CITY OF TURLOCK
INITIAL STUDY CHECKLIST

1) Project Title: **MDP 2019-06**
(Turlock One Stop Valero)
SCH# 2019080095

2) Lead Agency Name and Address: City of Turlock
156 South Broadway, Ste. 120
Turlock, CA 95380

3) Contact Person and Phone Number: Adrienne Werner – Senior Planner
(209) 668-5640

4) Project Location: 2500 Fulkerth Road
(Stanislaus County APN 089-019-021)

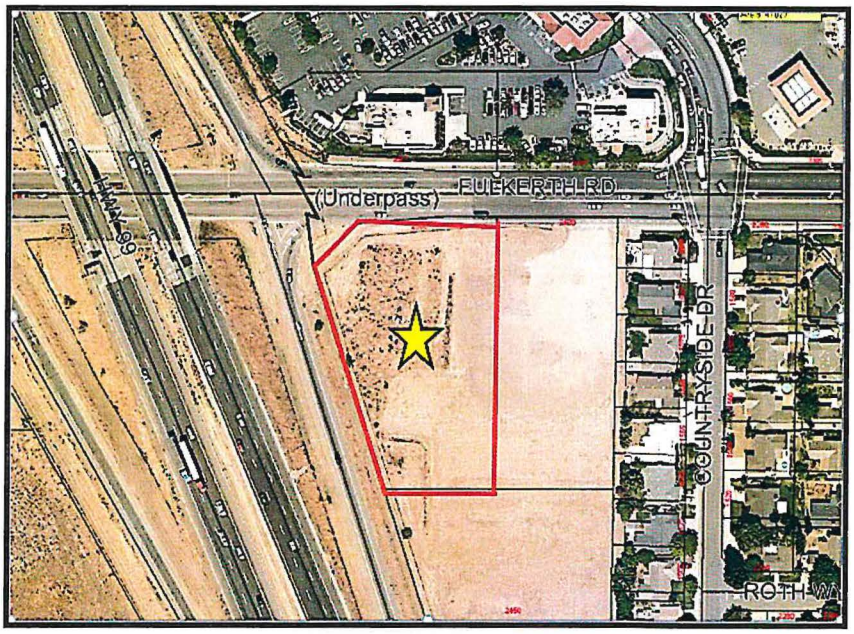
5) Project Sponsor's Name and Address: Amarpreet Kaur & Aman Sachdeva
998 Manning Avenue
Reedley, CA 93654

6) General Plan Designation: Community Commercial (CC)

7) Zoning: Community Commercial (CC)

8) Description of the Project:

Turlock One-Stop Valero has submitted an application requesting approval to construct a gas station with a 6-pump fuel island and canopy (3,572 square feet), an approximately 5,500 square foot convenience mart with a drive-through for a yet unidentified quick serve restaurant, and an approximately 2,400 square foot drive-through car wash with vacuum stalls and canopy (approximately 1,800 square feet). On-and off-site improvements will include paving, parking, parking stall striping, trash enclosure, landscaping, curb, gutter and sidewalks. The applicant will also be applying for a Type 21 alcohol license to allow the sale of beer, wine, and distilled spirits off the premises.



9) Surrounding Land Uses and Setting: (Briefly describe the project's surroundings)

The project site is located in the southwest quadrant of the City of Turlock adjacent to State Route 99. Surrounded by a mix of commercial and residential uses the property is currently vacant. Directly to the north is a commercial shopping center, to the east is a vacant parcel zoned Community Commercial, and a residential subdivision, to the south is a vacant parcel zoned Community Commercial. State Highway 99 is west of the property.

10) Other public agencies whose approval is required (e.g. permits, financing approval, or participation agreement).

San Joaquin Valley Air Pollution Control District
Regional Water Quality Control Board

11) Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

The Yokuts tribe was contacted in writing on July 29, 2019 as part of the Early Public Consultation process. Consultation has not been requested by the Yokuts. The Torres Martinez Desert Cahuilla Indians no longer request consultation as stated in their letter dated April 19, 2017.

12) EARLIER ENVIRONMENTAL ANALYSES

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. [Section 15183]

a) Earlier analyses used. (Available for review at the City of Turlock –Development Services, 156 S. Broadway, Suite 120, Turlock, CA).

City of Turlock General Plan, 2012 (City Council Resolution No. 2012-173)
Turlock General Plan – EIR, 2012 (Turlock City Council Resolution No. 2012-156)
City of Turlock, Housing Element, Certified in 2016
City of Turlock, Water Master Plan Update, 2003 (updated 2009)
Turlock Parks Master Plan, 1995 (Reviewed in 2003)
City of Turlock, Waste Water Master Plan, 1991 (Updated 2014)
City of Turlock, Storm Water Master Plan, 2013 (Adopted 2016)
City of Turlock, Urban Water Management Plan, 2015 (Adopted June 2016)
City of Turlock, Sewer System Master Plan, 2013
Turlock Municipal Code
City of Turlock Capital Facilities Fee Nexus Study (Turlock City Council Resolution No. 2013-202)

b) Impacts adequately addressed. (Effects from the checklist below, were within the scope of, and adequately analyzed during an earlier document pursuant to applicable legal standards, and such effects were addressed by mitigation measures based on the earlier analysis).

As identified in the Turlock General Plan EIR, development in the project area would result in significant, and unavoidable, impacts in the areas of transportation, noise, regional air quality, and the eventual loss of agricultural land and soil resources. The magnitude of these impacts can be reduced, but not eliminated, by applying the policies, programs and mitigation measures identified in the Turlock General Plan to the project and identifying mitigation measures as necessary in this initial study. The intensity of the proposed development will result in project level impacts that are equal to, or of lesser severity, than those anticipated in the General Plan EIR, and they would not be different from cumulative effects anticipated by the Turlock General Plan EIR. Potential secondary environmental impacts from the project will be of equal or lesser severity than those identified in the General Plan EIR. Therefore, mitigation measures identified in the General Plan EIR, and their respective Statements of Overriding Considerations (contained in Turlock City Council Resolution No. 2012-156), are adequate to mitigate the impacts from the proposed project where feasible, and are hereby incorporated by reference.

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

CITY OF TURLOCK
INITIAL STUDY CHECKLIST

Project level impacts will be mitigated by application of mitigation measures identified in this initial study, and by appropriate conditions of approval. All cumulative environmental effects related to the ultimate development of the project area will be mitigated through compliance with the policies, standards, and mitigation measures of the Turlock General Plan and General Plan MEA/EIR, as well as the standards of the Turlock Municipal Code, and are herein incorporated by reference where not specifically identified.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below ☒ could be potentially affected by this project. However, these impacts would result in a less than significant on the environment by incorporating appropriate mitigation measures.

X	Aesthetics		Hazards & Hazardous Materials		Recreation
	Agricultural and Forestry Resources	X	Hydrology/Water Quality	X	Transportation/Traffic
X	Air Quality		Land Use/Planning		Tribal Cultural Resources
X	Biological Resources		Mineral Resources	X	Utilities/Service Systems
X	Cultural Resources	X	Noise		
X	Geology/Soils		Population/Housing		
X	Greenhouse Gas Emissions	X	Public Services		

RECOMMENDED FINDINGS: Pursuant to Public Resources Code Section 21080(c)(2) and CEQA Guidelines Section 15168(c)(1), the City of Turlock, as lead agency for the proposed project, has prepared an initial study to make the following findings:

Pursuant to Public Resources Code Section 21080(c)(2) and CEQA Guidelines Section 15168(c)(1), the City of Turlock, as lead agency for the proposed project, has prepared an initial study to make the following findings:

1. Pursuant to CEQA Guidelines Section 15162, the proposed activity is adequately described and is within the scope of the General Plan EIR and the Northwest Triangle Specific Plan (NWTSP) Mitigated Negative Declaration.
2. All feasible mitigation measures developed in the General Plan EIR and the NWTSP Mitigated Negative Declaration have been incorporated into the project.
3. Pursuant to Public Resources Code Sections 21080(c)(2) and 21157.5, the initial study prepared for the proposed project has identified potential new or significant effects that were not adequately analyzed in the General Plan EIR and NWTSP Mitigated Negative Declaration, but feasible mitigation measures have been incorporated to revise the proposed subsequent project to avoid or mitigate the identified effects to a point where clearly no significant effects would occur.
4. There is no substantial evidence before the lead agency that the subsequent project, as revised, may have a significant effect on the environment.
5. The analyses of cumulative impacts, growth inducing impacts, and irreversible significant effects on the environment contained in the General Plan EIR and NWTSP Mitigated Negative Declaration are adequate for this subsequent project.
6. Pursuant to CEQA Guidelines Section 15093, a Statement of Overriding Considerations was adopted for the General Plan EIR (City Council Resolution 2012-156). As identified in the Turlock General Plan EIR, development in the project area would result in significant, and unavoidable, impacts in the areas of

noise, regional air quality, and the eventual loss of agricultural land. The magnitude of these impacts can be reduced, but not eliminated by the mitigation measures referenced in the initial study prepared for this project and General Plan EIR. Therefore, mitigation measures identified in the General Plan EIR, and its respective Statements of Overriding Considerations, are adequate to mitigate the impacts from the proposed project where feasible, and are hereby incorporated by reference.

7. Pursuant to Public Resources Code Section 21157.6(a), having reviewed the General Plan EIR, the City of Turlock finds and determines that:

   a. No substantial changes have occurred with respect to the circumstances under which the General Plan EIR was certified, and
   b. that there is no new available information which was not and could not have been known at the time the General Plan EIR was certified.

8. Whereas, on June 13, 2017, the City of Turlock adopted minor changes, deletions, and additions to the project described in the Northwest Triangle Specific Plan Amendment 2017 and certified an Addendum to the Mitigated Negative Declaration demonstrating that the preparation of a Subsequent Environmental Impact Report (EIR) was not required, pursuant to Section 15162 of the California Environmental Quality Act, because none of the following findings could be made:

   (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

   (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

   (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:

      (A) The project will have one or more significant effects not discussed in the previous EIR;

      (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

      (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

      (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or	

CITY OF TURLOCK
INITIAL STUDY CHECKLIST

agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.	X
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 "potential 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 in an earlier EIR or NEGATIVE DEDCLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	

Adrienne Werner — August 21, 2019

Adrienne Werner, Senior Planner — Date
Development Services – Planning Department

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 17, "Earlier Analysis," may be cross-referenced).

5) Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c) (3) (d). In this case, a brief discussion should identify the following:

   (a) Earlier Analysis Used. Identify and state where they are available for review.

(b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
(c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

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

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

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

9) The analysis of each issue should identify: (a) the significance criteria or threshold used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
1. Aesthetics – Would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		X		

Response:

The proposed mini-mat, gas station, quick service restaurant and automated car wash are proposed on a property located in an urbanized area, adjacent to State Route 99 and surrounded by commercial and residential uses. The General Plan EIR notes that the primary scenic views lie on the City's boundary, at its agricultural edge. The General Plan recognizes the relatively flat topography of Turlock results in few scenic vistas. The General Plan further concludes within most of the existing urbanized area, infill development and redevelopment would not have a significant effect on the visual quality of the city, because new development would likely be similar in scale and character to existing development. The proposed project is an infill project. The buildings and fuel canopy are in scale with the surrounding commercial and residential buildings and do not exceed the height standards established in the NWTSP or the Turlock Municipal code for buildings in the Community Commercial zoning district. Additionally, the vacant 1.32-acre property to the east further separates the buildings from the residential subdivision to the east minimizing the visual impact of the project. *(General Plan EIR pg. 3.7-1, 3.7-7, 3.7-9)*

b) **There are no scenic or historic resources on the project site. The 1.6-acre property is currently vacant. A site visit conducted by staff on August 1, 2019 confirmed the property is currently undeveloped and has no historic buildings, or other distinctive natural or historic resources. State scenic highways refer to those highways that are officially designated by the California Department of Transportation (Caltrans) as scenic. There are currently no highways in the General Plan study area eligible or officially designated as scenic highways by The Master Plan of State Highways Eligible for Official Scenic Highway Designation. The nearest State scenic highway is State Highway 5, which is designated scenic from the Merced county line to the San Joaquin county line. State Highway 5 is located approximately 20 miles from the project site. Due to the distance and intervening topography the project site would not be visible.** (*General Plan EIR pg. 3.7-1)*

c) **The 1.6-acre property is currently vacant. A new convenience mart/gas station and car wash with associated vacuum stalls, on-site parking, and landscaping are proposed to be constructed on the vacant site. The project will develop in accordance with City standards in the General Plan Urban Design Element, Zoning Ordinance, and the City's Design Guidelines. The change in materials, finishes, building colors, and rooflines of the buildings and fuel canopy will help minimize the bulkiness of the buildings and meet the design guidelines for the Community Commercial zoning district and the NWTSP. The Turlock General Plan notes that new development that implements the General Plan Urban Design Element creates a more aesthetically pleasing character for the City. Any development of the property will affect the existing visual character of the vacant site; however, the policies and standards contained in the General Plan, Zoning Ordinance, NWTSP, and design guidelines reduce any adverse impacts on visual character to less than significant.** *(TMC §9-2-122; Design Guidelines pg. 27-31; NWTSP pgs. 2-7, 2-13, 2-26, 2-27, General Plan pgs. 6-5, 6-29)*

d) **The project site is located in an urbanized area adjacent to State Route 99 and surrounded by commercial and residential uses. The development of the property with a new convenience mart/gas station and car wash will produce light and glare from on-site lighting. The Turlock General Plan EIR concludes that any new development has the potential to create new sources of light and glare; but would generally not be out of character with the existing urban environment, and would not rise to a level of being significant. In addition, the distance of the buildings from the residential uses further reduces the light and glare associated with the project.** *(General Plan EIR pg. 3.7-11)*

Sources: *City of Turlock, General Plan and MEIR, 2012; City Design Element, 2012; City of Turlock, Standard Specifications, Section 18; City of Turlock Beautification Master Plan, 2003; Turlock Zoning Ordinance, Commercial Districts; City of Turlock Design Guidelines; NWTSP and Addendum, 2017.*

Mitigation:

1. **Prior to the issuance of a building permit, a lighting plan shall be submitted to the Building Division for review and approval to ensure that all lighting is designed to confine light spread within the site boundaries.**
2. **All lighting fixtures must be shielded to confine light spread within the site boundaries.**
3. **Building illumination and architectural lighting shall be indirect. Floodlights are prohibited.**
4. **Light standards for parking areas shall not exceed thirty (30') feet in height.**
5. **Security lighting fixtures shall not project above the fascia or roofline of the building and are to be shielded. The shields shall be painted to match the surface to which they are attached.**
6. **Automatic shutoff or motion sensors shall be used for lighting to be used intermittently or for safety purposes.**

	Potentially Significant Impact	Less Than Significant Impact With	Less Than Significant Impact	No Impact

CITY OF TURLOCK
INITIAL STUDY CHECKLIST

		Mitigation		
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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the states inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use of a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Response:

a) The project is proposed to be developed on a property designated as "Urban and Built-Up Land" and on the 2016 Stanislaus County Important Farmland Map as compiled by the California Department of Conservation, Farmland Mapping and Monitoring Program. The property is located in an urbanized area surrounded by commercial and residential uses and adjacent to State Route 99. There are no agricultural uses on the property. Therefore, the project will not be converting prime farmland, unique farmland, or farmland of statewide importance. *(General Plan pgs. 7.7 through 7.11)*

b) The property is not enrolled in a Williamson Act contract or adjacent to any properties that are enrolled in the Williamson Act. The site is zoned for urbanized uses and will not conflict with any agricultural zoning districts or land held in Williamson Act Contract.

c), d) The project site is located within the City of Turlock in a developed area designated for urban uses. There are no forest lands or timberlands within the City of Turlock. The project does not conflict with the existing Community Commercial zoning designation.

e) The property is located within the City of Turlock in an urbanized area adjacent to State Route 99 and surrounded by urban uses. The property is designated for commercial uses. The property is currently vacant. Development of the site will not involve changes in the existing environment which will result in conversion of farmland or forest land as the properties in the area are already developed with commercial and residential.

