	HNBD		PROC ST	W	D	2200	FORD	2012	-	3	N	-	M G
2	DRVR	64	F	H	HNBD		SLOWING	W	A	0100	CHEV	2013	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **AVENUE 280** *Distance (ft)* **308** *Direction* **W** *Secondary Rd* **ROAD 156** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **006** *Type* **3** *CalTrans* *Badge* **019932** *Collision Date* **20190211** *Time* **1335** *Day* **MON**
Primary Collision Factor **DRVR ALC\|DRG** *Violation* **23152G** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **2** *Tow Away?* **Y** *Process Date* **20190225**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip
1F	DRVR	40	M	H	HBD-UI	DRUG	PROC ST	E	D	2200	CHEV	2012	-	3	A	22350	- M G
2	DRVR	55	M	H	HNBD		SLOWING	E	A	0800	HOND	2003	-	3	N	-	M G
3	DRVR	73	M	W	HNBD		STOPPED	E	A	0100	TOYT	2015	-	3	N	-	M G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	40	M	1	0	M	G
PASS	POSSIBL	73	F	3	0	M	G

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Primary Rd AVENUE 280 Distance (ft) 0 Direction Secondary Rd ROAD 148 NCIC 9480 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
City UNINCORP. (CALDWELL AVENUE) County Tulare Population 9 Rpt Dist Beat 006 Type 3 CalTrans Badge 019111 Collision Date 20190518 Time 1900 Day SAT
Primary Collision Factor STOP SGN|SIG Violation 22450A Collision Type BROADSIDE Severity INJURY #Killed 0 #Injured 4 Tow Away? Y Process Date 20190528
Weather1 CLOUDY Weather2 RAINING Rdwy Surface WET Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev FNCTNG Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	19	M	H	HNBD		PROC ST	N	D	2200	CHEV	2016	-	3	N		-	L	G
2	DRVR	46	M	H	HNBD		PROC ST	E	A	0100	NISS	2019	-	3	N		-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	MINOR	19	M	1	0	L	G
DRVR	MINOR	46	M	1	0	L	G
PASS	MINOR	43	F	4	0	P	H
PASS	MINOR	2	F	6	0	P	Q

Primary Rd AVENUE 280 Distance (ft) 1584 Direction E Secondary Rd ROAD 156 NCIC 9480 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
City UNINCORP. (VISALIA ROAD) County Tulare Population 9 Rpt Dist Beat 006 Type 3 CalTrans Badge 019932 Collision Date 20190920 Time 1749 Day FRI
Primary Collision Factor TOO CLOSE Violation 21703 Collision Type REAR END Severity INJURY #Killed 0 #Injured 2 Tow Away? N Process Date 20190925
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	22	M	H	HNBD		PROC ST	E	D	2200	CHEV	2006	-	3	N		-	M	G
2	DRVR	72	M	H	HNBD		SLOWING	E	D	2200	TOYT	2001	-	3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
PASS	POSSIBL	70	F	2	0	P	C
PASS	POSSIBL	65	F	3	0	M	G

Primary Rd AVENUE 280 Distance (ft) 0 Direction Secondary Rd ROAD 156 (S. NCIC 9480 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
City UNINCORP. (VISALIA ROAD) County Tulare Population 9 Rpt Dist Beat 006 Type 3 CalTrans Badge 016723 Collision Date 20191113 Time 1030 Day WED
Primary Collision Factor DRVR ALC|DRG Violation 23152F Collision Type BROADSIDE Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20191118
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev FNCTNG Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	69	F	W	HNBD	DRUG	PROC ST	E	A	0700	FORD	2016	-	3	A	21453	-	M	G
2	DRVR	73	M	W	HNBD		LFT TURN	N	D	2200	CHEV	2002	-	3	N		-	M	G
3	DRVR	38	F	H	HNBD		STOPPED	W	A	0700	BUIC	2005	-	3	N		-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	SERIOUS	69	F	1	0	M	G

Primary Rd AVENUE 288 Distance (ft) 2140 Direction W Secondary Rd ANDERSON ROAD NCIC 9480 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
City UNINCORP. County Tulare Population 9 Rpt Dist Beat 006 Type 3 CalTrans Badge 020612 Collision Date 20190914 Time 0342 Day SAT
Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20190919
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DARK - NO Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	18	F	H	HNBD		RAN OFF RD	E	A	0100	HOND	2003	-	3	N		-	L	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	POSSIBL	18	F	1	0	L	G

Primary Rd AVENUE 288 Distance (ft) 1584 Direction E Secondary Rd ROAD 148 NCIC 9480 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
City UNINCORP. County Tulare Population 9 Rpt Dist Beat 006 Type 3 CalTrans Badge 016995 Collision Date 20190616 Time 0310 Day SUN
Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type REAR END Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20190705
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run MSDMNR Motor Vehicle Involved With OTHER MV Lighting DARK - NO Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety	Equip
1F	DRVR	45	F	H	HNBD		PROC ST	E	A	0100	HYUN	2017	-	3	N		-	M	G
2	DRVR	998	-		IMP UNK	IMP UNK	SLOWING	E	D	2200	-	-	-	3	N		-	B	B

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd **AVENUE 280** *Distance (ft)* **25.0** *Direction* **E** *Secondary Rd* **CORNUCOPIA** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **006** *Type* **3** *CalTrans* *Badge* **017854** *Collision Date* **20200924** *Time* **1840** *Day* **THU**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **Y** *Process Date* **20200928**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	67	M	W	HNBD		PROC ST	W	A	0100	NISSA	2016	-	3	N	-	L	G
2	DRVR	36	F	H	HNBD		STOPPED	W	A	0700	CHEV	2016	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
DRVR	MINOR	67	M	1	0	L	G