Sources: *CA Dept. of Conservation Farmland Mapping and Monitoring Program, 2014: City of Turlock, General Plan, Land Use Element, 2012; City of Turlock, General Plan EIR, 2012; NWTSP and Addendum, 2017.*

Mitigation:

None

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
3. Air Quality - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?		X		
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?		X		
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Response:

a), b) The project will not conflict with, or obstruct, implementation of the 2007 PM10 Maintenance Plan, the 2016 Ozone Plan, or the 2012, 2015 and 2018 PM2.5 Plan or related subsequent progress reports of these plans. SJVAPCD has established thresholds for ROG, NOx, PM 10 & PM 2.5 emissions. The project will be subject to the San Joaquin Valley Air District rules and regulations designed to control criteria pollutants, such as Rule 9510 and Regulation VIII. The project is required to obtain these permits to construct and operate. As such, the project is not expected to cause a conflict with, or obstruct implementation of applicable air quality plans.

Based on the CalEEMod 2016.3.2 air quality impact analysis run on August 21, 2019 (Attachment 1), the project is located in an urbanized area surrounded by commercial and residential uses in Climate Zone 3, wind speeds 2.7 m/s, and 45 days precipitation frequency. When the construction emissions and operational emissions were calculated in the CalEEMOD models, it was found that emissions would not exceed the established Air Quality Thresholds of Significance for both Construction and Operational Emissions for ROG (10 tons per year), NOx (10 tpy), PM 10 (15 tpy) & PM 2.5 (15 tpy) emissions.

Overall Construction Emissions
ROG 0.3506 tpy, NOx 1.9043 tpy, CO 1.6345 tpy SOx 3.0300e-003 tpy, PM_{10} 0.1389 tpy and $PM_{2.5}$ 0.1082 tpy.

Overall Operational Emissions
ROG 0.3114 tpy, NOx 2.4900 tpy, CO 1.4076 tpy SOx 5.5900e-003 tpy, PM_{10} 0.2055 tpy and $PM_{2.5}$ 0.0587 tpy.

In addition, a letter received from the San Joaquin Valley Air Pollution Control District, dated August 6, 2019, stated that based on the information provided to the District, project specific annual emissions of criteria pollutants are not expected to exceed any of the following District significance thresholds: 100 tons per year of carbon monoxide (CO), 10 tons per year of oxides of nitrogen (NOx), 10 tons per year of reactive organic gases (ROG), 27 tons per year of oxides of sulfur (SOx), 15 tons per year of particulate matter of 10 microns or less in size (PM10), or 15 tons per year of particulate matter of 2.5 microns or less in size (PM2.5). The District concludes that the Project would have a less than significant impact on air quality when compared to the above-listed annual criteria pollutant emissions significance thresholds.

The proposed Project would equal or exceed 2,000 square feet of commercial space. Therefore, the proposed Project is subject to District Rule 9510 (Indirect Source Review). District Rule 9510 is intended to mitigate a project's impact on air quality through project design elements or by payment of applicable off-site mitigation fees.

A variety of toxic air contaminants (TACs) are of environmental concern. The California Air Resources Board's (CARB) *Air Quality and Land Use Handbook: A Community Health Perspective* provides recommended setback distances for sensitive land uses from major sources of TACs such as gas stations, freeways and high traffic roads, distribution centers and dry cleaners. The SJVAPCD defines sensitive receptors as "*people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s).*" The convenience mart/gas station is not a sensitive receptor and does not involve siting a new sensitive receptor within any recommended setback distance of any existing source of TACs. However, the convenience mart/gas station is proposed near a residential subdivision. The 6-fuel pumps and canopy are more than 160-feet away from the residential subdivision; more than the 50-foot separation the CARB recommends for typical gas dispensing facilities from sensitive land uses. The existing residential subdivision is within 500-feet of State Route 99.

The CARB also identifies diesel particulate matter (DPM) from diesel-fueled engines as a TAC. High volume freeways, stationary diesel engines, and facilities attracting heavy and constant heavy diesel semi-truck traffic, such as distribution centers, are identified as having the highest associated health risks for DPM. The CARB handbook identifies significant sources of DPM as land uses accommodating 100 heavy diesel semi-trucks per day. The convenience mart/gas station is, the project would not be expected to attract 100 or more heavy diesel semi-trucks to the area. As such the proposed car wash facility would not generate a substantial amount of DPM per the CARB handbook. Based on the consideration above the car wash project would not cause sensitive receptors to be exposed to substantial pollutant concentrations.

The project will not violate any air quality standards, result in cumulatively considerable net increase of any criteria pollutant, or expose sensitive receptors to substantial pollutant concentrations. Compliance with the General Plan policies and standards, and the SJVAPCD Rules and Regulations is expected to reduce the project impacts; however, the Turlock General Plan EIR found that there would be significant and unavoidable air quality impacts even with implementation of these measures with the buildout of the General Plan primarily due to local and regional vehicle

emissions generated by future population growth associated with the buildout of the proposed plan. A Statement of Overriding Considerations has been adopted as part of that process.

Additionally, the City of Turlock adopted an Air Quality and Greenhouse Gas Emissions Element demonstrating that the General Plan would reduce greenhouse gas emissions. Compliance with the State's greenhouse gas emissions targets for 2030 relied on the adoption of the regional Sustainable Communities Strategy (SCS). StanCOG's SCS has been adopted and was approved by the California Air Resources Board. StanCOG has found that the City of Turlock's General Plan complies with the SCS. This project is consistent with the General Plan; therefore, the project would have a less than significant impact on greenhouse gas emissions. *(General Plan pgs. 8-1 through 8-37)*

c) **The convenience mart/gas station is a commercial project proposed on a commercially zoned property. The proposed is not expected to expose sensitive receptors to increased pollutants. The project site is surrounded by a mix of commercial and residential uses, adjacent to Fulkerth Road, a 4-lane arterial and State Route 99. The letter received from the San Joaquin Valley Air Pollution Control District dated August 6, 2019 concluded that the project would have a less than significant impact on air quality when compared to the annual criteria pollutant emissions significance thresholds. The project may produce odors during the construction phase; however, these impacts are short-term in nature and are anticipated to be of a less-than-significant impact.** *(General Plan pgs. 8-1 through 8-37)*

d) **The project consists of the construction of a new convenience mart/gas station and car wash with associated vacuum stalls. The project may produce odors during the construction phase of the project; however, these impacts are short-term in nature and are anticipated to be of a less-than-significant impact. The project does not include any equipment or processing that would lead to the generation of unusual odors; therefore, the project is not anticipated to create objectionable odors affecting a substantial number of people. The General Plan notes that the primary source of odor complaints in Turlock has been due to agricultural activities. The proposed project does not include agricultural activities.** *(General Plan EIR pgs. 3.4-4.1)*

Sources: *San Joaquin Valley Unified Air Pollution Control District 2008 Ozone Plan, 2010 PM-10 Maintenance Plan, 2012 and 2015 PM-2.5 Plan; SJVAPCD's Guidance For Assessing and Mitigating Air Quality Impacts March 19, 2015; Turlock General Plan EIR, 2012, Turlock General Plan, Air Quality and Greenhouse Gas Element Section, 2012; Statement of Overriding Considerations (Turlock City Council Resolution 2012-156); SJVUAPCD (June 2005) Air Quality Guidelines for General Plans; Institute of Transportation Engineers Trip Generation, 10th Edition, Volume 2: Data Part 3; Turlock One-Stop Valero CalEEMod Air Quality Analysis dated August 21, 2019; San Joaquin Valley Air Pollution Control District comment letter dated August 6,2019; Air Quality and Land Use Handbook: A Community Health Perspective, 2005 CARB; NWTSP and Addendum, 2017.*

Mitigation:

1. **The applicant shall comply with all applicable San Joaquin Valley Air Pollution Control District rules and regulations. The applicant shall contact the SJVAPCD prior to submitting an application for a building, grading and/or encroachment permit. Compliance with Rule 9510 shall be demonstrated to the Planning Division prior to the issuance of a building permit.**
2. **Burning of any combustible material shall be controlled to minimize particulate air pollution, and shall occur only on days permitted by the San Joaquin Valley Air Pollution Control District.**
3. **Project development applicants shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of project development and construction.**
4. **Where feasible, plant deciduous trees on the south- and west facing sides of the buildings.**
5. **Comply with the SJVAPCD Compliance Assistance Bulletin for Fugitive Dust Control.**
6. **The applicant shall be responsible for ensuring that all adequate dust control measures are implement in a timely manner during all phases of project development and construction.**
7. **Construction activity plans shall include and/or provide for a dust management plan to prevent fugitive dust from leaving the property boundaries and causing a public nuisance or a violation of an ambient air standard.**
8. **Soils stabilization is required at all construction sites after normal working hours and on weekends and holidays, as well as on inactive construction areas during phased construction. Methods include short-term water spraying, and long-term dust suppressants and vegetative cover.**
9. **Diesel engines shall be shut off while not in use to reduce emissions from idling. Minimize idling time of all other equipment to 10 minutes maximum.**
10. **Sandbags, or other erosion control measures, shall be installed to prevent silt runoff to public roadways from construction sites with a slope greater than one percent (1%).**
11. **Wheels on all trucks and other equipment shall be washed prior to leaving the construction site.**
12. **Wind breaks shall be installed at windward sides of construction areas.**
13. **Excavation and grading activities shall be suspended when winds exceed 20 mph.**
14. **Limit areas subject to excavation, grading and other construction activities to the minimum required at any one time.**
15. **Limit and expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours.**
16. **Construction activities shall be curtailed during periods of high ambient pollutant concentrations.**
17. **Bike racks shall be installed to encourage alternative modes of transportation.**

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
4. Biological Resources - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?		X		

b) Have a substantially adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or state habitat conservation plan?				X

Response:

a) **The General Plan states that the Study Area contains mostly human-modified habitats, with almost all the land being urban (52%) or under agricultural production (46%). The General Plan further states that development proposed under the General Plan would be situated on infill sites or land contiguous to existing development. The convenience mart/gas station and car wash is proposed on a property zoned for commercial use. The project site is surrounded by urban uses and adjacent to State Route 99.**

The proposed project would not have any direct effects on species, riparian habitat, wetlands, nor would it interfere with the movement of any resident or migratory fish, conflict with policies protecting biological resources or the provisions of an adopted Habitat Conservation Plan. Virtually all of the land within the urban boundaries of Turlock, as well as unincorporated land within the City's Sphere of Influence, have been modified from its native state, primarily converted into urban or agricultural production.

The California Natural Diversity Database has identified two special-status species within the General Plan Study area, the Swainson's Hawk and the Hoary bat. While the General Plan Study Area does not contain land that is typical for the Hawk's breeding and nesting, it is presumed to be present and mitigation measures have been incorporated to address any potential impacts. There are no large trees on the property that offer nesting habitat for Swainson's Hawk. The Hoary bat is not listed as a Species of Special Concern by the California Department of Fish and Wildlife but it is monitored in the CNDDB. The subject site is out of the area in which the Hoary bat is presumed to be present. Due to the property's proximity to urban development, the property has little habitat value for these species. Mitigation measures identified in the General Plan EIR, (General Plan Policy 7.4-d), consistent with the comments received on the Turlock General Plan, have been added to the project to reduce the impacts of the project to a less than significant level. *(General Plan EIR pg. 3.9-1 through 3.9-14)*

b) **There are no rivers, lakes or streams located within the City of Turlock. There are no irrigation facilities, such as canals, located on or adjacent to the project site. Therefore, the project will have no impact on riparian habitats or species.** *(General Plan EIR pg. 3.9-13)*

c) **The General Plan EIR identifies the federally protected wetlands located within the City of Turlock and the surrounding Study Area. These areas are located west of Highway 99, more than 3-miles away from the project site, and are not identified on the subject property.** *(General Plan EIR pg. 3.9-13)*

d) **The project is located within the City of Turlock in an urbanized area surrounded by commercial and residential uses. No migratory wildlife corridors have been designated on, near or through the project site; therefore, the project would not impede the movement of any resident or migratory fish or wildlife species. The General Plan identifies mitigation measures that will be incorporated in to the project requiring the investigation of the existence of any wildlife nursery sites on the project site.** *(General Plan EIR pg. 3.9-13)*

e) **The property is vacant and there are no trees or other natural features on the property that offer habitat opportunities except the land itself which could potentially offer foraging habitat for Swainson's Hawk.** *(General Plan EIR pg. 3.9-11)*

f) **There is no Habitat Conservation Plan, Natural Conservation Community Plan, other approved local or regional conservation plan that encompasses the project site.** *(General Plan EIR pg. 3.9-14)*

CITY OF TURLOCK
INITIAL STUDY CHECKLIST

Sources: *California Dept. of Fish & Wildlife: Natural Diversity Data Base; California Native Plant Protection Act; U.S. Dept. of Agriculture: Land Capability Classification Maps; California Dept. of Conservation: Important Farmlands Maps & Monitoring Program; Stanislaus County Williamson Act Contract Maps; Turlock General Plan, Conservation Element, 2012; US Fish and Wildlife Service – Recovery Plan for Upland Species of the San Joaquin Valley, 1998; Turlock General Plan, Conservation Element, 2012; NWTSP and Addendum, 2017.*

Mitigation:

1. **If ground disturbing activities, such as grading, occurs during the typical nesting season for songbirds and raptors, February through mid-September, the developer is required to have a qualified biologist conduct a survey of the site no more than 10 days prior to the start of disturbance activities. If nests are found, no-disturbance buffers around active nests shall be established as follows until the breeding season has ended or until a qualified biologist determines that the birds have fledged and are no longer on the nest for survival: 250 feet for non-listed bird species; 500 feet for migratory bird species; and one-half mile for listed species and fully protected species.**

2. **If nests are found, they should be continuously surveyed for the first 24 hours prior to any construction related activities to establish a behavioral baseline. Once work commences the nest shall be continuously monitored to detect any behavioral changes as a result of the project. If behavioral changes are observed, the work causing the change should cease and the Department consulted for additional avoidance and minimization measures.**

3. **If Swainson's Hawks are found foraging on the site prior to or during construction, the applicant shall consult a qualified biologist for recommended proper action, and incorporate appropriate mitigation measures. Mitigation may include, but are not limited to: establishing a one-half mile buffer around the nest until the breeding season has ended or until a qualified biologist determines that the birds have fledged and are no longer dependent on the nest for survival. Mitigating habitat loss within a 10-mile radius Mitigating habitat loss within a 10-mile radius of known nest sites as follows: providing a minimum of one acre of habitat management land or each acre of development for projects within one mile of an active nest tree. Provide a minimum of .75 acres of habitat management land for each acre of development for projects within between one and five miles of an active nest tree. Provide a minimum of .5 acres of habitat management land for each acre of development for projects within between five and 10 miles of an active nest tree.**

4. **The applicant shall comply with all applicable federal, State, and local laws and regulations related to the protection and preservation of endangered and/or threatened species through consultations with appropriate agencies.**

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
5. Cultural Resources - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?		X		

b) Cause a substantial adverse change in the significance of an archaeological resources pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Response:

a), b), and c) The project site is located in an urbanized area, adjacent to State Route 99 and surrounded by commercial and residential uses. The project would not alter or destroy any historic archaeological site, building, structure, or object, nor would it alter or affect unique ethnic cultural values or restrict religious or sacred uses. The City of Turlock consulted with California Native American tribes as required under SB 18 when developing the General Plan EIR. The closest historic resource identified in the General Plan EIR is located more than 1-mile away. In addition, the City has conducted a Cultural Records Search as part of the Turlock General Plan and found no evidence of significant historic or cultural resources on or near this site. As a result of many years of extensive agricultural production virtually all of the land in the Plan area has been previously altered from its native or riparian state. There are no known sites of unique prehistoric or ethnic cultural value. Mitigation measures have been added in the event anything is discovered during construction. *(General Plan EIR pgs. 3.8-4, 3.8-5, 3.8-12, 3.8-13)*

Sources: *Turlock General Plan, Conservation Element, 2012; City of Turlock General Plan EIR, 2012; Cultural Resources Records Search, 2008; NWTSP and Addendum, 2017.*

Mitigation:

1. **In accordance with State Law, if potentially significant cultural, archaeological, or Native American resources are discovered during construction, work shall halt in that area until a qualified archaeologist can assess the significance of the find, and, if necessary develop appropriate treatment measures in consultation with Stanislaus County, Native American tribes, and other appropriate agencies and interested parties.**

2. **If human remains are discovered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the coroner determines that no investigation of the cause of death is required and if the remains are of Native American origin, the coroner will notify the Native American Heritage Commission, which in turn will inform a most likely descendant. The descendant will then recommend to the landowner appropriate disposition of the remains and any grave goods.**

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

a) and b) The convenience mart/gas station project is proposed on property surrounded by commercial and residential uses and adjacent to State Route 99. The project site is easily accessed by the existing roadway infrastructure, BLST bus system, and is within ¼ mile of three bus stops. The new convenience mart/gas station will have access to existing electrical and telecommunication services. No new transportation, electrical or telecommunication facilities are required to support the project leading to unnecessary consumption of energy resources. Compliance with the California Green Building Standards Code and the San Joaquin Valley Air Pollution Control District standards during construction and operation of the project will further ensure the efficient consumption of energy resources. *(General Plan EIR pgs.3.5-16)*
Sources: *Turlock General Plan, Conservation Element, Air Quality & Greenhouse Gases Element, 2012; California Building Standards Code; San Joaquin Valley Air Pollution Control District*
Mitigation: **1. The applicant shall comply with all applicable San Joaquin Valley Air Pollution Control District rules and regulations.** **2. The project shall comply with the California Green Building Code Standards (CBC), requirements regulating energy efficiency.**

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
7. Geology and Soils - Would the project:				
a) Directly or indirectly cause potential adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.		X		
ii) Strong seismic ground shaking?		X		
iii) Seismic-related ground failure, including liquefaction?		X		
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		X		
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?		X		

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X

Response:

a) **Several geologic hazards have a low potential to occur within the Turlock General Plan study area. The greatest seismic hazard identified in the Turlock General Plan EIR is posed by ground shaking from a fault located at least 45 miles away. While no specific liquefaction hazard is located within the Turlock General Plan study area, the potential for liquefaction is recognized throughout the San Joaquin Valley. The risk to people and structures was identified as a less than significant impact addressed through compliance with the California Building Codes. Turlock is located in Seismic Zone 3 according to the State of California and the Alquist-Priolo Special Study Zones Act. All building permits are reviewed to ensure compliance with the California Building Code (CBC) for compliance with standards to reduce the potential damage that could be associated with seismic events. The property is flat and is not located adjacent to areas subject to landslides. In addition, the City enforces the provisions of the Alquist-Priolo Special Study Zones Act that limits development in areas identified as having special seismic hazards.** *(General Plan pgs. 10-9 through 10-14, General Plan EIR pgs. 3.10-13 through 3.10-16)*

b) **and c) The General Plan EIR notes that soils on the project site have a "low" susceptibility to soil erosion. Erosion hazards are highest during construction. Chapter 7-4 of the Turlock Municipal Code requires all construction activities to include engineering practices for erosion control. Furthermore, future development projects are required to comply with National Pollutant Discharge Elimination System (NPDES) General Construction Permit requirements. Project applicants are required to prepare a Storm Water Pollution Prevention Plan (SWPPP) and comply with the City's Municipal Separate Storm Sewer System permit (MS4) to minimize the discharge of pollutants during and post-construction. Compliance with existing policies and programs will reduce this impact to less than significant levels.** *(General Plan pgs. 10-9 through 10-14, General Plan EIR pgs. 3.10-13 through 3.10-16)*

d) **Less than one percent of the soils located in the General Plan study area are considered to have moderate potential for expansion. As required by the Turlock Municipal Code, building permit applications must be accompanied by a preliminary soil management report that characterizes soil properties in the development area.** *(General Plan pgs. 10-9 through 10-14, General Plan EIR pgs. 3.10-13 through 3.10-16)*

e) **The proposed convenience mart/gas station and car wash project will be required to connect to the City of Turlock's waste water system and will not utilize any type of septic system or alternative wastewater system.**

f) **The convenience mart/gas station is proposed on an infill site adjacent to State Route. The property is located in an urbanized area, zoned for commercial uses, and surrounded by commercial and residential uses. As a result of urbanization the property has been altered from its native state.**

Sources: *California Uniform Building Code; City of Turlock, Standard Specifications, Grading Practices; City of Turlock Municipal Code, Title 8, (Building Regulations); City of Turlock, General Plan, Safety Element, 2012.*

Mitigation:

1. **The project shall comply with the current California Building Code (CBC) requirements for Seismic Zone 3, which stipulates building structural material and reinforcement.**
2. **The project shall comply with California Health and Safety Code Section 19100 et seq. (Earthquake Protection Law), which requires that buildings be designed to resist stresses produced by natural forces caused earthquakes and wind.**
3. **The project shall comply with the California Building Code (CBC), requirements regulating grading activities including drainage and erosion control.**
4. **The project shall comply with the City's NPDES permitting requirements by providing a grading and erosion control plan, including but not limited to the preparation of a Storm Water Pollution Prevent Plan and Erosion and Sediment Control Plan.**
5. **The project shall comply with the California Building Code (CBC) requirements for specific site development and construction standards for specified soils types.**

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

Response:

a), b) The convenience mart/gas station and car wash is an infill project proposed on a property zoned for commercial use, adjacent to State Route 99 and surrounded by commercial and residential uses.

Based on the CalEEMod 2016.3.2 air quality impact analysis run on August 21, 2019 the project is located in an urbanized area surrounded by commercial and residential uses in Climate Zone 3, wind speeds 2.7 m/s, and 45 days precipitation frequency. When the construction emissions and operational emissions were calculated in the CalEEMOD models, it was found that emissions would not exceed the established Air Quality Thresholds of Significance for both Construction and Operational Emissions for ROG (10 tons per year), NOx (10 tpy), PM 10 (15 tpy) & PM 2.5 (15 tpy) emissions.

Overall Construction Emissions
ROG 0.3506 tpy, NOx 1.9043 tpy, CO 1.6345 tpy SOx 3.0300e-003 tpy, PM_{10} 0.1389 tpy and $PM_{2.5}$ 0.1082 tpy.

Overall Operational Emissions
ROG 0.3114 tpy, NOx 2.4900 tpy, CO 1.4076 tpy SOx 5.5900e-003 tpy, PM_{10} 0.2055 tpy and $PM_{2.5}$ 0.0587 tpy.

In addition, a letter received from the San Joaquin Valley Air Pollution Control District, dated August 6, 2019, stated that based on the information provided to the District, project specific annual emissions of criteria pollutants are not expected to exceed any of the following District significance thresholds: 100 tons per year of carbon monoxide (CO), 10 tons per year of oxides of nitrogen (NOx), 10 tons per year of reactive organic gases (ROG), 27 tons per year of oxides of sulfur (SOx), 15 tons per year of particulate matter of 10 microns or less in size (PM10), or 15 tons per year of particulate matter of 2.5 microns or less in size (PM2.5). The District concludes that the Project would have a less than significant impact on air quality when compared to the above-listed annual criteria pollutant emissions significance thresholds.

The proposed Project would equal or exceed 2,000 square feet of commercial space. Therefore, the proposed Project is subject to District Rule 9510 (Indirect Source Review). District Rule 9510 is intended to mitigate a project's impact on air quality through project design elements or by payment of applicable off-site mitigation fees.

The project will not violate any air quality standards, result in cumulatively considerable net increase of any criteria pollutant, or expose sensitive receptors to substantial pollutant concentrations. Compliance with the General Plan policies and standards, and the SJVAPCD Rules and Regulations is expected to reduce the project impacts; however, the Turlock General Plan EIR found that there would be significant and unavoidable air quality impacts even with implementation of these measures with the buildout of the General Plan primarily due to local and regional vehicle emissions generated by future population growth associated with the buildout of the proposed plan. A Statement of Overriding Considerations has been adopted as part of that process.

Additionally, the City of Turlock adopted an Air Quality and Greenhouse Gas Emissions Element demonstrating that the General Plan would reduce greenhouse gas emissions. Compliance with the State's greenhouse gas emissions targets for 2030 relied on the adoption of the regional Sustainable Communities Strategy (SCS). StanCOG's SCS has been adopted and was approved by the California Air Resources Board. StanCOG has found that the City of Turlock's General Plan complies with the SCS. This project is consistent with the General Plan and NWTSP; therefore, the project is expected to have a less than significant impact on greenhouse gas emissions. *(General Plan pgs. 8-1 through 8-37, General Plan EIR pgs. 3.5-1 through 3.5-47)*

CITY OF TURLOCK
INITIAL STUDY CHECKLIST

Sources: *2012 General Plan, Air Quality and Greenhouse Gases chapter; AB 32 Scoping Plan; 2014 Stanislaus Council of Governments Regional Transportation Plan and Sustainable Communities Strategy; NWTSP and Addendum, 2017; San Joaquin Valley Air Pollution Control District, comment letter dated August 6, 2019.*

Mitigation:

1. **The applicant shall comply with all applicable San Joaquin Valley Air Pollution Control District rules and regulations.**

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
9. Hazards and Hazardous Materials - Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result would it create a significant hazard to the public or the environment?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area			X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

Response:

a), b), and c) The development of the convenience mart/gas station project does not involve an industrial process that would create the risk of explosion or release of hazardous substances through the routine transport or accidental use of hazardous materials. The project does not involve routine transport, use or disposal of hazardous materials. There is no anticipated risk of explosion or release of hazardous substances from the proposed project. The project site is not included on one or more Hazardous Waste and Substance Site Lists compiled pursuant to California Government Code Section 65962.5. All new development is reviewed by the City Fire Division to ensure the project meets the fire protection standards established by the City. All new development must also comply with federal, State, San Joaquin Valley APCD, Stanislaus County, and City policies regulating the production, use, transport and/or disposal of hazardous materials

d) The General Plan EIR does not identify any active cleanup sites located on or near the project site. In addition, the project is not located on a site which is included in one or more Hazardous Waste and Substance Site List, compiled pursuant to California Government Code Section 65962.5. *(General Plan EIR pgs. 3.11-2 through 3.11-7)*

e) The project site is not located within two miles of a public airport or public use airport and is not located within the planning area boundary of the Turlock Air Park. Moreover, the Turlock Air Park has been removed from the Stanislaus County Airport Land Use Compatibility Plan adopted on October 6, 2016 as the Safety Inspectors from the Caltrans Division of Aeronautics have reported that the Airport Operating permits are no longer valid.

f) The proposed project will not impair the implementation of an adopted emergency response/evacuation plan. The project generates traffic that is consistent with the projections contained within the Turlock General Plan EIR. The General Plan EIR found that anticipated growth, and the resulting traffic levels, would not impeded emergency evacuation routes or otherwise prevent public safety agencies from responding in an emergency. *(General Plan EIR pgs. 3.11-22 through 3.11.25)*

g) There are no designated wildland fire areas within or adjoining the project site. *(General Plan EIR pg. 3.11-23)*

Sources: *City of Turlock, Emergency Response Plan, 2004; Stanislaus County Airport Land Use Compatibility Plan, adopted October 6, 2016; Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan, 2010; City of Turlock, General Plan, Safety Element, 2012; City of Turlock, Municipal Code, Title 8, (Building Regulations); NWTSP and Addendum, 2017.*

Mitigation:

None

CITY OF TURLOCK
INITIAL STUDY CHECKLIST

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

Response:

a) The proposed convenience mart/gas station project will be required to comply with the Regional Water Quality Control Board's construction requirements to reduce the potential impact of pollution from water runoff at the time of construction and post-construction. Upon development, the project will be required to connect to City utility systems, including water and sewer; therefore, development of the project area would not result in water quality or waste discharge violations. *(General Plan EIR pgs. 3.12-22 through 3.12-26)*

b) **The proposed convenience mart/gas station project is located within the City of Turlock. The City has developed an Urban Water Management Plan (UWMP) that evaluates the long-range water needs of the City including water conservation and other measures that are necessary to reduce the impact of growth on groundwater supplies. The project has been reviewed by the City of Turlock Municipal Services, the water provider for the City of Turlock, and no concerns were raised regarding the ability of the City to provide adequate potable water to the project.** *(General Plan EIR pgs. 3.12-22 through 3.12-26)*

c) **The convenience mart/gas station project is proposed on a vacant parcel zoned for commercial use. The infill project is located in an urbanized area, adjacent to State Route 99 and surrounded by commercial and residential uses. The City of Turlock requires that all development construct the necessary storm water collection systems to convey runoff to detention basins within the project area. Grading plans for construction within the project area will be reviewed to ensure compliance with the Regional Water Quality Control Board's regulations and the City's NPDES discharge permit. Grading and improvement plans for the project will be reviewed to ensure that storm water runoff from the project area is adequately conveyed to the storm water collection system that will be implemented with the project.**

The project site is not located in a flood area. The entire City of Turlock is located in Flood Zone "X", according to FEMA. The City of Turlock's Community Number is 060392; Panel Numbers are: 0570E, 0600E, 0800E, 0825E (Revised update September 26, 2008). *(General Plan EIR pgs. 3.12-27)*

d) **The project site is not located in a flood area. The entire City of Turlock is located in Flood Zone "X", according to FEMA. The City of Turlock's Community Number is 060392; Panel Numbers are: 0570E, 0600E, 0800E, 0825E (Revised update September 26, 2008). The project site is located outside the Dam Inundation Area for New Don Pedro Dam and for New Exchequer Dam (the two inundation areas located closest to the City of Turlock Municipal Boundary).** *(General Plan EIR pgs. 3.12-27)*

e) **The proposed infill project is a convenience mart/gas station project on a vacant parcel zoned for commercial use and surrounded by a commercial and residential uses. Once constructed, runoff from the developed site could result in increased potential water contamination from urban pollutants that are commonly found in surface parking lots, ornamental landscape planters, and from atmospheric buildup on rooftops. In order to mitigate potential impacts to a less than significant level, the proposed project will be subject to post-construction BMPs per the City's NPDES permit to address increases in impervious surfaces, methods to decrease incremental increase in off-site stormwater flows, and methods for decreasing pollutant loading in off-site discharges.** *(General Plan EIR pg. 3.12-27)*

Sources: *Federal Emergency Management Agency Floodplain regulations; City of Turlock, Storm Drain Master Plan, 1987;Turlock General Plan EIR, 2012; Turlock General Plan, 2012; City of Turlock, Water Master Plan Update, 2009; City of Turlock, Storm Water Master Plan, 2013; City of Turlock Urban Water Management Plan, 2011; City of Turlock Sewer System Master Plan, 2013; City of Turlock, Municipal Code, Title 9, Chapter 2, Water Conservation Landscape Ordinance; NWTSP and Addendum, 2017.*

Mitigation:

1. **The project shall connect to the City's Master Water and Storm Drainage System.**
2. **The project shall comply with the Regional Water Control Board's regulations and standards to maintain and improve groundwater and surface water quality. The applicant shall conform to the requirements of the Construction Storm Water General Permit and the Municipal Separate Storm Sewer System (MS4) Permit, including both Best Management Practices and Low Impact Development (post-construction) requirements.**
3. **If the site will be commercially irrigated, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program.**
4. **If the project includes construction dewatering and it is necessary to discharge the groundwater to water of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit.**
5. **Site grading shall be designed to create positive drainage throughout the site and to collect the storm water for the storm water drainage system. If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United State Army Corps of Engineers (USACOE). If a USACOE permit or any other federal permit is required for this project due to the disturbance of water of the United States then a Water Quality Certification must be obtained from the Central Valley Water Board prior to the initiation of project activities. If the USCACOE determines that only non-jurisdictional water of the State are present in the proposed project are, the proposed project will require a Waste Discharge Requirements permit to be issued by the Central Valley Water Board.**
6. **The discharge of oil, gasoline, diesel fuel, or any other petroleum derivative, or any toxic chemical or hazardous waste is prohibited.**
7. **Materials and equipment shall be stored so as to ensure that spills or leaks cannot enter storm drains, or the drainage ditches or detention basins.**
8. **A spill prevention and cleanup plan shall be implemented.**
9. **The builder and/or developer shall utilize cost-effective urban runoff controls, including Best Management Practices (BMP's), to limit urban pollutants from entering the drainage ditches. A General Construction permit shall be obtained from the State Water Resources Control Board, a Storm Water Pollution Prevention Plan (SWPPP) shall be prepared and implemented as part of this permit.**