Primary Rd **AVENUE 280** *Distance (ft)* **0.00** *Direction* *Secondary Rd* **DRIVE 85B** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **093** *Type* **1** *CalTrans* *Badge* **019349** *Collision Date* **20200818** *Time* **1330** *Day* **TUE**
Primary Collision Factor **STOP SGN|SIG** *Violation* **22450A** *Collision Type* **BROADSIDE** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20200820**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	25	F	W	HNBD		PROC ST	W	A	0100	CHEV	2014	-	3	N	-	L	G
2	DRVR	59	M	W	HNBD		PROC ST	S	A	0800	FORD	2019	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **AVENUE 280** *Distance (ft)* **2006** *Direction* **W** *Secondary Rd* **MARIPOSA AVE** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **006** *Type* **3** *CalTrans* *Badge* **020450** *Collision Date* **20200904** *Time* **2129** *Day* **FRI**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **HIT OBJECT** *Severity* **INJURY** *#Killed* **0** *#Injured* **1** *Tow Away?* **N** *Process Date* **20200921**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run **FELONY** *Motor Vehicle Involved With* **BICYCLE** *Lighting* **DARK - NO** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	30	M	H	HNBD		PROC ST	E	A	0700	HOND	2007	-	3	N	-	M	G
2	BICY	41	M	H	HNBD		PROC ST	E	L	0400	UNKNO		-	3	A	21201	-	-	V

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
BICY	SERIOUS	41	M	1	1	-	V

Primary Rd **AVENUE 280** *Distance (ft)* **1531** *Direction* **W** *Secondary Rd* **PEPPERTREE** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **006** *Type* **3** *CalTrans* *Badge* **016145** *Collision Date* **20200924** *Time* **0455** *Day* **THU**
Primary Collision Factor **IMPROP TURN** *Violation* **22107** *Collision Type* **HIT OBJECT** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **Y** *Process Date* **20200925**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **FIXED OBJ** *Lighting* **DARK - ST** *Ped Action* *Cntrl Dev* **FNCTNG** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	21	M	B	HNBD		RAN OFF RD	W	A	0700	FORD	1998	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

Primary Rd **AVENUE 280** *Distance (ft)* **46.0** *Direction* **E** *Secondary Rd* **ROAD 148** *NCIC* **9480** *State Hwy?* **N** *Route* *Postmile Prefix* *Postmile* *Side of Hwy*
City **UNINCORP.** *County* **Tulare** *Population* **9** *Rpt Dist* *Beat* **006** *Type* **3** *CalTrans* *Badge* **019349** *Collision Date* **20201101** *Time* **1410** *Day* **SUN**
Primary Collision Factor **UNSAFE SPEED** *Violation* **22350** *Collision Type* **REAR END** *Severity* **PDO** *#Killed* **0** *#Injured* **0** *Tow Away?* **N** *Process Date* **20201104**
Weather1 **CLEAR** *Weather2* *Rdwy Surface* **DRY** *Rdwy Cond1* **NO UNUSL CND** *Rdwy Cond2* *Spec Cond* **0**
Hit and Run *Motor Vehicle Involved With* **OTHER MV** *Lighting* **DAYLIGHT** *Ped Action* *Cntrl Dev* **NT PRS/FCTR** *Loc Type* *Ramp/Int*

Party Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	
1F	DRVR	55	F	W	HNBD		SLOWING	W	A	0700	GMC	2001	-	3	N	-	M	G
2	DRVR	26	F	H	HNBD		SLOWING	W	A	0100	TOYO	2019	-	3	N	-	M	G

Victim Info

ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected

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Primary Rd AVENUE 280 | Distance (ft) 0.00 | Direction | Secondary Rd ROAD 148 | NCIC 9480 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. | County Tulare | Population 9 | Rpt Dist | Beat 006 | Type 3 | CalTrans | Badge 013656 | Collision Date 20201116 | Time 0745 | Day MON
Primary Collision Factor R-O-W AUTO | Violation 21801A | Collision Type BROADSIDE | Severity INJURY | #Killed 0 | #Injured 1 | Tow Away? Y | Process Date 20201203
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	27	M	W	HNBD		LFT TURN	E	F	2500	INTL	2015	- 3	N		-	M G								
2	DRVR	65	M	H	HNBD		PROC ST	W	A	0100	NISS	2006	- 3	N		-	L G	DRVR	POSSIBL	65	M	1	0	L	G

Primary Rd AVENUE 280 | Distance (ft) 225. | Direction E | Secondary Rd ROAD 156 | NCIC 9480 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. | County Tulare | Population 9 | Rpt Dist | Beat 006 | Type 3 | CalTrans | Badge 013656 | Collision Date 20200205 | Time 0740 | Day WED
Primary Collision Factor UNSAFE SPEED | Violation 22350 | Collision Type REAR END | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? Y | Process Date 20200210
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev FNCTNG | Loc Type | Ramp/Int

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	49	F	W	HNBD		STOPPED	W	A	0100	KIA	2014	- 3	N		-	M G								
2F	DRVR	37	F	H	HNBD		PROC ST	W	D	2200	DODG	2016	- 3	N		-	M G								

Primary Rd AVENUE 280 | Distance (ft) 20.0 | Direction E | Secondary Rd ROAD 156 | NCIC 9480 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. | County Tulare | Population 9 | Rpt Dist | Beat 006 | Type 3 | CalTrans | Badge 013656 | Collision Date 20200430 | Time 1155 | Day THU
Primary Collision Factor UNSAFE SPEED | Violation 22350 | Collision Type REAR END | Severity INJURY | #Killed 0 | #Injured 1 | Tow Away? N | Process Date 20200511
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev FNCTNG | Loc Type | Ramp/Int