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
11. Land Use Planning – Would the project:				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

Response:

a) **The project site is located in an urbanized area, adjacent to State Route 99 on property zoned for commercial use, and surrounded by commercial and residential uses. The proposed convenience mart/gas station project will not physically divide an established community.**

b) The convenience mart/gas station project is proposed on a property zoned for commercial use. The proposed project will not require a change in the land use or zoning designation of the property. The project is consistent with the City's Zoning and General Plan designation.
Sources: *Turlock General Plan, 2012 & Adopted Housing Element, 2014-23; City of Turlock General Plan EIR, 2012; Turlock Municipal Code, Title 9, Chapter 3; US Fish and Wildlife Service – Recovery Plan for Upland Species of the San Joaquin Valley, 1998; NWTSP and Addendum, 2017.*
Mitigation: **None**

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
12. Mineral Resources – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
Response: **a), b) Any development that may ultimately occur in the City does result in the utilization of natural resources (water, natural gas, construction materials, etc.); however, these resources will not be depleted by this project. The only known mineral resources within the City of Turlock are sand and gravel from the Modesto and Riverbank formations. The project will result in only minor excavation of the site.** *(General Plan pg. 7-28)*				
Sources: *City of Turlock, General Plan, Conservation Element, 2012*				
Mitigation: **None**				

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
13. Noise – Would the project result in:				

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?		X		
c) For a project located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

Response:

a) The project is a proposed convenience mart, gas station, quick service restaurant and car wash facility. The General Plan and City Noise Ordinance (TMC 5-28-100ART) establish noise standards that must be met for all new development. General Plan Policy 9.4-c requires that residential areas be protected from excessive noise exposure. Likewise, General Plan Policies 9.4-d, 9.4-e (Noise) requires that a noise analysis be conducted for all new development proposed where projected noise exposure would be other than "normally acceptable" and which require discretionary review. The close proximity of the proposed car wash facility to residential uses and residentially zoned property required that an acoustical analysis be prepared and submitted with the project application. The acoustical analysis addresses the noise level associated with the proposed car wash operation.

The acoustical analysis notes the project site is located adjacent to State Route 99 and south of Fulkerth Road. The project site is zoned Community Commercial (CC). Existing residential land uses are located east of the project site. The proposed hours of operation for the car wash facility are between 7:00 a.m. and 8:00 p.m., seven days per week.

Due to existing elevated (without project) ambient noise levels, the applicable noise level standards are to be adjusted upward. Therefore, due to existing, without project, ambient noise levels at the nearby residential land uses, the applicable noise level standards would be 70 dBL_{eq} and 70 dBL_{50}. The vacuum noise levels are expected to be approximately 35-37 dB at the closest noise-sensitive land uses. These levels are below the applicable noise level standards and below existing ambient noise levels in the project vicinity.

The noise analysis concluded that the closest noise-sensitive building to the car wash operations are located approximately 265 feet east of the car wash tunnel. Car wash related noise levels would be significantly below existing ambient noise levels, and would not contribute to (increase) existing ambient noise levels. Car wash related noise levels would not increase interior noise levels at any nearby residential land uses. Additional noise mitigation is therefore not required.

The environmental noise assessment is included as Attachment 2.

The project is subject to the City's noise ordinance which prohibits construction on weekdays from 7:00 p.m. to 7:00 a.m., on weekends and holidays from 8:00 p.m. to 9:00 a.m. Once constructed and operating the car wash hours of operation will be 7:00 a.m. to 8:00 p.m. seven days a week. The new car wash facility is not anticipated to generate noise levels in excess of the standards established in the General Plan or City Noise Ordinance. *(General Plan EIR pgs. 3.6-16 through 3.6-19, TMC §5-28ART)*

b) **Project-related construction will result in short-term increases in noise levels and vibration on and immediately surrounding the project site. The standards of Turlock's Noise Ordinance (TMC5-28-100ART) are applicable to the development during construction and occupancy. The City's ordinance addresses both temporary construction-related noise, as well as ongoing noise from equipment and other operations of the facility. The project is subject to the City's noise ordinance which prohibits construction on weekdays from 7:00 p.m. to 7:00 a.m., on weekends and holidays from 8:00 p.m. to 9:00 a.m.** *(General Plan pg. 9-5, General Plan EIR pg. 3.6-17 through 3.16-19, TMC §5-28-100ART)*

c) **The project site is not located within two miles of a public airport or public use airport. Two private airstrips are located adjacent to the Turlock City Limits. A private airstrip serving a local pilot is located at 2707 East Zeering Road (APN 073-004-004), approximately 3 miles northeast of the project site. The property is located over 2 miles north of the Turlock Air Park, a private air strip which has been removed from the Stanislaus County Airport Land Use Compatibility Plan adopted on October 6, 2016 as the Safety Inspectors from the Caltrans Division of Aeronautics have reported that the Airport Operating permits are no longer valid. The Stanislaus County Zoning Ordinance has established a 1,000-foot radius around the perimeter of a private strip as a clear area not suitable for most types of development. The project site is located outside of the 1,000-foot radius. The project will not expose people residing or working in the project area to excessive noise levels due to a public airport or private airstrip.**

Sources: *City of Turlock, General Plan, Noise Element, 2012; City of Turlock, Municipal Code, Title 5, Chapter 28, Noise Regulations; Stanislaus County Airport Land Use Compatibility Plan, adopted October 6, 2016; Merced County Airport Land Use Compatibility Plan, June 12, 2012; Turlock General Plan, Circulation Element, 2012; NWTSP 6.14-a, 6.14b; Acoustical Analysis, One-Stop Valero Car Wash – Turlock, July 19, 2019.*

Mitigation:

1. Compliance with the standards of the City of Turlock's Noise Ordinance (TMC5-28-100ART).

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

Response:

a) **The proposed project would not directly or indirectly cause substantial population growth not identified in the Turlock General Plan. The proposed project is for the construction of mini-mart, gas station, quick service restaurant and car wash facility project. The infill project is proposed on a property located in an urbanized area, adjacent to State Route 99, zoned for commercial use, and surrounded by commercial and residential uses. The use is consistent with the uses anticipated for this area, the underlying General Plan land use designation, and the General Plan EIR and will not cause any impacts to population and housing that have not been anticipated and addressed in these documents.**

b) **The proposed project would not displace substantial numbers of existing housing, and would not displace substantial numbers of people necessitating the construction of replacement housing elsewhere. The proposed project is the construction of a mini-mart, gas station, quick service restaurant and car wash facility with associated vacuum stalls on a property designated for commercial use. The project site is surrounded by existing urban uses and accessed by the exiting roadway. There are no existing residences on the site.**

Sources: *City of Turlock, General Plan, 2012 & Housing Element, 2016; NWTSP and Addendum, 2017.*

Mitigation:

None

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
15. Public Services – Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire Protection?		X		
b) Police Protection?		X		
c) Schools?			X	
d) Parks?			X	
e) Other public facilities?		X		

Response:

a) **The project area is located approximately 1 mile from Fire Station 4 (North Walnut Road), and approximately 2 miles from Fire Station 1 (Marshall Street). The Fire Department reviews all development applications to determine the adequacy of fire protection for the proposed development. The Fire Department has commented on this project but has not indicated that the development could not be adequately served or would create an impact on the ability of the Department to serve the City as a whole. The Turlock Municipal Code and the State Fire Code establish standards of service for all new development in the City. Those standards and regulations are applicable to the project.** *(General Plan EIR pgs. 3.14-14 through 3.14-19)*

b) **The project is proposed on an infill property in an urbanized area surrounded by commercial and residential uses. Development of the project will not result in any unique circumstances that cannot be handled with the existing level of police resources. The Police Department was routed the project and did not indicate that the development of the project could not be adequately served. No new or expansion of existing police facilities are needed as a result of this project. The impacts from the development of the property on police services will be less-than-significant. The developer will be required to pay Capital Facilities Fees upon development, a portion of which is used to fund Police Service capital improvements.** *(General Plan EIR pgs. 3.14-14 through 3.14-19)*

c) **As a commercial land use the project will not have any residential dwelling units and will not generate any direct demand for school facilities. Under the Leroy F. Greene School Facilities Act of 1998, the satisfaction by the developer of his statutory fee under California Government Code Section 65995 is deemed "full and complete mitigation" of school impacts. Therefore, mitigation of impacts upon school facilities shall be accomplished by the payment of the fees set forth established by the Turlock Unified School District.** *(General Plan EIR pgs. 3.14-14 through 3.14-19)*

d) **Demand for park and recreational facilities are generally the direct result of residential development. No residential dwelling units are proposed as part of this project. Development of the project area with a mini-mart, gas station, quick serve restaurant, and car wash will not result in a significant increase in the use of existing neighborhood or regional parks.** *(General Plan EIR pgs. 3.14-14 through 3.14-19)*

e) **Development of the project will not significantly increase the use of or need for new public facilities. The City has prepared and adopted a Capital Facility Program that identifies the public service needs of roads, police, fire, and general government that will be required through build-out of the General Plan area. This program includes the collection of Capital Facility Fees from all new development. Development fees are also collected from all new development for recreational lands and facilities. Conditions of development will require payment of these fees and charges, where appropriate and allowed by law.** *(General Plan EIR pg. 3.14-14)*

Sources: *Stanislaus County, Public Facilities Plan; City of Turlock, Capital Facility Fees Program, City of Turlock Capital Improvement Program (CIP); Turlock Unified School District, School Facilities Needs Analysis; City of Turlock, General Plan, Parks and Recreational Open Space and Safety Elements, 2012*

Mitigation:

1. **The applicant, developer or successor in interest shall pay all applicable Citywide Capital Facility Fees for public facility service improvements.**

2. **Prior to the issuance of a building permit, the developer shall pay the applicable development-related school impact fees to fully mitigate its impacts upon school facilities pursuant to California statutes.**

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

Response:

a) and b) Demand for park and recreational facilities are generally the direct result of residential development. No residential dwelling units are proposed as part of this project. The mini-mart, gas station, quick serve, car wash project does not include recreational facilities or require the construction or expansion of recreational facilities. The development of the project will not result in a significant increase in use of existing neighborhood or regional parks. However, development fees are collected from all new development to provide additional park lands and facilities. *(General Plan EIR pgs. 3.13-10 through 3.13-15)*

Sources: *City of Turlock General Plan 2012: City of Turlock Parks Master Plan, 2003; Northwest Triangle Specific Plan MEIR, June 1995. Northwest Triangle Specific Plan (NWTSP), 1995 (Updated January 13, 2004, and June 13, 2017), Northwest Triangle Specific Plan (NWTSP) Amendment 2017, Mitigated Negative Declaration Adopted June 13, 2017, Addendum to Mitigated Negative Declaration Adopted November 28, 2017*

Mitigation:

None

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
17. Transportation – Would the project:				

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

Response:

a) and b) The mini-mat, gas station, quick service restaurant and car wash facility is an infill project proposed on a vacant parcel zoned for commercial uses. Located in an urbanized area the project site is adjacent to State Route 99 and surrounded by commercial and residential uses. The site is adjacent to Fulkerth Road. Based on the ITE Trip Generation (Land Use: 945) on a weekday, the project is anticipated to generate approximately 5,325 AVT on weekdays and 451 AVT on Saturday. The City Engineer has reviewed the project and has determined the current roadway system can adequately accommodate the vehicle traffic generated by the project.

The site is served by BLST bus Route A and B. There are three bus stops within a ¼ -mile of the project. The City annually assesses the need for bus service and may alter its routes based upon demand. In accordance with CEQA Guidelines §15064.3(b) land use projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact.

The project site is located within an area identified in the Turlock General Plan for commercial uses. The City has adopted a Capital Facility Program with traffic improvements planned for build out of the General Plan. A condition of each new development is payment of a Citywide Capital Facility Fee, a portion of which is used to fund these circulation improvements required for cumulative impacts added by the development. The mitigation measures identified in the General Plan EIR and the Statement of Overriding Considerations are adequate to mitigate the transportation and traffic impacts associated with the project. Therefore, no significant traffic issues will be generated by the project. *(General Plan EIR pgs. 3.3-23 through 3.3-33)*

c) The infill project will not substantially increase hazards due to a design feature or incompatible uses. Roadway and public rights-of way improvements along the Fulkerth Road frontage are required to be constructed.

d) The Turlock Fire Department reviews all development proposals for adequate emergency access. The Fire Department has not expressed concerns that the project does not provide adequate emergency access. The project will either meet or exceed the Fire Department needs for emergency vehicle access throughout the project site.

Sources: *City of Turlock, Capital Improvement Program (CIP); City of Turlock, General Plan, 2012; StanCOG, Regional Transportation Plan and Sustainable Communities Strategy, 2014; Stanislaus Assn. of Governments, Congestion Mgmt. Plan, 1992; Institute of Traffic Engineers Trip Generation, 10th Edition Volume 2: Data Part 3.*

Mitigation:

None

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

Response:

a) **The Turlock General Plan EIR found that there are no known Native American cultural resources within the City of Turlock. The properties are not listed or eligible for listing on the California Register of Historical Resources. In compliance with AB52 notices were sent to the North Valley Yokuts Tribe on July 29, 2019 with the project description. The Torres Martinez Desert Cahuilla Tribe sent a letter to the City of Turlock on April 19, 2017 formally asking the City to remove them from future project notifications. The City of Turlock has not received comments from the North Valley Yokuts Tribe.** *(General Plan EIR pgs. 3.8-13 through 3.8-15)*

Sources: *Turlock General Plan, Conservation Element, 2012; City of Turlock General Plan EIR, 2012; NWTSP Mitigated Negative Declaration Addendum,1; Cultural Resources Records Search,2008*

Mitigation:

None

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
19. Utilities and Service Systems – Would the project:				

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which services or may serve the project determined that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?		X		
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Response:

a) The mini-mat, gas station, quick service restaurant and car wash project is proposed as an infill project on an existing vacant parcel zoned for commercial use. The project site is adjacent to State Route 99 and Fulkerth Road and has access to existing infrastructure including water, wastewater and storm water drainage facilities. The proposed project will not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. Sewer, or wastewater, systems are currently available to the site. The type of wastewater anticipated by the project is readily handled by the current waste water system. The proposed project will not result in the need to construct a new water or wastewater treatment facility. The existing water and wastewater facilities which serve the City of Turlock are sufficient to serve this use. The project site has access to existing electric power, natural gas, and telecommunications and will not require or result in the construction of new or expanded facilities. *(General Plan EIR pgs. 3.15-11 through 3.15-15)*

b) and c) **The project site is within the boundaries of the City of Turlock's Storm Water Master Plan and Urban Water Management Plan. The project is consistent with the General Plan land use and growth assumptions that were used to update the City's Urban Water Management Plan. The proposed mini-mat, gas station, quick service restaurant and car wash is an infill project proposed on a vacant parcel zoned for commercial use. The owner or successor in interest will be required to provide on-site infrastructure as determined necessary by the City Engineer. No additional improvements are needed to either sewer lines or treatment facilities to serve the proposed project, as the project will connect to existing lines. A standard condition of development in the City of Turlock is the payment of the adopted water connection fees which reflect the pro rata share of any necessary improvement to the existing City water system for each new water user.**

The owner, or successor in interest, must pay standard connection fees to address their proportional impact to the water system. Implementation of BMPs will reduce pollutants in stormwater and urban runoff from the project site. Impacts from the proposed car wash facility will be less than significant and no mitigation beyond compliance with existing laws is required. The development is consistent with what has been anticipated in the General Plan and planned for in the Storm Water Master Plan and will not require the construction of new facilities or expansion of existing storm drainage facilities. *(General Plan EIR pgs. 3.12-24 through 3.12-29)*

d) and e) **Solid waste will be of a domestic nature and will comply with all federal, State and local statutes. Upon completion of the car wash project, the property owner(s), or successor(s) in interest shall contract with the City of Turlock's designated waste hauler, Turlock Scavenger, for solid waste disposal. Turlock Scavenger has an adopted waste diversion/recycling program which has resulted in waste diversion exceeding state-mandated California Integrated Waste Management Board timeframes under Public Resources Code 41000 *et seq.* The project is required to install a trash enclosure that will accommodate recycled materials. Sufficient capacity remains for the additional solid waste needs to support this project.** *(General Plan EIR pgs. 3.15-11 through 3.15-15)*

Sources: *City of Turlock, Capital Improvement Program (CIP); City of Turlock, General Plan, 2012; City of Turlock, Water Master Plan Update, 2009; City of Turlock, Waste Water Master Plan, 1991; City of Turlock, Storm Water Master Plan, 2013; City of Turlock Urban Water Management Plan, 2011; City of Turlock Sewer System Master Plan, 2013.*

Mitigation:

None

	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
20. Wildfire - If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water				X

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 structure to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Response:

a) The proposed project will not impair the implementation of an adopted emergency response evacuation plan. The project generates traffic that is consistent with the projections contained within the Turlock General Plan EIR. The General Plan EIR found that anticipated growth, and the resulting traffic levels, would not impede emergency evacuation routes or otherwise prevent public safety agencies from responding in an emergency. *(General Plan pg. 10-18, General Plan EIR pgs. 3.11-22 through 3.11-25)*

b), c), and d) There are no wildlands or steep slopes in the City of Turlock, making the risk of wildland fire low; likewise, the Turlock General Plan notes the city topography as flat urbanized or agricultural land with a low fire risk. The California Department of Forestry and Fire Protection's Fire and Resource Assessment Program (FRAP) designates the City of Turlock as a Low Risk Area (LRA). There are no rivers, lakes or streams located within the City of Turlock that would expose people of structures to significant risks of flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. *(General Plan 10-18, General Plan EIR pgs. 3.10-5, 3.11-22 through 3.11-25)*

Sources: *City of Turlock, Emergency Operation Plan, 2017; Local Hazard Mitigation Plan, 2010-2015; Stanislaus County Multi-Jurisdictional Hazard Mitigation Plan, updated 2016 City of Turlock, General Plan, Safety Element, 2012*

Mitigation:
None

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

CITY OF TURLOCK
INITIAL STUDY CHECKLIST

The proposed mini-mat, gas station, quick service restaurant and car wash facility is an infill project within the City adjacent to State Route 99 and surrounded by commercial and residential uses. As discussed in Section 1, no scenic vistas, scenic resources, or the visual character of the area will be substantially impacted and the project will not result in excessive light or glare. The project site is located within an urbanized area and surrounded by urban uses. No evidence of significant historic or cultural resources were identified on or near the project site. As a result of many years of agricultural production virtually all of the land in the General Plan area has been altered. The project site is not known to have any association with an important example of California's history or prehistory. Construction-phase procedures will be implemented in the event an archaeological or cultural resource is discovered consistent with the Mitigation Measures contained in Sections 4 & 5. As discussed in Section 4, there are no rivers, lakes or streams located within the City of Turlock; therefore, the project would have no impact on riparian habitats or species.

The context for assessing air quality impacts is the immediate project vicinity with respects to emissions generated by the construction and operation of the proposed project. The environmental analysis provided in Section 3 concludes that operational and construction emissions would not exceed the air quality thresholds established by the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAPCD letter dated August 6, 2019 stated that the project specific annual emissions of criteria pollutants are not expected to exceed any of the District thresholds. Furthermore, Mitigation Measures identified in Sections 3 & 8 would reduce potential impacts to less-than-significant levels.

Mitigation measures for any potentially significant project-level impacts have been included in this document and will reduce the impacts to less-than-significant levels. Based on the analysis above, the City finds that impacts related to environmental effects that could cause adverse effects on human beings would be less than significant.

KEY NOTES:

1. 6"X6" CONCRETE CURBS AT LOCATIONS SHOWN.
2. 6"X6" CONCRETE CURBS PAINTED OSHA RED WITH "NO PARKING-FIRE LANE" IN 4" TALL WHITE LETTERS AT LOCATIONS SHOWN.
3. TRASH ENCLOSURES WITH RECYCLE AREA, PER TURLOCK CITY P.W. STANDARDS.
4. 20 FOOT TALL PARKING LOT LIGHT POLES.
5. MINI-MART MAIN ENTRANCE.
6. QSR MAIN ENTRANCE.
7. CONTRASTING PAINTED TRAFFIC DIRECTION ARROWS.
8. STATE STANDARD "STOP" SIGN AT LOCATION SHOWN.
9. 2-20,000 GALLON UNDER GROUND STATE APPROVED FUEL STORAGE TANKS PER 2306 OF CFC. PLANS AND PERMITS BY OTHERS.
10. 4 FOOT MINIMUM WIDE PATH OF TRAVEL PER CHAPTER 11B OF CBC.
11. TYPICAL 9'X18' AUTOMOBILE PARKING STALLS. FRONT CURB IS THE WHEEL STOP.
12. TYPICAL 9'X18' ELECTRIC / ALTERNATIVE FUEL VEHICLE PARKING STALL WITH "RESERVED" SIGN. (2 SPACES)
13. FUTURE ELECTRIC CAR CHARGING STATION LOCATION.
14. TYPICAL 9'X18' A.D.A.PARKING STALLS PER CHAPTER 11B OF CBC (2 STALLS)
15. 12 FOOT WIDE CONCRETE WALK WAY.
16. 5 ½" CONCRETE OR A.C. PAVING PER GRADING AND PAVING PLAN FUTURE PLANS AND PERMITS BY OTHERS.
17. LANDSCAPE AREAS.
18. 6 FOOT HIGH WROUGHT IRON FENCE ALONG PROPERTY LINE PER TURLOCK CITY P.W.STANDARDS.
19. 12 FOOT MINIMUM WIDE DRIVE THRU LANE.
20. MONUMENT SIGN. PLANS AND PERMITS BY OTHERS.
21. AIR AND WATER MACHINE.
22. 5½" THICK CONCRETE SLAB FOR DUMPSTER ROLL OUT.
23. "NO PARKING" CONTRASTING PAINTED 12" TALL LETTERS ON CONCRETE PAVING.
24. 4" WIDE WHITE PAINTED STRIPES.
25. RESERVED PARKING FOR CAR-POOLING EMPLOYEES.
26. FUEL ISLANDS. PLANS AND PERMITS BY OTHERS.
27. BICYCLE PARKING FOR 3 BICYCLES PER CAL-GREEN.
28. RESERVED PARKING STALL FOR "ALOHA BOB" AND FRIENDS..
29. 8'X18' ADA VAN STYLE "NO PARKING" LOADING AREA PER CBC.
30. ADA PARKING LOT SIGN/NOTICE PER CHAPTER 11B OF CBC.
31. A.D.A. APPROVED RAMPS PER CHAPTER 11B OF CBC. SEE FUTURE GRADING PLAN BY OTHERS.
32. "RIGHT TURN ONLY" SIGN PER TURLOCK CITY P.W. STANDARDS.
33. VEETER-ROOT EVAPORATIVE EMISSIONS CANISTER. PLANS AND PERMITS BY OTHERS. MINIMUM 3 FEET BEHIND CURB.
34. MPD LOCATIONS. TYPICAL OF 6.
35. ADA PARKING STALL SIGNS PER CHAPTER 11B OF CBC.
36. 6" CONCRETE FILLED STEEL PIPE BOLARDS AT LOCATIONS SHOWN.
37. FUEL CANOPY SUPPORT POSTS. PLANS AND PERMITS BY OTHERS.
38. INSTALL SIDEWALKS ALONG FRONTAGE OF PROPERTY PER TURLOCK CITY PUBLIC WORKS STANDARDS.
39. "EXIT-DO NOT ENTER" SIGNS PER TURLOCK CITY P.W. STANDARDS.
40. 10'-0" PUBLIC UTILITIES EASEMENT.
41. 6"X6" A.C. CURB AT COMMON DRIVE.
42. ORDER CONFORMATION BOARD FOR QSR.
43. ORDER CONFORMATION BOARD FOR CARWASH.
44. 10'X16' COVERED PATIO/SEATING AREA WITH CONCRETE DECK.
45. 30'-0" WIDE COMMON DRIVE.
46. CARWASH ENTRY AND PRICE SIGN.
47. (4)15'X20' VACUUM AREA PARKING STALLS.
48. FUTURE COMMON DRIVE BY OTHERS.
49. 8'-0" HIGH X 16'-0" SOUND ATTENUATION WALL.
50. 30'X60' SOLAR PANEL AND VACUUM AREA CANOPY.
51. 6'X20' COVERED ENTRY ROOF.

LEGAL DESCRIPTION

The land referred to herein is situated in the State of California, county of Stanislaus, City of Turlock and described as follow:

Parcel 1, as shown upon that certain Parcel Map, filed for record December 30, 2002, in Book 51 of Parcel Maps at Page 97, Stanislaus County Records.

Excepting therefrom that portion conveyed to the City of Turlock in that certain Grant Deed recorded June 22,2018 as Document No. 2018-0042914, Official Records more particularly described as follows:

A portion of Parcel 1 as shown on map filed on December 30, 2002 in Book 51 of Parcel Maps at Page 97, Stanislaus County Records, located in Section 16, Township 5 South, Range 10 East, Mount Diablo Base and Meridian, in City of Turlock, County of Stanislaus, State of California, described as follows:

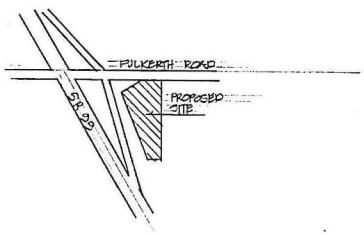
Beginning at the Southwest corner of Parcel 1; thence along the Westerly and Northerly lines of said Parcel 3, also being the Easterly right-of-way line for California State Highway 99, the following three courses:

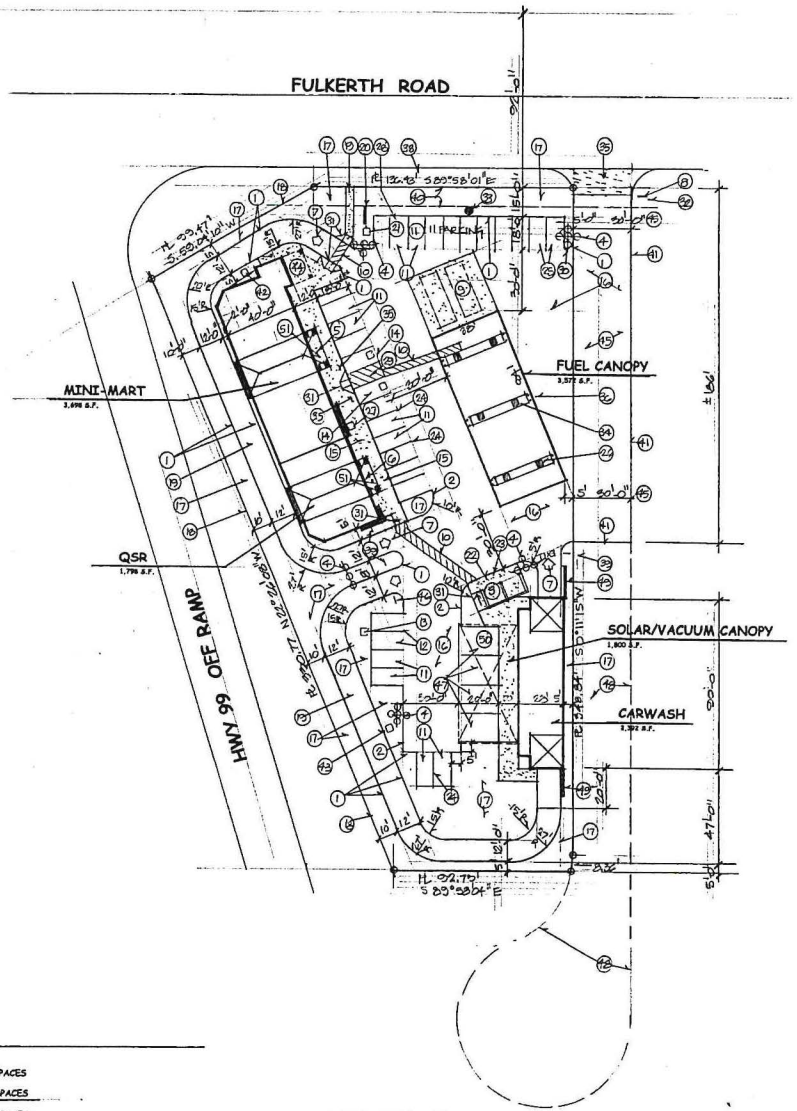
1) North 17°53'54" West, a distance of 317.68 feet
2) North 46°11'22" East, a distance of 73.03 feet
3) North 85°16'14" East, a distance of 120.58 feet

hence South 0°14'22" East, a distance of 6.00 feet, thence North 89°58'01" West, a distance of 72.04 feet; thence South 59°04'10" West, a distance of 99.47 feet; thence South 22°26'08" East, a distance of 330.77 feet to the South line of said Parcel1; thence North 89°58'58" West along said South line of Parcel 1, a distance of 44.13 feet to the point of beginning.

APN: 089-019-021

VICINITY MAP





SITE PLAN

SCALE: 1"=30'-0"

SITE STATISTICS:

LAND	= 1.32 ACRES	
	= +/- 57,500 S.F.	
BUILDINGS		
MINI-MART	= 3,698 S.F.	
QSR	= 1,798 S.F.	
CARWASH	= 2,392 S.F.	
VACUUM CANOPY	= 1,800 S.F.	
FUEL CANOPY	= 3,572 S.F.	
M-M/QSR ENTRIES	= 240 S.F.	
TOTAL	= 13,500 S.F.	
LOT COVERAGE	= 23.5%	
PAVING	= 26,658 S.F.	
LOT COVERAGE	= 46.3%	
HARDSCAPE	= 2,280 S.F.	
LOT COVERAGE	= 4%	
LANDSCAPE	= 15,062 S.F.	
LOT COVERAGE	= 26.2%	

REQUIRED PARKING	
MINI-MART 1/250 S.F.	= 15 SPACES
QSR 1/100 S.F.	= 18 SPACES
TOTAL	= 33 SPACES
PARKING PROVIDED	
2 HANDICAPPED SPACES	
2 ELECTRIC/ECO VEHICLE SPACES	
1 RESERVED SPACE FOR ALOHA BOB	
26 STANDARD SPACES	
4 VACUUM CANOPY SPACES	
35 TOTAL	

PROPERTY DEVELOPER:

AMARPREET KAUR and AMAN SACHDEVA
998 EAST MANNING AVENUE
REEDLEY, CA. 93654
(559)978-1682

REVISIONS/DATE
1 PER OWNERS 10 MAY'17

RICHARD HERZOG CONSTRUCTION INC.
7847 NORTH HIGHLAND AVENUE
CLOVIS, CALIFORNIA 93619
(559)304-7777
CCL: 959790

OWNER
ONE STOP VALERO, LLC
998 EAST MANNING AVENUE
REEDLEY, CA 93654
(559) 978-1682

PROPOSED
TURLOCK ONE STOP VALERO
MINI-MART, GAS STATION, QSR & CARWASH
2500 FULKERTH ROAD
TURLOCK, CA. 95380

JOB #: 16-09
DR. BY: RDL-DHE
DATE: 24 MAY'17
CHECKED BY:
DATE:

SHEET TITLE
SITE PLAN

SHEET NUMBER
S

ATTACHMENT 1

CALEEMOD 2016.3.2
AIR QUALITY IMPACT ANALYSIS

TURLOCK ONE STOP VALERO
2500 FULKERTH ROAD
AUGUST 21, 2019

Turlock One Stop Valero - 2500 Fulkerth Rd

San Joaquin Valley Unified APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Convenience Market With Gas Pumps	1.00	1000sqft	0.18	9,070.00	0
User Defined Commercial	1.00	User Defined Unit	0.09	4,200.00	0
Parking Lot	1.00	1000sqft	0.12	5,700.00	0
Other Asphalt Surfaces	1.00	1000sqft	0.47	23,238.00	0
Other Non-Asphalt Surfaces	1.00	1000sqft	0.30	15,062.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2021
Utility Company	Turlock Irrigation District				
CO2 Intensity (lb/MWhr)	790	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - The proposed project is the construction of convenience market/gas station with a 6-pump fuel island, an approximately 5,500 square foot convenience mart with a drive-through for a yet unidentified quick serve restaurant, an approximately 2,400 square foot drive-through car wash with vacuum stalls.