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	43	F	H	HNBD		STOPPED	W	A	0100	HOND	2004	- 3	N		-	M G	DRVR	POSSIBL	43	F	1	0	M	G
2F	DRVR	61	M	W	HNBD		PROC ST	W	A	0100	KIA	2018	- 3	N		-	M G								

Primary Rd AVENUE 280 | Distance (ft) 0.00 | Direction | Secondary Rd ROAD 156 | NCIC 9480 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. | County Tulare | Population 9 | Rpt Dist | Beat 006 | Type 3 | CalTrans | Badge 016210 | Collision Date 20200712 | Time 0715 | Day SUN
Primary Collision Factor STOP SGN|SIG | Violation 21453A | Collision Type BROADSIDE | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? N | Process Date 20200721
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DAYLIGHT | Ped Action | Cntrl Dev FNCTNG | Loc Type | Ramp/Int

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	63	M	H	HNBD		PROC ST	N	A	0100	TOYT	1992	- 3	N		-	M G								
2	DRVR	50	M	H	HNBD		PROC ST	E	A	0100	FORD	2013	- 3	N		-	M G								

Primary Rd AVENUE 280 | Distance (ft) 0.00 | Direction | Secondary Rd ROAD 156 | NCIC 9480 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. | County Tulare | Population 9 | Rpt Dist | Beat 006 | Type 3 | CalTrans | Badge 013656 | Collision Date 20200825 | Time 0610 | Day TUE
Primary Collision Factor STOP SGN|SIG | Violation 21453A | Collision Type BROADSIDE | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? Y | Process Date 20200902
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DUSK/DAWN | Ped Action | Cntrl Dev FNCTNG | Loc Type | Ramp/Int

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	63	M	H	HNBD		PROC ST	E	A	0100	TOYT	2016	- 3	N		-	L G								
2	DRVR	24	M	H	HNBD		PROC ST	S	A	0100	TOYT	2012	- 3	N		-	M G								

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Primary Rd AVENUE 280 | Distance (ft) 15.0 | Direction W | Secondary Rd ROAD 92 (SHIRK | NCIC 9480 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. (CALDWELL AVE) | County Tulare | Population 9 | Rpt Dist | Beat 006 | Type 3 | CalTrans | Badge 020060 | Collision Date 20200216 | Time 1815 | Day SUN
Primary Collision Factor UNSAFE SPEED | Violation 22350 | Collision Type REAR END | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? N | Process Date 20200220
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DARK - ST | Ped Action | Cntrl Dev FNCTNG | Loc Type | Ramp/Int

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	18	M	H	HNBD		PROC ST	E	A	0800	JEEP	2019	- 3	F		-	M G								
2	DRVR	33	F	W	HNBD		STOPPED	E	A	0100	BMW	2014	- 3	N		-	M G								

Primary Rd AVENUE 280 | Distance (ft) 45.0 | Direction E | Secondary Rd DRIVE 85B | NCIC 9480 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. (CALDWELL AVENUE) | County Tulare | Population 9 | Rpt Dist | Beat 006 | Type 3 | CalTrans | Badge 013914 | Collision Date 20201218 | Time 0653 | Day FRI
Primary Collision Factor UNSAFE SPEED | Violation 22350 | Collision Type REAR END | Severity INJURY | #Killed 0 | #Injured 2 | Tow Away? Y | Process Date 20201228
Weather1 CLOUDY | Weather2 FOG | Rdwy Surface WET | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DUSK/DAWN | Ped Action | Cntrl Dev FNCTNG | Loc Type | Ramp/Int

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	18	M	W	HNBD		PROC ST	W	A	0100	CHRY	2002	- 3	N		-	M G	DRVR	MINOR	18	M	1	0	M	G
2	DRVR	27	F	W	HNBD		SLOWING	W	A	0100	CHEV	2015	- 3	N		-	M G	DRVR	MINOR	27	F	1	0	M	G

Primary Rd AVENUE 280 | Distance (ft) 10.0 | Direction E | Secondary Rd ROAD 148 | NCIC 9480 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. (VISALIA ROAD) | County Tulare | Population 9 | Rpt Dist | Beat 006 | Type 3 | CalTrans | Badge 017854 | Collision Date 20201119 | Time 1825 | Day THU
Primary Collision Factor UNSAFE SPEED | Violation 22350 | Collision Type REAR END | Severity INJURY | #Killed 0 | #Injured 1 | Tow Away? Y | Process Date 20201125
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DARK - NO | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	43	F	W	HNBD		PROC ST	W	A	0700	FORD	2016	- 3	N		-	L G	DRVR	POSSIBL	43	F	1	0	L	G
2	DRVR	49	M	W	HNBD		STOPPED	W	A	0100	DODGE	2011	- 3	N		-	M G								

Primary Rd AVENUE 280 | Distance (ft) 2112 | Direction W | Secondary Rd ROAD 176 | NCIC 9480 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. (VISALIA ROAD) | County Tulare | Population 9 | Rpt Dist | Beat 006 | Type 3 | CalTrans | Badge 020060 | Collision Date 20200626 | Time 2112 | Day FRI
Primary Collision Factor DRVR ALC|DRG | Violation 23152A | Collision Type HEAD-ON | Severity FATAL | #Killed 1 | #Injured 3 | Tow Away? Y | Process Date 20201013
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run | Motor Vehicle Involved With OTHER MV | Lighting DARK - NO | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	37	M	H	HBD-UI		UNS TURN	W	A	0100	HOND	2001	- 3	A	22107	-	L G	DRVR	SERIOUS	37	M	1	0	L	G
2	DRVR	61	F	H	HNBD		PROC ST	E	A	0100	TOYO	2013	- 3	N		-	L H	DRVR	KILLED	61	F	1	0	L	H
																		PASS	SERIOUS	60	M	3	0	L	H
3	DRVR	57	M	H	HNBD		PROC ST	E	D	2200	TOYO	2015	- 3	N		-	M G	DRVR	POSSIBL	57	M	1	0	M	G

Primary Rd AVENUE 288 | Distance (ft) 845. | Direction E | Secondary Rd ROAD 148 | NCIC 9480 | State Hwy? N | Route | Postmile Prefix | Postmile | Side of Hwy
City UNINCORP. | County Tulare | Population 9 | Rpt Dist | Beat 006 | Type 3 | CalTrans | Badge 013656 | Collision Date 20201110 | Time 2500 | Day TUE
Primary Collision Factor IMPROP TURN | Violation 22107 | Collision Type HIT OBJECT | Severity PDO | #Killed 0 | #Injured 0 | Tow Away? Y | Process Date 20201116
Weather1 CLEAR | Weather2 | Rdwy Surface DRY | Rdwy Cond1 NO UNUSL CND | Rdwy Cond2 | Spec Cond 0
Hit and Run MSDMNR | Motor Vehicle Involved With FIXED OBJ | Lighting DUSK/DAWN | Ped Action | Cntrl Dev NT PRS/FCTR | Loc Type | Ramp/Int

Party Info / Victim Info

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	998	-		IMP UNK	IMP UNK	RAN OFF RD	W	A	0700	CHEV	2008	- 3	N		-	L B								

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Appendix F: Existing Traffic Conditions

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	88	231	10	7	346	48	21	19	6	35	15	73
Future Vol, veh/h	88	231	10	7	346	48	21	19	6	35	15	73
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	104	272	12	8	407	56	25	22	7	41	18	86

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	463	0	0	284	0	0	989	965	279	953	943	435
Stage 1	-	-	-	-	-	-	486	486	-	451	451	-
Stage 2	-	-	-	-	-	-	503	479	-	502	492	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1093	-	-	1273	-	-	225	254	757	238	262	619
Stage 1	-	-	-	-	-	-	561	549	-	586	569	-
Stage 2	-	-	-	-	-	-	549	553	-	550	546	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1093	-	-	1273	-	-	166	223	756	198	230	619
Mov Cap-2 Maneuver	-	-	-	-	-	-	166	223	-	198	230	-
Stage 1	-	-	-	-	-	-	498	487	-	520	564	-
Stage 2	-	-	-	-	-	-	454	548	-	461	484	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.3	0.1	28.1	23
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	209	1093	-	-	1273	-	-	342
HCM Lane V/C Ratio	0.259	0.095	-	-	0.006	-	-	0.423
HCM Control Delay (s)	28.1	8.6	0	-	7.8	0	-	23
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1	0.3	-	-	0	-	-	2

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	421	24	8	362	44	6	9	19	14	6	55
Future Vol, veh/h	60	421	24	8	362	44	6	9	19	14	6	55
Conflicting Peds, #/hr	12	0	0	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	76	533	30	10	458	56	8	11	24	18	8	70

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	526	0	0	563	0	0	1245	1246	548	1236	1233	498
Stage 1	-	-	-	-	-	-	700	700	-	518	518	-
Stage 2	-	-	-	-	-	-	545	546	-	718	715	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1036	-	-	1003	-	-	150	173	534	152	176	570
Stage 1	-	-	-	-	-	-	428	440	-	539	532	-
Stage 2	-	-	-	-	-	-	521	516	-	419	433	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1024	-	-	1003	-	-	115	150	534	123	153	563
Mov Cap-2 Maneuver	-	-	-	-	-	-	115	150	-	123	153	-
Stage 1	-	-	-	-	-	-	381	392	-	475	519	-
Stage 2	-	-	-	-	-	-	444	503	-	346	386	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0.2	24.2	22.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	230	1024	-	-	1003	-	-	299
HCM Lane V/C Ratio	0.187	0.074	-	-	0.01	-	-	0.318
HCM Control Delay (s)	24.2	8.8	0	-	8.6	0	-	22.5
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.7	0.2	-	-	0	-	-	1.3

Intersection: 1: Road 148 & Avenue 280

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	110	25	101	77
Average Queue (ft)	24	2	30	36
95th Queue (ft)	64	12	69	64
Link Distance (ft)	2316	274	2499	131
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Road 148 & Avenue 280

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	86	53	52	72
Average Queue (ft)	18	6	16	37
95th Queue (ft)	51	33	40	60
Link Distance (ft)	2316	274	2499	131
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Appendix G: Opening Year plus Project Traffic Conditions

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	93	252	10	7	358	53	22	20	7	38	16	88
Future Vol, veh/h	93	252	10	7	358	53	22	20	7	38	16	88
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	109	296	12	8	421	62	26	24	8	45	19	104

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	483	0	0	308	0	0	1050	1019	303	1005	994	452
Stage 1	-	-	-	-	-	-	520	520	-	468	468	-
Stage 2	-	-	-	-	-	-	530	499	-	537	526	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1074	-	-	1247	-	-	204	236	734	219	244	605
Stage 1	-	-	-	-	-	-	537	530	-	574	560	-
Stage 2	-	-	-	-	-	-	531	542	-	526	527	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1074	-	-	1247	-	-	142	205	733	178	212	605
Mov Cap-2 Maneuver	-	-	-	-	-	-	142	205	-	178	212	-
Stage 1	-	-	-	-	-	-	471	465	-	503	555	-
Stage 2	-	-	-	-	-	-	421	537	-	433	462	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.3	0.1	32.6	27
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	187	1074	-	-	1247	-	-	327
HCM Lane V/C Ratio	0.308	0.102	-	-	0.007	-	-	0.511
HCM Control Delay (s)	32.6	8.7	0	-	7.9	0	-	27
HCM Lane LOS	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	1.2	0.3	-	-	0	-	-	2.8