Land Use - Convenience mart w/drive through restaurant: 5,500 sqft; carwash & vacuum canopy: 4,200 sqft; fuel canopy w/6-pumps: 3,572 sqft; 33 parking spaces; 15,000 sqft of landscaping; hardscape 2,280; total paving 26,658

Energy Use -

Turlock One Stop Valero - 2500 Fulkerth Rd - San Joaquin Valley Unified APCD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	1,000.00	9,070.00
tblLandUse	LandUseSquareFeet	1,000.00	5,700.00
tblLandUse	LandUseSquareFeet	1,000.00	23,238.00
tblLandUse	LandUseSquareFeet	1,000.00	15,062.00
tblLandUse	LandUseSquareFeet	0.00	4,200.00
tblLandUse	LotAcreage	0.02	0.18
tblLandUse	LotAcreage	0.02	0.12
tblLandUse	LotAcreage	0.02	0.47
tblLandUse	LotAcreage	0.02	0.30
tblLandUse	LotAcreage	0.00	0.09

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					
2020	0.3506	1.9043	1.6345	3.0300e-003	0.0419	0.0970	0.1389	0.0151	0.0931	0.1082	0.0000	256.3258	256.3258	0.0448	0.0000	257.4461
Maximum	**0.3506**	**1.9043**	**1.6345**	**3.0300e-003**	**0.0419**	**0.0970**	**0.1389**	**0.0151**	**0.0931**	**0.1082**	**0.0000**	**256.3258**	**256.3258**	**0.0448**	**0.0000**	**257.4461**

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					
2020	0.3506	1.9043	1.6345	3.0300e-003	0.0419	0.0970	0.1389	0.0151	0.0931	0.1082	0.0000	256.3255	256.3255	0.0448	0.0000	257.4459
Maximum	**0.3506**	**1.9043**	**1.6345**	**3.0300e-003**	**0.0419**	**0.0970**	**0.1389**	**0.0151**	**0.0931**	**0.1082**	**0.0000**	**256.3255**	**256.3255**	**0.0448**	**0.0000**	**257.4459**

	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**

Turlock One Stop Valero - 2500 Fulkerth Rd - San Joaquin Valley Unified APCD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2020	3-31-2020	0.6374	0.6374
2	4-1-2020	6-30-2020	0.5884	0.5884
3	7-1-2020	9-30-2020	0.5949	0.5949
		Highest	0.6374	0.6374

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	0.0648	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Energy	5.2000e-004	4.7600e-003	4.0000e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	32.3823	32.3823	1.1000e-003	3.0000e-004	32.4996
Mobile	0.2461	2.4852	1.4666	5.5600e-003	0.2004	4.6900e-003	0.2051	0.0539	4.4200e-003	0.0583	0.0000	519.7634	519.7634	0.0825	0.0000	521.8253
Waste						0.0000	0.0000		0.0000	0.0000	0.6110	0.0000	0.6110	0.0361	0.0000	1.5137
Water						0.0000	0.0000		0.0000	0.0000	0.0235	0.2006	0.2241	2.4200e-003	6.0000e-005	0.3020
Total	**0.3114**	**2.4900**	**1.4706**	**5.5900e-003**	**0.2004**	**5.0500e-003**	**0.2055**	**0.0539**	**4.7800e-003**	**0.0587**	**0.6345**	**552.3463**	**552.9808**	**0.1221**	**3.6000e-004**	**556.1408**

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	0.0648	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Energy	5.2000e-004	4.7600e-003	4.0000e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	32.3823	32.3823	1.1000e-003	3.0000e-004	32.4996
Mobile	0.2461	2.4852	1.4666	5.5600e-003	0.2004	4.6900e-003	0.2051	0.0539	4.4200e-003	0.0583	0.0000	519.7634	519.7634	0.0825	0.0000	521.8253
Waste						0.0000	0.0000		0.0000	0.0000	0.6110	0.0000	0.6110	0.0361	0.0000	1.5137
Water						0.0000	0.0000		0.0000	0.0000	0.0235	0.2006	0.2241	2.4200e-003	6.0000e-005	0.3020
Total	**0.3114**	**2.4900**	**1.4706**	**5.5900e-003**	**0.2004**	**5.0500e-003**	**0.2055**	**0.0539**	**4.7800e-003**	**0.0587**	**0.6345**	**552.3463**	**552.9808**	**0.1221**	**3.6000e-004**	**556.1408**

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

3.0 Construction Detail

Construction Phase

Turlock One Stop Valero - 2500 Fulkerth Rd - San Joaquin Valley Unified APCD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/28/2020	5	20	
2	Site Preparation	Site Preparation	1/29/2020	1/30/2020	5	2	
3	Grading	Grading	1/31/2020	2/5/2020	5	4	
4	Building Construction	Building Construction	2/6/2020	11/11/2020	5	200	
5	Paving	Paving	11/12/2020	11/25/2020	5	10	
6	Architectural Coating	Architectural Coating	11/26/2020	12/9/2020	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.89

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 19,905; Non-Residential Outdoor: 6,635; Striped Parking Area: 2,640 (Architectural Coating – sqft)

OffRoad Equipment

Turlock One Stop Valero - 2500 Fulkerth Rd - San Joaquin Valley Unified APCD Air District, Annual

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	23.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0213	0.2095	0.1466	2.4000e-004		0.0115	0.0115		0.0108	0.0108	0.0000	21.0677	21.0677	5.4200e-003	0.0000	21.2031
Total	**0.0213**	**0.2095**	**0.1466**	**2.4000e-004**		**0.0115**	**0.0115**		**0.0108**	**0.0108**	**0.0000**	**21.0677**	**21.0677**	**5.4200e-003**	**0.0000**	**21.2031**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.7000e-004	3.7900e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0500e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.9333	0.9333	3.0000e-005	0.0000	0.9340
Total	**5.5000e-004**	**3.7000e-004**	**3.7900e-003**	**1.0000e-005**	**1.0400e-003**	**1.0000e-005**	**1.0500e-003**	**2.8000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.9333**	**0.9333**	**3.0000e-005**	**0.0000**	**0.9340**

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	0.0213	0.2095	0.1466	2.4000e-004		0.0115	0.0115		0.0108	0.0108	0.0000	21.0676	21.0676	5.4200e-003	0.0000	21.2030
Total	**0.0213**	**0.2095**	**0.1466**	**2.4000e-004**		**0.0115**	**0.0115**		**0.0108**	**0.0108**	**0.0000**	**21.0676**	**21.0676**	**5.4200e-003**	**0.0000**	**21.2030**

3.2 Demolition - 2020

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	5.5000e-004	3.7000e-004	3.7900e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0500e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.9333	0.9333	3.0000e-005	0.0000	0.9340
Total	**5.5000e-004**	**3.7000e-004**	**3.7900e-003**	**1.0000e-005**	**1.0400e-003**	**1.0000e-005**	**1.0500e-003**	**2.8000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.9333**	**0.9333**	**3.0000e-005**	**0.0000**	**0.9340**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	1.6300e-003	0.0184	7.7100e-003	2.0000e-005		8.2000e-004	8.2000e-004		7.6000e-004	7.6000e-004	0.0000	1.5127	1.5127	4.9000e-004	0.0000	1.5249
Total	**1.6300e-003**	**0.0184**	**7.7100e-003**	**2.0000e-005**	**5.8000e-003**	**8.2000e-004**	**6.6200e-003**	**2.9500e-003**	**7.6000e-004**	**3.7100e-003**	**0.0000**	**1.5127**	**1.5127**	**4.9000e-004**	**0.0000**	**1.5249**

3.3 Site Preparation - 2020

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-005	2.0000e-005	2.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0574	0.0574	0.0000	0.0000	0.0575
Total	**3.0000e-005**	**2.0000e-005**	**2.3000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0574**	**0.0574**	**0.0000**	**0.0000**	**0.0575**

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					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	1.6300e-003	0.0184	7.7100e-003	2.0000e-005		8.2000e-004	8.2000e-004		7.6000e-004	7.6000e-004	0.0000	1.5127	1.5127	4.9000e-004	0.0000	1.5249
Total	**1.6300e-003**	**0.0184**	**7.7100e-003**	**2.0000e-005**	**5.8000e-003**	**8.2000e-004**	**6.6200e-003**	**2.9500e-003**	**7.6000e-004**	**3.7100e-003**	**0.0000**	**1.5127**	**1.5127**	**4.9000e-004**	**0.0000**	**1.5249**

3.3 Site Preparation - 2020

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-005	2.0000e-005	2.3000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0574	0.0574	0.0000	0.0000	0.0575
Total	**3.0000e-005**	**2.0000e-005**	**2.3000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0574**	**0.0574**	**0.0000**	**0.0000**	**0.0575**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	2.7000e-003	0.0302	0.0129	3.0000e-005		1.3700e-003	1.3700e-003		1.2600e-003	1.2600e-003	0.0000	2.4779	2.4779	8.0000e-004	0.0000	2.4980
Total	**2.7000e-003**	**0.0302**	**0.0129**	**3.0000e-005**	**9.8300e-003**	**1.3700e-003**	**0.0112**	**5.0500e-003**	**1.2600e-003**	**6.3100e-003**	**0.0000**	**2.4779**	**2.4779**	**8.0000e-004**	**0.0000**	**2.4980**

3.4 Grading - 2020

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	7.0000e-005	5.0000e-005	4.7000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1149	0.1149	0.0000	0.0000	0.1150
Total	**7.0000e-005**	**5.0000e-005**	**4.7000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1149**	**0.1149**	**0.0000**	**0.0000**	**0.1150**

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					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	2.7000e-003	0.0302	0.0129	3.0000e-005		1.3700e-003	1.3700e-003		1.2600e-003	1.2600e-003	0.0000	2.4779	2.4779	8.0000e-004	0.0000	2.4980
Total	**2.7000e-003**	**0.0302**	**0.0129**	**3.0000e-005**	**9.8300e-003**	**1.3700e-003**	**0.0112**	**5.0500e-003**	**1.2600e-003**	**6.3100e-003**	**0.0000**	**2.4779**	**2.4779**	**8.0000e-004**	**0.0000**	**2.4980**

3.4 Grading - 2020

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	7.0000e-005	5.0000e-005	4.7000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1149	0.1149	0.0000	0.0000	0.1150
Total	**7.0000e-005**	**5.0000e-005**	**4.7000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.1149**	**0.1149**	**0.0000**	**0.0000**	**0.1150**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2031	1.4788	1.3188	2.2000e-003		0.0796	0.0796		0.0769	0.0769	0.0000	181.5421	181.5421	0.0337	0.0000	182.3847
Total	**0.2031**	**1.4788**	**1.3188**	**2.2000e-003**		**0.0796**	**0.0796**		**0.0769**	**0.0769**	**0.0000**	**181.5421**	**181.5421**	**0.0337**	**0.0000**	**182.3847**

3.5 Building Construction - 2020

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	3.5700e-003	0.1096	0.0208	2.6000e-004	5.9700e-003	6.0000e-004	6.5700e-003	1.7200e-003	5.8000e-004	2.3000e-003	0.0000	24.3018	24.3018	1.9200e-003	0.0000	24.3498
Worker	9.7200e-003	6.6000e-003	0.0671	1.8000e-004	0.0184	1.3000e-004	0.0185	4.8900e-003	1.2000e-004	5.0100e-003	0.0000	16.5124	16.5124	4.7000e-004	0.0000	16.5242
Total	**0.0133**	**0.1162**	**0.0879**	**4.4000e-004**	**0.0244**	**7.3000e-004**	**0.0251**	**6.6100e-003**	**7.0000e-004**	**7.3100e-003**	**0.0000**	**40.8142**	**40.8142**	**2.3900e-003**	**0.0000**	**40.8740**

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	0.2031	1.4788	1.3188	2.2000e-003		0.0796	0.0796		0.0769	0.0769	0.0000	181.5419	181.5419	0.0337	0.0000	182.3844
Total	**0.2031**	**1.4788**	**1.3188**	**2.2000e-003**		**0.0796**	**0.0796**		**0.0769**	**0.0769**	**0.0000**	**181.5419**	**181.5419**	**0.0337**	**0.0000**	**182.3844**

3.5 Building Construction - 2020

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	3.5700e-003	0.1096	0.0208	2.6000e-004	5.9700e-003	6.0000e-004	6.5700e-003	1.7200e-003	5.8000e-004	2.3000e-003	0.0000	24.3018	24.3018	1.9200e-003	0.0000	24.3498
Worker	9.7200e-003	6.6000e-003	0.0671	1.8000e-004	0.0184	1.3000e-004	0.0185	4.8900e-003	1.2000e-004	5.0100e-003	0.0000	16.5124	16.5124	4.7000e-004	0.0000	16.5242
Total	**0.0133**	**0.1162**	**0.0879**	**4.4000e-004**	**0.0244**	**7.3000e-004**	**0.0251**	**6.6100e-003**	**7.0000e-004**	**7.3100e-003**	**0.0000**	**40.8142**	**40.8142**	**2.3900e-003**	**0.0000**	**40.8740**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2000e-003	0.0423	0.0444	7.0000e-005		2.3500e-003	2.3500e-003		2.1600e-003	2.1600e-003	0.0000	5.8829	5.8829	1.8600e-003	0.0000	5.9295
Paving	7.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.9700e-003**	**0.0423**	**0.0444**	**7.0000e-005**		**2.3500e-003**	**2.3500e-003**		**2.1600e-003**	**2.1600e-003**	**0.0000**	**5.8829**	**5.8829**	**1.8600e-003**	**0.0000**	**5.9295**

3.6 Paving - 2020

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	2.7000e-004	1.9000e-004	1.9000e-003	1.0000e-005	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4667	0.4667	1.0000e-005	0.0000	0.4670
Total	**2.7000e-004**	**1.9000e-004**	**1.9000e-003**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4667**	**0.4667**	**1.0000e-005**	**0.0000**	**0.4670**

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	4.2000e-003	0.0423	0.0444	7.0000e-005		2.3500e-003	2.3500e-003		2.1600e-003	2.1600e-003	0.0000	5.8828	5.8828	1.8600e-003	0.0000	5.9295
Paving	7.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.9700e-003**	**0.0423**	**0.0444**	**7.0000e-005**		**2.3500e-003**	**2.3500e-003**		**2.1600e-003**	**2.1600e-003**	**0.0000**	**5.8828**	**5.8828**	**1.8600e-003**	**0.0000**	**5.9295**

3.6 Paving - 2020

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	2.7000e-004	1.9000e-004	1.9000e-003	1.0000e-005	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4667	0.4667	1.0000e-005	0.0000	0.4670
Total	**2.7000e-004**	**1.9000e-004**	**1.9000e-003**	**1.0000e-005**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4667**	**0.4667**	**1.0000e-005**	**0.0000**	**0.4670**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1014					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e-003	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2791
Total	**0.1027**	**8.4200e-003**	**9.1600e-003**	**1.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.0000e-004**	**0.0000**	**1.2791**