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	283	414	6	2	4
Future Vol, veh/h	14	283	414	6	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	16	322	470	7	2	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	477	0	-	0	828	474
Stage 1	-	-	-	-	474	-
Stage 2	-	-	-	-	354	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1080	-	-	-	340	588
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	708	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1080	-	-	-	334	588
Mov Cap-2 Maneuver	-	-	-	-	334	-
Stage 1	-	-	-	-	613	-
Stage 2	-	-	-	-	708	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1080	-	-	-	469
HCM Lane V/C Ratio	0.015	-	-	-	0.015
HCM Control Delay (s)	8.4	0	-	-	12.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	62	443	25	8	375	47	6	9	20	15	6	65
Future Vol, veh/h	62	443	25	8	375	47	6	9	20	15	6	65
Conflicting Peds, #/hr	12	0	0	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	78	561	32	10	475	59	8	11	25	19	8	82

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	546	0	0	593	0	0	1303	1299	577	1288	1286	517
Stage 1	-	-	-	-	-	-	733	733	-	537	537	-
Stage 2	-	-	-	-	-	-	570	566	-	751	749	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1018	-	-	978	-	-	137	161	514	140	164	556
Stage 1	-	-	-	-	-	-	411	425	-	526	521	-
Stage 2	-	-	-	-	-	-	505	506	-	401	418	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1006	-	-	978	-	-	101	139	514	111	141	550
Mov Cap-2 Maneuver	-	-	-	-	-	-	101	139	-	111	141	-
Stage 1	-	-	-	-	-	-	363	376	-	460	507	-
Stage 2	-	-	-	-	-	-	417	493	-	327	370	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0.2	26	24.6
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	215	1006	-	-	978	-	-	291
HCM Lane V/C Ratio	0.206	0.078	-	-	0.01	-	-	0.374
HCM Control Delay (s)	26	8.9	0	-	8.7	0	-	24.6
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.8	0.3	-	-	0	-	-	1.7

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	470	428	2	1	3
Future Vol, veh/h	8	470	428	2	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	9	534	486	2	1	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	488	0	-	0	1039	487
Stage 1	-	-	-	-	487	-
Stage 2	-	-	-	-	552	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1070	-	-	-	254	579
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	575	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1070	-	-	-	251	579
Mov Cap-2 Maneuver	-	-	-	-	251	-
Stage 1	-	-	-	-	609	-
Stage 2	-	-	-	-	575	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	13.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1070	-	-	-	436
HCM Lane V/C Ratio	0.008	-	-	-	0.01
HCM Control Delay (s)	8.4	0	-	-	13.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection: 1: Road 148 & Avenue 280

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	94	52	117	96
Average Queue (ft)	27	6	35	45
95th Queue (ft)	67	32	75	80
Link Distance (ft)	2316	274	2499	131
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Avenue 280 & Project Drwy

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	31	31
Average Queue (ft)	5	6
95th Queue (ft)	23	26
Link Distance (ft)	274	131
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Intersection: 1: Road 148 & Avenue 280

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	116	53	43	73
Average Queue (ft)	22	4	18	41
95th Queue (ft)	68	27	39	70
Link Distance (ft)	2316	274	2499	131
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Avenue 280 & Project Drwy

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	30	30
Average Queue (ft)	2	2
95th Queue (ft)	14	14
Link Distance (ft)	274	131
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Appendix H: Cumulative Year 2042 No Project Traffic Conditions

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	93	277	10	8	375	59	25	30	17	35	15	73
Future Vol, veh/h	93	277	10	8	375	59	25	30	17	35	15	73
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	108	322	12	9	436	69	29	35	20	41	17	85

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	505	0	0	334	0	0	1084	1067	329	1062	1039	471
Stage 1	-	-	-	-	-	-	544	544	-	489	489	-
Stage 2	-	-	-	-	-	-	540	523	-	573	550	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1055	-	-	1220	-	-	194	221	710	200	230	591
Stage 1	-	-	-	-	-	-	521	517	-	559	548	-
Stage 2	-	-	-	-	-	-	524	529	-	503	514	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1055	-	-	1220	-	-	139	191	709	150	199	591
Mov Cap-2 Maneuver	-	-	-	-	-	-	139	191	-	150	199	-
Stage 1	-	-	-	-	-	-	455	452	-	489	543	-
Stage 2	-	-	-	-	-	-	430	524	-	394	449	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.2	0.1	35.4	29.7
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	200	1055	-	-	1220	-	-	285
HCM Lane V/C Ratio	0.419	0.103	-	-	0.008	-	-	0.502
HCM Control Delay (s)	35.4	8.8	0	-	8	0	-	29.7
HCM Lane LOS	E	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	1.9	0.3	-	-	0	-	-	2.6

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	474	25	11	414	65	8	22	61	19	7	59
Future Vol, veh/h	65	474	25	11	414	65	8	22	61	19	7	59
Conflicting Peds, #/hr	12	0	0	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	72	527	28	12	460	72	9	24	68	21	8	66

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	544	0	0	555	0	0	1242	1253	541	1263	1231	508
Stage 1	-	-	-	-	-	-	685	685	-	532	532	-
Stage 2	-	-	-	-	-	-	557	568	-	731	699	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1020	-	-	1010	-	-	151	171	539	146	177	563
Stage 1	-	-	-	-	-	-	436	447	-	529	524	-
Stage 2	-	-	-	-	-	-	513	505	-	412	440	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1008	-	-	1010	-	-	116	149	539	100	154	557
Mov Cap-2 Maneuver	-	-	-	-	-	-	116	149	-	100	154	-
Stage 1	-	-	-	-	-	-	391	401	-	469	509	-
Stage 2	-	-	-	-	-	-	438	491	-	303	394	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0.2	25.4	28
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	276	1008	-	-	1010	-	-	249
HCM Lane V/C Ratio	0.366	0.072	-	-	0.012	-	-	0.379
HCM Control Delay (s)	25.4	8.8	0	-	8.6	0	-	28
HCM Lane LOS	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	1.6	0.2	-	-	0	-	-	1.7

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	93	277	10	8	375	59	25	30	17	35	15	73
Future Vol, veh/h	93	277	10	8	375	59	25	30	17	35	15	73
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	108	322	12	9	436	69	29	35	20	41	17	85

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	505	0	0	334	0	0	1084	1067	329	1062	1039	471
Stage 1	-	-	-	-	-	-	544	544	-	489	489	-
Stage 2	-	-	-	-	-	-	540	523	-	573	550	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1055	-	-	1220	-	-	194	221	710	200	230	591
Stage 1	-	-	-	-	-	-	521	517	-	559	548	-
Stage 2	-	-	-	-	-	-	524	529	-	503	514	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1055	-	-	1220	-	-	139	191	709	150	199	591
Mov Cap-2 Maneuver	-	-	-	-	-	-	139	191	-	150	199	-
Stage 1	-	-	-	-	-	-	455	452	-	489	543	-
Stage 2	-	-	-	-	-	-	430	524	-	394	449	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.2	0.1	27.7	29.7
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	139	260	1055	-	-	1220	-	-	285
HCM Lane V/C Ratio	0.209	0.21	0.103	-	-	0.008	-	-	0.502
HCM Control Delay (s)	37.6	22.5	8.8	0	-	8	0	-	29.7
HCM Lane LOS	E	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.8	0.8	0.3	-	-	0	-	-	2.6

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	474	25	11	414	65	8	22	61	19	7	59
Future Vol, veh/h	65	474	25	11	414	65	8	22	61	19	7	59
Conflicting Peds, #/hr	12	0	0	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	72	527	28	12	460	72	9	24	68	21	8	66

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	544	0	0	555	0	0	1242	1253	541	1263	1231	508
Stage 1	-	-	-	-	-	-	685	685	-	532	532	-
Stage 2	-	-	-	-	-	-	557	568	-	731	699	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1020	-	-	1010	-	-	151	171	539	146	177	563
Stage 1	-	-	-	-	-	-	436	447	-	529	524	-
Stage 2	-	-	-	-	-	-	513	505	-	412	440	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1008	-	-	1010	-	-	116	149	539	100	154	557
Mov Cap-2 Maneuver	-	-	-	-	-	-	116	149	-	100	154	-
Stage 1	-	-	-	-	-	-	391	401	-	469	509	-
Stage 2	-	-	-	-	-	-	438	491	-	303	394	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0.2	22.5	28
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	116	318	1008	-	-	1010	-	-	249
HCM Lane V/C Ratio	0.077	0.29	0.072	-	-	0.012	-	-	0.379
HCM Control Delay (s)	38.6	20.9	8.8	0	-	8.6	0	-	28
HCM Lane LOS	E	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.2	1.2	0.2	-	-	0	-	-	1.7

Intersection: 1: Road 148 & Avenue 280

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	LTR
Maximum Queue (ft)	73	47	30	53	96
Average Queue (ft)	16	3	13	23	39
95th Queue (ft)	45	18	33	48	65
Link Distance (ft)	2311	268		2499	131
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 1: Road 148 & Avenue 280

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	LTR
Maximum Queue (ft)	73	48	29	92	100
Average Queue (ft)	21	6	3	36	34
95th Queue (ft)	59	26	18	70	69
Link Distance (ft)	2311	268		2499	131
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Appendix I: Cumulative Year 2042 plus Project Traffic Conditions

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	95	290	10	8	376	62	25	30	18	38	16	88
Future Vol, veh/h	95	290	10	8	376	62	25	30	18	38	16	88
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	110	337	12	9	437	72	29	35	21	44	19	102

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	509	0	0	349	0	0	1115	1090	344	1083	1060	473
Stage 1	-	-	-	-	-	-	563	563	-	491	491	-
Stage 2	-	-	-	-	-	-	552	527	-	592	569	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1051	-	-	1204	-	-	184	214	696	194	223	589
Stage 1	-	-	-	-	-	-	509	507	-	557	546	-
Stage 2	-	-	-	-	-	-	516	527	-	491	504	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1051	-	-	1204	-	-	126	184	695	144	192	589
Mov Cap-2 Maneuver	-	-	-	-	-	-	126	184	-	144	192	-
Stage 1	-	-	-	-	-	-	443	441	-	485	540	-
Stage 2	-	-	-	-	-	-	407	521	-	381	438	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.1	0.1	39	33.5
HCM LOS			E	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	188	1051	-	-	1204	-	-	286
HCM Lane V/C Ratio	0.452	0.105	-	-	0.008	-	-	0.577
HCM Control Delay (s)	39	8.8	0	-	8	0	-	33.5
HCM Lane LOS	E	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	2.1	0.4	-	-	0	-	-	3.4

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	331	442	6	2	4
Future Vol, veh/h	14	331	442	6	2	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	16	385	514	7	2	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	521	0	-	0	935	518
Stage 1	-	-	-	-	518	-
Stage 2	-	-	-	-	417	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1040	-	-	-	293	556
Stage 1	-	-	-	-	596	-
Stage 2	-	-	-	-	663	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1040	-	-	-	287	556
Mov Cap-2 Maneuver	-	-	-	-	287	-
Stage 1	-	-	-	-	584	-
Stage 2	-	-	-	-	663	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	13.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1040	-	-	-	424
HCM Lane V/C Ratio	0.016	-	-	-	0.016
HCM Control Delay (s)	8.5	0	-	-	13.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	482	25	11	415	67	8	22	61	20	7	67
Future Vol, veh/h	65	482	25	11	415	67	8	22	61	20	7	67
Conflicting Peds, #/hr	12	0	0	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	72	536	28	12	461	74	9	24	68	22	8	74