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	7.0000e-005	7.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1795	0.1795	1.0000e-005	0.0000	0.1796
Total	**1.1000e-004**	**7.0000e-005**	**7.3000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1795**	**0.1795**	**1.0000e-005**	**0.0000**	**0.1796**

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	0.1014					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e-003	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2791
Total	**0.1027**	**8.4200e-003**	**9.1600e-003**	**1.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.5000e-004**	**5.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**1.0000e-004**	**0.0000**	**1.2791**

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	7.0000e-005	7.3000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1795	0.1795	1.0000e-005	0.0000	0.1796
Total	**1.1000e-004**	**7.0000e-005**	**7.3000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1795**	**0.1795**	**1.0000e-005**	**0.0000**	**0.1796**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2461	2.4852	1.4666	5.5600e-003	0.2004	4.6900e-003	0.2051	0.0539	4.4200e-003	0.0583	0.0000	519.7634	519.7634	0.0825	0.0000	521.8253
Unmitigated	0.2461	2.4852	1.4666	5.5600e-003	0.2004	4.6900e-003	0.2051	0.0539	4.4200e-003	0.0583	0.0000	519.7634	519.7634	0.0825	0.0000	521.8253

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	845.60	1,448.33	1182.08	525,554	525,554
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
User Defined Commercial	0.00	0.00	0.00		
Total	845.60	1,448.33	1,182.08	525,554	525,554

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
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
User Defined Commercial	9.50	7.30	7.30	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
Convenience Market With Gas Pumps	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792
Other Asphalt Surfaces	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792
Other Non-Asphalt Surfaces	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792
Parking Lot	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792
User Defined Commercial	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Turlock One Stop Valero - 2500 Fulkerth Rd - San Joaquin Valley Unified APCD Air District, Annual

	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	27.2034	27.2034	1.0000e-003	2.1000e-004	27.2899
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	27.2034	27.2034	1.0000e-003	2.1000e-004	27.2899
NaturalGas Mitigated	5.2000e-004	4.7600e-003	4.0000e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1789	5.1789	1.0000e-004	9.0000e-005	5.2097
NaturalGas Unmitigated	5.2000e-004	4.7600e-003	4.0000e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1789	5.1789	1.0000e-004	9.0000e-005	5.2097

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					
Convenience Market With Gas Pumps	97049	5.2000e-004	4.7600e-003	4.0000e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1789	5.1789	1.0000e-004	9.0000e-005	5.2097
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
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
User Defined Commercial	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		**5.2000e-004**	**4.7600e-003**	**4.0000e-003**	**3.0000e-005**		**3.6000e-004**	**3.6000e-004**		**3.6000e-004**	**3.6000e-004**	**0.0000**	**5.1789**	**5.1789**	**1.0000e-004**	**9.0000e-005**	**5.2097**

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					
Convenience Market With Gas Pumps	97049	5.2000e-004	4.7600e-003	4.0000e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.1789	5.1789	1.0000e-004	9.0000e-005	5.2097
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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
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
User Defined Commercial	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		**5.2000e-004**	**4.7600e-003**	**4.0000e-003**	**3.0000e-005**		**3.6000e-004**	**3.6000e-004**		**3.6000e-004**	**3.6000e-004**	**0.0000**	**5.1789**	**5.1789**	**1.0000e-004**	**9.0000e-005**	**5.2097**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	73920.5	26.4885	9.7000e-004	2.0000e-004	26.5728
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	1995	0.7149	3.0000e-005	1.0000e-005	0.7172
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
Total		**27.2034**	**1.0000e-003**	**2.1000e-004**	**27.2899**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	73920.5	26.4885	9.7000e-004	2.0000e-004	26.5728
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	1995	0.7149	3.0000e-005	1.0000e-005	0.7172
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
Total		**27.2034**	**1.0000e-003**	**2.1000e-004**	**27.2899**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0648	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Unmitigated	0.0648	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004

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	0.0101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0547					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Total	**0.0648**	**0.0000**	**5.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**1.0000e-004**

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	0.0101					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0547					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.0000e-005	9.0000e-005	0.0000	0.0000	1.0000e-004
Total	**0.0648**	**0.0000**	**5.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0000**	**1.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.2241	2.4200e-003	6.0000e-005	0.3020
Unmitigated	0.2241	2.4200e-003	6.0000e-005	0.3020

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.0740725 / 0.0453993	0.2241	2.4200e-003	6.0000e-005	0.3020
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.2241**	**2.4200e-003**	**6.0000e-005**	**0.3020**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.0740725 / 0.0453993	0.2241	2.4200e-003	6.0000e-005	0.3020
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.2241**	**2.4200e-003**	**6.0000e-005**	**0.3020**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.6110	0.0361	0.0000	1.5137
Unmitigated	0.6110	0.0361	0.0000	1.5137

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	3.01	0.6110	0.0361	0.0000	1.5137
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.6110**	**0.0361**	**0.0000**	**1.5137**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Convenience Market With Gas Pumps	3.01	0.6110	0.0361	0.0000	1.5137
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.6110**	**0.0361**	**0.0000**	**1.5137**

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

ATTACHMENT 2

ACOUSTICAL ANALYSIS

TURLOCK ONE STOP VALERO
2500 FULKERTH ROAD
AUGUST 21, 2019

ACOUSTICAL ANALYSIS

ONE-STOP VALERO CAR WASH
2500 FULKERTH ROAD
TURLOCK, CALIFORNIA

WJVA Project No. 19-033

PREPARED FOR

MR. AMARPREET KAUR & MR. AMAN ACHDEVA
998 EAST MANNING AVENUE
REEDLEY, CA 93654

PREPARED BY

WJV ACOUSTICS, INC.
VISALIA, CALIFORNIA

wjv acoustics

JULY 19, 2019

INTRODUCTION

The project is a proposed mini-mart, gas station, quick service restaurant and car wash facility to be located at 2500 Fulkerth Road, in Turlock, California. The project site is located adjacent to State Route 99 (SR 99) along the south side of Fulkerth Road. The project site is currently zoned CC (Community Commercial). Existing residential land uses are located east of the project site. The City of Turlock has requested an acoustical analysis to determine if noise levels associated with the operation of the car wash facility would exceed the City's noise level standards at nearby noise-sensitive land uses.

This report is based upon the project site plan dated May 24, 2019, noise measurements obtained by WJV Acoustics, Inc. (WJVA) at the project site, reference noise measurements obtained at existing car wash facilities and information provided to WJVA by the project applicant concerning the proposed equipment and hours of operation of the car wash. Revisions to the site plan or other project-related information available to WJVA at the time the analysis was prepared may require a reevaluation of the findings and/or recommendations of the report. The Project Site Plan is provided as Figure 1.

Appendix A provides definitions of the acoustical terminology used in this report. Unless otherwise stated, all sound levels reported in this analysis are A-weighted sound pressure levels in decibels (dB). A-weighting de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighted sound levels, as they correlate well with public reaction to noise. Appendix B provides typical A-weighted sound levels for common noise sources.

CRITERIA FOR ACCEPTABLE NOISE EXPOSURE

The Noise Element of the City of Turlock General Plan establishes noise level standards for both transportation and non-transportation (stationary) noise sources. Table I provides the maximum interior and exterior noise level standards for various land use categories, in terms of the CNEL. The CNEL (Community Noise Equivalent Level) is the time-weighted average noise level for a 24-hour day with penalties of 4.77 dB added to noise levels occurring during the evening hours (7:00 p.m-10:00 p.m.) and 10 dB added to noise levels occurring during the nighttime hours (10:00 p.m-7:00 a.m.).

The noise element establishes an exterior noise standard of 60 dB CNEL for exterior noise exposure within outdoor activity areas of residential land uses. Outdoor activity areas include backyards of single-family residences, individual patios or decks of multi-family developments and common outdoor recreation areas of multi-family developments. The intent of the exterior noise level requirement is to provide an acceptable noise environment for outdoor activities and recreation. There is no applicable exterior noise level standard for commercial or office land uses provided in the General Plan Noise Element.

The Noise Element also requires that interior noise levels attributable to exterior noise sources not exceed 45 dB CNEL. The intent of the interior noise level standard is to provide an acceptable noise environment for indoor communication and sleep. The Noise Element also establishes an interior noise level standard of 50 dB CNEL for commercial and office land uses.

TABLE I

ALLOWABLE NOISE EXPOSURE
CITY OF TURLOCK GENERAL PLAN NOISE ELEMENT
dBA, CNEL

Land Use Categories	Outdoor Activity Areas[1]	Interior Spaces[2]
Residential	60	45
Motels, Hotels	60	45
Hospitals, Nursing Homes, Schools, Libraries, Museums, Churches	60	45
Playgrounds, Parks, Recreation Uses	65	50
Commercial and Office Uses	65	50
Industrial Uses	70	65

1 For non-residential uses, where an outdoor activity area is not proposed, the standard does not apply. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving use.

2. Where it is not possible to reduce noise in outdoor activity areas to the allowable maximum, levels up to 5 dB higher may be allowed provided that available exterior noise level reductions measures have been implemented and interior noise levels are in compliance with this table.

Source: City of Turlock General Plan

Table II provides noise level performance standards for non-transportation (stationary) noise sources, as provided in the City of Turlock General Plan Noise Element. The non-transportation noise level standards are provided in terms of the energy average noise level (L_{eq}) and maximum allowable noise level (L_{max}), and become 10 dB more restrictive during the nighttime hours (10:00 p.m. to 7:00 a.m.).

TABLE II

NOISE LEVEL PERFORMANCE STANDARDS, NON-TRANSPORTATION NOISE SOURCES
CITY OF TURLOCK GENERAL PLAN
dBA

Noise Level Descriptor	Daytime 7:00 a.m. to 10:00 p.m.	Nighttime 10:00 p.m. to 7:00 a.m.
Hourly L_{eq}, dB	55	45
Maximum Level, dB	75	65

Note: Each of the noise levels specified above shall be lowered by 5 dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises.

Source: City of Turlock General Plan

Additionally, section 5-28-108 (Noise Limits) of the City of Turlock Municipal Code provide exterior noise limits applicable to the project. Table III provides the noise level standards provided in the Municipal Code.

TABLE III

EXTERIOR NOISE LIMITS
LEVELS NOT TO BE EXCEEDED MORE THAN 30 MINUTES IN ANY HOUR (L_{50})
CITY OF TURLOCK MUNICIPAL CODE

Receiving Land Use Category	L_{50} A-Weighted Decibels, dBA Sources	
	7:00 a.m. to 10:00 p.m.	10:00 p.m. to 7:00 a.m.
One- and Two-Family Residential	60	50
Multiple Dwelling Resdiential	60	55
Public Spaces	65	--
Motels/Hotels, Hospitals, Nursing Homes, Schools, Libraries, Museums, Churches	60	55
All Other Commercial	65	60
Light Industrial	70	70
Heavy Industrial	75	75

Source: City of Turlock Municipal Code

In regards to the noise level standards described in Table III, section 5-28-109 (Maximum permissible sound levels by receiving land uses) of the City of Turlock Municipal Code states the following:

The maximum sound levels shall be determined as follows:

(a) The noise standards for the various categories of land use identified by the Noise Control Officer as set forth in TMC 5-28-108, unless otherwise specifically indicated, shall apply to all such property within a designated zone.

(b) No person shall operate, or cause to be operated, any source of sound at any location within the incorporated City, or allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level, when measured on any other property, either incorporated or unincorporated, to exceed:

(1) The noise standard for that land use as specified in TMC 5-28-108 for a cumulative period of more than thirty (30) minutes in any hour; or

(2) The noise standard plus five (5) dB for a cumulative period of more than fifteen (15) minutes in any hour; or

(3) The noise standard plus ten (10) dB for a cumulative period of more than five (5) minutes in any hour; or

(4) The noise standard plus fifteen (15) dB for a cumulative period of more than one (1) minute in any hour; or

(5) The noise standard plus twenty (20) dB or the maximum measured ambient level for any period of time.

(c) If the measured ambient level differs from that permissible within any of the first four (4) noise limit categories set forth in subsection (b) of this section, the allowable noise exposure standard shall be adjusted in five (5) dB increments in each category as appropriate to encompass or reflect such ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under such category shall be increased to reflect the maximum ambient noise level.

(d) If the measurement location is on a boundary between two (2) different zones, the noise level limit applicable to the lower noise zone, plus five (5) dB, shall apply.

Table IV summarizes the noise level standards provided in section 5-28-109 of the City of Turlock Municipal Code. The noise ordinance addresses the statistical distribution of noise over time and allows for progressively shorter periods of exposure to levels of increasing loudness. Table IV summarizes the exterior noise level standards of the ordinance. The ordinance is to be applied during any one-hour time period of the day or night and the standards are more restrictive during the nighttime hours of 10:00 p.m. to 7:00 a.m. The standards of the noise ordinance may be adjusted upward (made less restrictive) if existing ambient noise levels without the source of concern already exceed the noise ordinance standards.

TABLE IV

EXTERIOR NOISE LEVEL STANDARDS, dBA
CITY OF TURLOCK MUNICIPAL CODE
CUMULATIVE # MIN/HR. (L_n)
DAYTIME, 7 A.M. to 10 P.M. (NIGHTTIME, 10 P.M. to 7 A.M.)

Receiving Land Use Category	30 (L_{50})	15 (L_{25})	5 ($L_{8.3}$)	1 ($L_{1.7}$)	0 (L_{max})
One- and Two-Family Residential	60 (50)	65 (55)	70 (60)	75 (65)	80 (70)
Multiple Dwelling Resdiential	60 (55)	65 (60)	70 (65)	75 (70)	80 (75)
Public Spaces	65	70	75	80	85
Motels/Hotels, Hospitals, Nursing Homes, Schools, Libraries, Museums, Churches	60 (55)	65 (60)	70 (65)	75 (70)	80 (75)
All Other Commercial	65 (60)	70 (65)	75 (70)	80 (75)	85 (80)
Light Industrial	70	75	80	85	90
Heavy Industrial	75	80	85	90	95

Note: In layman's terms, the noise level standards shown may not be exceeded for more than the specified number of minutes within any one-hour time period. The L_n value shown in parenthesis indicates the percent of the time during an hour that a particular noise level may not be exceeded. For example, the L_{50} represents 50% of the hour, or 30 minutes.

PROJECT SITE NOISE EXPOSURE

The project site is currently an undeveloped lot located southeast of the intersection of State Route 99 (SR 99) and Fulkerth Road, in Turlock, California. The project site is adjacent to (east of) the northbound SR 99 off ramp. A site inspection and ambient noise monitoring were conducted on July 17, 2019 to evaluate the acoustical characteristics of the site and quantify existing ambient noise levels within the project area. The existing ambient noise environment is dominated by traffic noise associated with vehicles traveling on SR 99 (and SR 99 northbound off ramp) and Fulkerth Road. Additional sources of noise observed during the site inspection included aircraft overflights and HVAC units associated with nearby residential land uses.

Ambient noise monitoring equipment consisted of a Larson-Davis Laboratories Model LDL 820 sound level analyzer equipped with a Bruel & Kjaer (B&K) Type 4176 ½" microphone. The monitor was calibrated with a B&K Type 4230 acoustical calibrator to ensure the accuracy of the measurements. The equipment complies with applicable specifications of the American National Standards Institute (ANSI) for Type 1 (precision) sound level meters.

WJVA collected two (2) short-term (15-minute) ambient noise level measurements at two (2) noise monitoring site locations near the project site on July 17, 2019. The noise monitoring sites were selected as they represent the area in the vicinity of the car wash tunnel and the property line of the closest residential land use to the proposed project. Two (2) individual measurements were collected at each site to document existing (without project) noise levels during mid-morning and evening conditions. The findings of the noise measurements are provided in Table V. The project vicinity and ambient noise monitoring site locations are provided as Figure 2. Photographs of noise monitoring sites ST1 and ST2 are presented as Figure 3 and Figure 4, respectively.