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	547	0	0	564	0	0	1257	1265	550	1274	1242	510
Stage 1	-	-	-	-	-	-	694	694	-	534	534	-
Stage 2	-	-	-	-	-	-	563	571	-	740	708	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1017	-	-	1003	-	-	147	168	533	143	174	561
Stage 1	-	-	-	-	-	-	432	443	-	528	523	-
Stage 2	-	-	-	-	-	-	509	503	-	407	436	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1005	-	-	1003	-	-	111	146	533	98	151	555
Mov Cap-2 Maneuver	-	-	-	-	-	-	111	146	-	98	151	-
Stage 1	-	-	-	-	-	-	387	396	-	467	508	-
Stage 2	-	-	-	-	-	-	427	489	-	298	390	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0.2	26.1	28.9
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	270	1005	-	-	1003	-	-	253
HCM Lane V/C Ratio	0.374	0.072	-	-	0.012	-	-	0.413
HCM Control Delay (s)	26.1	8.9	0	-	8.6	0	-	28.9
HCM Lane LOS	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	1.7	0.2	-	-	0	-	-	1.9

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	555	490	2	1	3
Future Vol, veh/h	8	555	490	2	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	9	617	544	2	1	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	546	0	-	0	1180	545
Stage 1	-	-	-	-	545	-
Stage 2	-	-	-	-	635	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1018	-	-	-	209	536
Stage 1	-	-	-	-	579	-
Stage 2	-	-	-	-	526	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1018	-	-	-	206	536
Mov Cap-2 Maneuver	-	-	-	-	206	-
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	526	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	14.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1018	-	-	-	383
HCM Lane V/C Ratio	0.009	-	-	-	0.012
HCM Control Delay (s)	8.6	0	-	-	14.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	95	290	10	8	376	62	25	30	18	38	16	88
Future Vol, veh/h	95	290	10	8	376	62	25	30	18	38	16	88
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	110	337	12	9	437	72	29	35	21	44	19	102

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	509	0	0	349	0	0	1115	1090	344	1083	1060	473
Stage 1	-	-	-	-	-	-	563	563	-	491	491	-
Stage 2	-	-	-	-	-	-	552	527	-	592	569	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1051	-	-	1204	-	-	184	214	696	194	223	589
Stage 1	-	-	-	-	-	-	509	507	-	557	546	-
Stage 2	-	-	-	-	-	-	516	527	-	491	504	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1051	-	-	1204	-	-	126	184	695	144	192	589
Mov Cap-2 Maneuver	-	-	-	-	-	-	126	184	-	144	192	-
Stage 1	-	-	-	-	-	-	443	441	-	485	540	-
Stage 2	-	-	-	-	-	-	407	521	-	381	438	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.1	0.1	29.5	33.5
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	126	254	1051	-	-	1204	-	-	286
HCM Lane V/C Ratio	0.231	0.22	0.105	-	-	0.008	-	-	0.577
HCM Control Delay (s)	41.9	23.1	8.8	0	-	8	0	-	33.5
HCM Lane LOS	E	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.8	0.8	0.4	-	-	0	-	-	3.4

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	482	25	11	415	67	8	22	61	20	7	67
Future Vol, veh/h	65	482	25	11	415	67	8	22	61	20	7	67
Conflicting Peds, #/hr	12	0	0	0	0	12	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	72	536	28	12	461	74	9	24	68	22	8	74

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	547	0	0	564	0	0	1257	1265	550	1274	1242	510
Stage 1	-	-	-	-	-	-	694	694	-	534	534	-
Stage 2	-	-	-	-	-	-	563	571	-	740	708	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	1017	-	-	1003	-	-	147	168	533	143	174	561
Stage 1	-	-	-	-	-	-	432	443	-	528	523	-
Stage 2	-	-	-	-	-	-	509	503	-	407	436	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1005	-	-	1003	-	-	111	146	533	98	151	555
Mov Cap-2 Maneuver	-	-	-	-	-	-	111	146	-	98	151	-
Stage 1	-	-	-	-	-	-	387	396	-	467	508	-
Stage 2	-	-	-	-	-	-	427	489	-	298	390	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0.2	22.9	28.9
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	111	313	1005	-	-	1003	-	-	253
HCM Lane V/C Ratio	0.08	0.295	0.072	-	-	0.012	-	-	0.413
HCM Control Delay (s)	40.2	21.2	8.9	0	-	8.6	0	-	28.9
HCM Lane LOS	E	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.3	1.2	0.2	-	-	0	-	-	1.9

Intersection: 1: Road 148 & Avenue 280

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	LTR
Maximum Queue (ft)	90	89	28	52	141
Average Queue (ft)	33	8	12	29	58
95th Queue (ft)	71	41	32	53	109
Link Distance (ft)	2311	268		2499	131
Upstream Blk Time (%)					1
Queuing Penalty (veh)					1
Storage Bay Dist (ft)			100		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Avenue 280 & Project Drwy

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	97	30
Average Queue (ft)	6	5
95th Queue (ft)	38	23
Link Distance (ft)	268	131
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 1

Intersection: 1: Road 148 & Avenue 280

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	LTR
Maximum Queue (ft)	92	25	28	93	137
Average Queue (ft)	33	3	3	37	44
95th Queue (ft)	81	15	17	69	86
Link Distance (ft)	2311	268		2499	131
Upstream Blk Time (%)					1
Queuing Penalty (veh)					1
Storage Bay Dist (ft)			100		
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 2: Avenue 280 & Project Drwy

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	72	30
Average Queue (ft)	4	4
95th Queue (ft)	30	20
Link Distance (ft)	268	131
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 1

Appendix J: Traffic Signal Warrants

Signal Warrant Analysis

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet

				COUNT DATE		12/07/21	
006	Fresno	N/A	N/A	CALC	JG	DATE	12/16/21
DIST	CO	RTE	KPM	CHK	CA	DATE	12/16/21

Major St:	**Avenue 280**	Critical Approach Speed	55	MPH
Minor St:	**Road 148**	Critical Approach Speed	55	MPH

Critical speed of major street traffic > 64 km/h (40 mph)..... ☑ or ☐ RURAL (R)

In built up area of isolated community of < 10,000 population ..... ☐ URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume

(Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume **100% SATISFIED** YES ☐ NO ☑

80 % SATISFIED YES ☐ NO ☑

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)											
	U	R	U	R	7:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM
APPROACH LANES	1		2 or More									Hour
Both Approaches Major Street	500	350	600	420	554	670	677	710	734	883	909	827
	(400)	(280)	(480)	(336)	554	670	677	710	734	883	909	827
Highest Approach Minor Street	150	105	200	140	63	26	36	43	29	90	51	38
	(120)	(84)	(160)	(112)	63	26	36	43	29	90	51	38

Condition B - Interruption of Continuous Traffic **100% SATISFIED** YES ☐ NO ☑

80 % SATISFIED YES ☐ NO ☑

	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)											
	U	R	U	R	7:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM
APPROACH LANES	1		2 or More									Hour
Both Approaches Major Street	750	525	900	630	554	670	677	710	734	883	909	827
	(600)	(420)	(720)	(504)	554	670	677	710	734	883	909	827
Highest Approach Minor Street	75	53	100	70	63	26	36	43	29	90	51	38
	(60)	(42)	(80)	(56)	63	26	36	43	29	90	51	38

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Combination of Conditions A & B **SATISFIED** YES ☐ NO ☑

REQUIREMENT	WARRANT		FULFILLED
TWO WARRANTS SATISFIED 80%	1. MINIMUM VEHICULAR VOLUME		Yes ☐ No ☑
	2. INTERRUPTION OF CONTINUOUS TRAFFIC		

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Warrant 3: Peak Hour (Rural)

Existing Project Traffic Conditions
1. Road 148 / Avenue 280
AM (PM) Peak Hour

Road 148 Highest Approach Volume = 87 (48) VPH

Avenue 280 Total of Both Approaches = 730 (919) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

☼ **AM Peak Hour – Signal Warrant is Not Met**

★ **PM Peak Hour – Signal Warrant is Not Met**

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)
Chapter 4C: Traffic Control Signal Needs Studies
Part 4: Highway Traffic Signals
November 7, 2014

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Warrant 3: Peak Hour (Rural)

Opening Year plus Project Traffic Conditions
1. Road 148 / Avenue 280
AM (PM) Peak Hour

Road 148 Highest Approach Volume = 98 (54) VPH

Avenue 280 Total of Both Approaches = 773 (960) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

☼ **AM Peak Hour – Signal Warrant is Not Met**

★ **PM Peak Hour – Signal Warrant is Not Met**

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)
Chapter 4C: Traffic Control Signal Needs Studies
Part 4: Highway Traffic Signals
November 7, 2014

Warrant 3: Peak Hour (Rural)

Opening Year plus Project Traffic Conditions
2. Project Driveway / Avenue 280
AM (PM) Peak Hour

Project Driveway Highest Approach Volume = 4 (3) VPH

Avenue 280 Total of Both Approaches =

717 (908) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

☼ **AM Peak Hour – Signal Warrant is Not Met**

★ **PM Peak Hour – Signal Warrant is Not Met**

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)
Chapter 4C: Traffic Control Signal Needs Studies
Part 4: Highway Traffic Signals
November 7, 2014

Warrant 3: Peak Hour (Rural)

Cumulative Year 2042 No Project Traffic Conditions
1. Road 148 / Avenue 280
AM (PM) Peak Hour

Road 148 Highest Approach Volume = 87 (61) VPH

Avenue 280 Total of Both Approaches =

822 (1054) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

☼ **AM Peak Hour – Signal Warrant is Not Met**

★ **PM Peak Hour – Signal Warrant is Not Met**

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)
Chapter 4C: Traffic Control Signal Needs Studies
Part 4: Highway Traffic Signals
November 7, 2014

Warrant 3: Peak Hour (Rural)

Cumulative Year 2042 plus Project Traffic Conditions
1. Road 148 / Avenue 280
AM (PM) Peak Hour

Road 148 Highest Approach Volume = 98 (61) VPH

Avenue 280 Total of Both Approaches = 841 (1065) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

☼ **AM Peak Hour – Signal Warrant is Not Met**

★ **PM Peak Hour – Signal Warrant is Not Met**

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)
Chapter 4C: Traffic Control Signal Needs Studies
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Warrant 3: Peak Hour (Rural)

Cumulative Year 2042 plus Project Traffic Conditions
2. Project Driveway / Avenue 280
AM (PM) Peak Hour

Project Driveway Highest Approach Volume = 4 (3) VPH

Avenue 280 Total of Both Approaches =

793 (1055) VPH

*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.

☼ **AM Peak Hour – Signal Warrant is Not Met**

★ **PM Peak Hour – Signal Warrant is Not Met**

Source: California Manual of Uniform Traffic Control Devices (CA MUTCD 2014 Edition)
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