TABLE V

SUMMARY OF SHORT-TERM AMBIENT NOISE MEASUREMENT DATA
ONE-STOP VALERO CAR WASH, 2500 FULKERTH ROAD, TURLOCK
JULY 17, 2019

Site	Time	A-Weighted Decibels, dBA					
		L_{eq}	L_{50}	L_{25}	$L_{8.3}$	$L_{1.7}$	L_{max}
ST1	9:50 a.m.	67.3	66.9	68.3	69.8	70.9	73.2
ST1	7:15 p.m.	66.7	66.4	68.0	69.4	70.5	75.4
ST2	10:20 a.m.	66.2	65.6	67.3	68.8	69.7	69.9
ST2	7:35 p.m.	66.0	65.7	67.4	68.3	69.0	67.1

Source: WJV Acoustics, Inc.

Reference to Table V indicates that noise levels as measured by the L_{eq} and L_{50} metric (as well as several additional statistical metrics) exceed the City's applicable noise level standards without project-related noise sources. As such, the applicable noise level standards can be adjusted upward as to encompass the existing ambient noise levels.

PROJECT RELATED NOISE LEVELS

The project is a proposed mini-mart, gas station, quick service restaurant and car wash facility to be located at 2500 Fulkerth Road, in Turlock, California. This acoustical analysis addresses noise levels associated with the proposed car wash operations.

The project site is located adjacent to State Route 99 (SR 99) along the south side of Fulkerth Road. The project site is currently zoned CC (Community Commercial). Existing residential land uses are located east of the project site. The proposed hours of operation are between 7:00 a.m. and 8:00 p.m., seven days per week.

The applicable City of Turlock General Plan Noise Element and City of Turlock Municipal Code (Noise Ordinance) noise level standards during the proposed hours of operation would be an exterior noise level standard 55 dB L_{eq} and 60 dB L_{50} at the closest off-site noise sensitive receiver (residences) locations. However, due to existing elevated (without project) ambient noise levels, the applicable nose level standards are to be adjusted upward. The Municipal Code states *"If the measured ambient level differs from that permissible within any of the first four (4) noise limit categories set forth in subsection (b) of this section, the allowable noise exposure standard shall be adjusted in five (5) dB increments in each category as appropriate to encompass or reflect such ambient noise level."* While the General Plan noise element does not specifically state that the applicable noise level standards are to be adjusted if existing ambient noise levels already exceed the standard, such a provision is commonplace and is assumed. Therefore, due to existing (without project) ambient noise levels at the nearby residential land uses (Table V), the applicable noise level standards would be 70 dB L_{eq} and 70 dB L_{50}.

Exterior Noise Levels:

At the time of this analysis, the exact make and model of the equipment for the proposed car wash tunnel was not known. However, according to the project applicant, the intended equipment will include a MacNeil Car Wash system with Motor City drying blower system. This is a very common configuration of car wash equipment, and WJVA has measured noise levels associated with this combination of car wash equipment on numerous occasions. The following analysis is based upon noise levels obtained by WJVA at an existing car wash facility which utilize a MacNeil car wash system in combination with a Motor City drying system.

In order to obtain representative noise level data for the car wash project, WJVA reviewed measured noise levels previously collected at existing similar car wash facilities located on the corner of East Bullard Avenue and North 1st Street, in Fresno, East Bullard Avenue and North Palm Avenue, in Fresno as well as Willow Avenue and Nees Avenue, in Clovis. Measurements were conducted during the morning of August 18, 2015 and the morning of September 1, 2015 using the previously-described noise monitoring equipment. WJVA conducted additional noise measurements at the East Bullard Avenue and North 1st Street location on June 27, 2018.

The tested car wash facilities utilize MacNeil Wash Systems washers with Motor City drying systems consisting of twelve (12) 10-HP blowers. The blowers were located approximately 5-15 feet from the terminus of the car wash tunnel. Additionally, the tested car wash facilities utilize AutoVac Central Vacuum Systems.

Reference noise measurements were obtained at a distance of approximately 35 feet from the car wash tunnel exit. At a distance of 35 feet from the exit tunnel noise levels were observed to be in the range of 78-79 dBA, while the blowers were in full operation.

Reference noise measurements were also obtained at a distance of approximately 35 feet from the car wash tunnel entrance. At a distance of approximately 35 feet from the tunnel entrance, noise levels were observed to be in the range of 75-76 dB, while all car wash equipment was fully operational.

The above described measured reference noise levels were used to calculate project-related noise levels at the closest noise-sensitive land uses (residential land uses east of the project site). For the calculations it was assumed that sound is attenuated with increasing distance at the normal rate for a "point" noise source (6 dB/doubling of distance). Additionally, car wash equipment (blowers) cycle on an off, based upon demand. However, for the purpose of this analysis it was assumed that the car wash blower would be in continuous operation throughout the hour, and noise levels described in this analysis should therefore be considered a worst-case assessment of project-related noise levels.

There are existing residential land uses located approximately 250 feet east of the proposed car wash tunnel location. The car wash tunnel is oriented in a north/south alignment direction, where the tunnel walls will provide a significant amount of acoustical shielding to the existing homes to the east. WJVA has conducted numerous noise level measurements at various angles and distances from car wash tunnels. Generally speaking, at a 45-degree angle from a car wash tunnel entrance/exit, noise levels are approximately 6-8 dB below noise levels measured directly in line with the tunnel, at the same distance. Additionally, at a 90-degree angle, WJVA has observed noise levels to be approximately 10-15 dB below noise levels measured directly in line with the tunnel, at the same distance. The variation in acoustic shielding is a product of the variation of distance between the tunnel entrance/exit and the location of the noise-producing equipment (blowers) inside the tunnel.

Taking into account noise levels measured by WJVA at a car wash facilities utilizing the same equipment as that which is proposed for the project site, the standard rate of noise attenuation with increased distance from a point source, and the acoustical shielding provided by car wash tunnel, car wash noise levels were calculated for the closest residential land uses. Car wash related noise levels would be in the range of approximately 50-54 dB at nearby residential land uses located east of the proposed project site. Such levels are below the applicable exterior noise level standards and below existing ambient noise levels at nearby residential land uses located east of the project site. These noise levels are provided as Figure 5. It should be noted; car wash noise levels would not exceed the noise standards or existing ambient noise levels

without the acoustical shielding provided by the car wash tunnel. Additional mitigation is therefore not required.

WJVA also observed noise levels produced by an AutoVac central vacuum system at the car wash test facility. The central vacuum system produced noise levels in the range of 55-57 dBA at a distance of 25 feet from the vacuum system. Assuming the normal rate of noise attenuation with increasing distance from a "point" noise source (6 dB/doubling of distance), vacuum noise levels would be approximately 35-37 dB at the closest noise-sensitive land uses. Such levels are below the applicable noise level standards and below existing ambient noise levels in the project vicinity. Additional mitigation is therefore not required.

Interior Noise Levels:

The closest noise-sensitive building façades to the car wash operations are located approximately 265 feet east of the tunnel. Car wash related noise levels would be significantly below existing ambient noise levels, and would not contribute to (increase) existing ambient noise levels. Car wash related noise levels would not increase interior noise levels at any nearby residential land uses.

CONCLUSIONS AND RECOMMENDATIONS

Noise levels associated with the proposed car wash facility would be expected to be in the range of 50-54 dB at the closest residential land uses located east of the project site. Such levels are below the applicable exterior noise level standards and significantly below existing ambient noise levels at the residential land uses. Car wash related noise would not result in any increase of existing ambient noise levels at the residential land uses located east of the project site. Additional mitigation is not required.

The conclusions and recommendations of this acoustical analysis are based upon the best information known to WJV Acoustics Inc. (WJVA) at the time the analysis was prepared concerning the proposed site plan, project equipment and proposed hours of operation. Any significant changes in these factors will require a reevaluation of the findings of this report. Additionally, any significant future changes in car wash equipment, noise regulations or other factors beyond WJVA's control may result in long-term noise results different from those described by this analysis.

Respectfully submitted,

Walter J. Van Groningen
President

WJV:wjv

FIGURE 1: PROJECT SITE PLAN

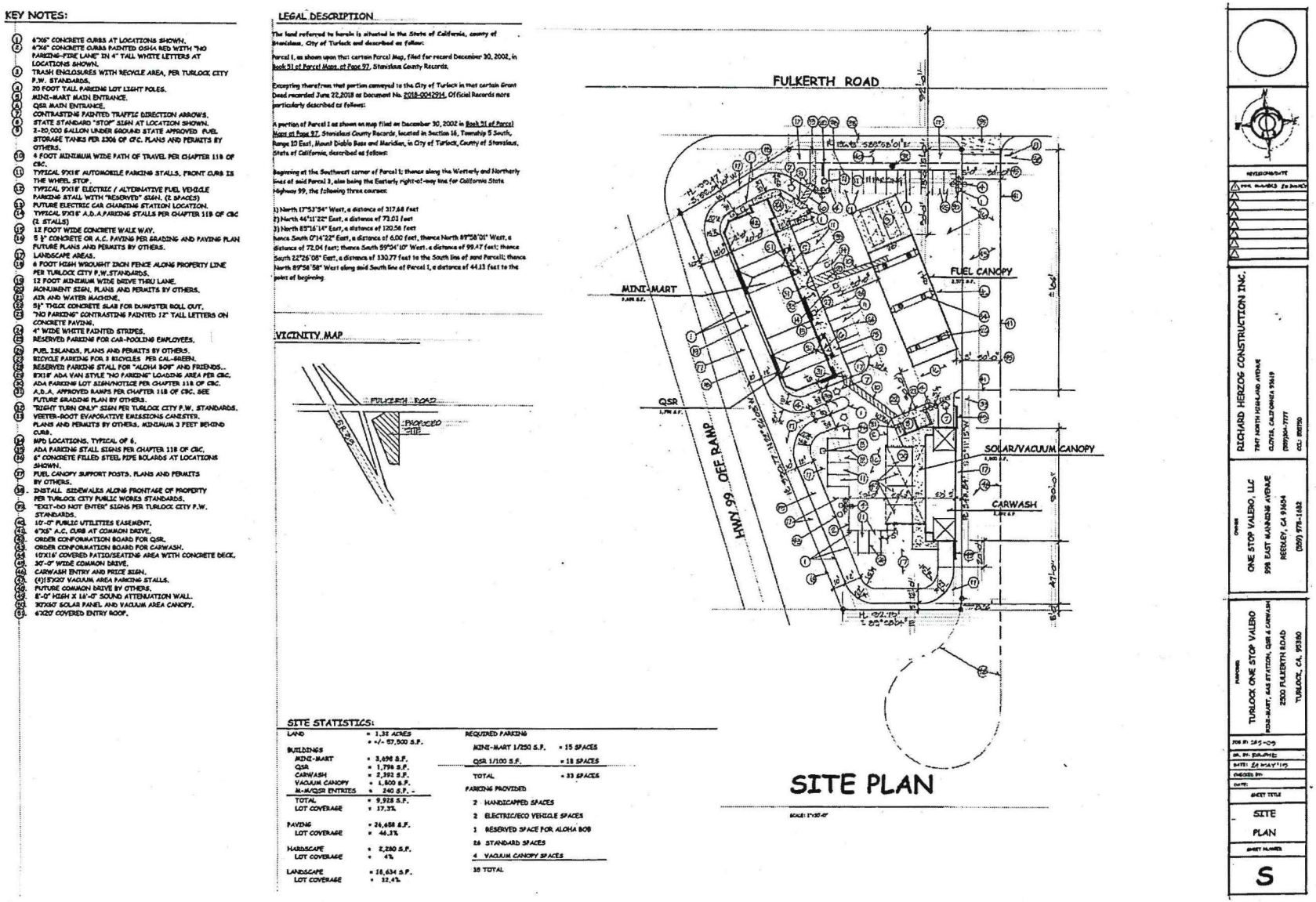


FIGURE 2: PROJECT SITE VICINITY AND NOISE MONITORING SITE LOCATION

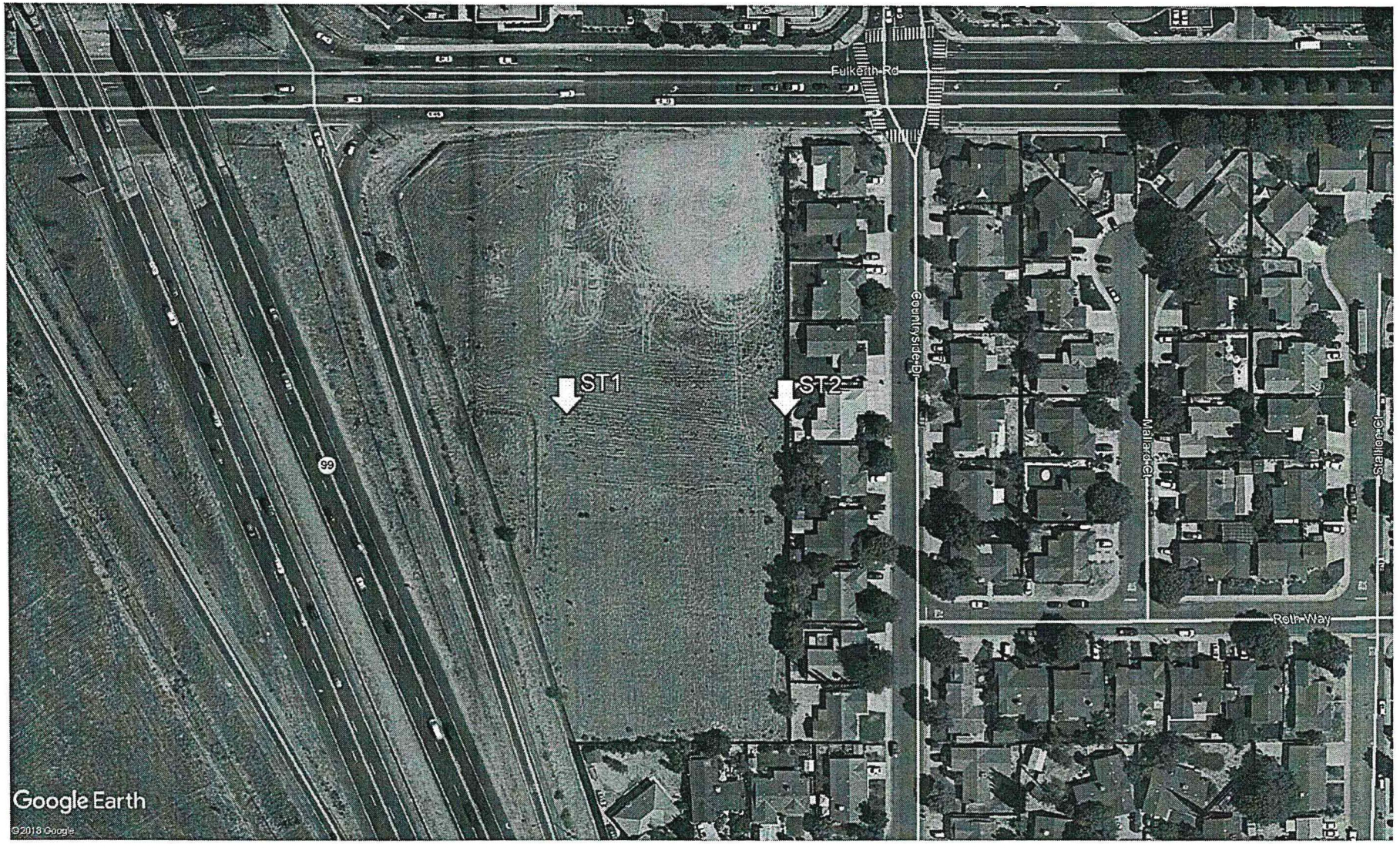


FIGURE 3: NOISE MONITORING SITE ST1

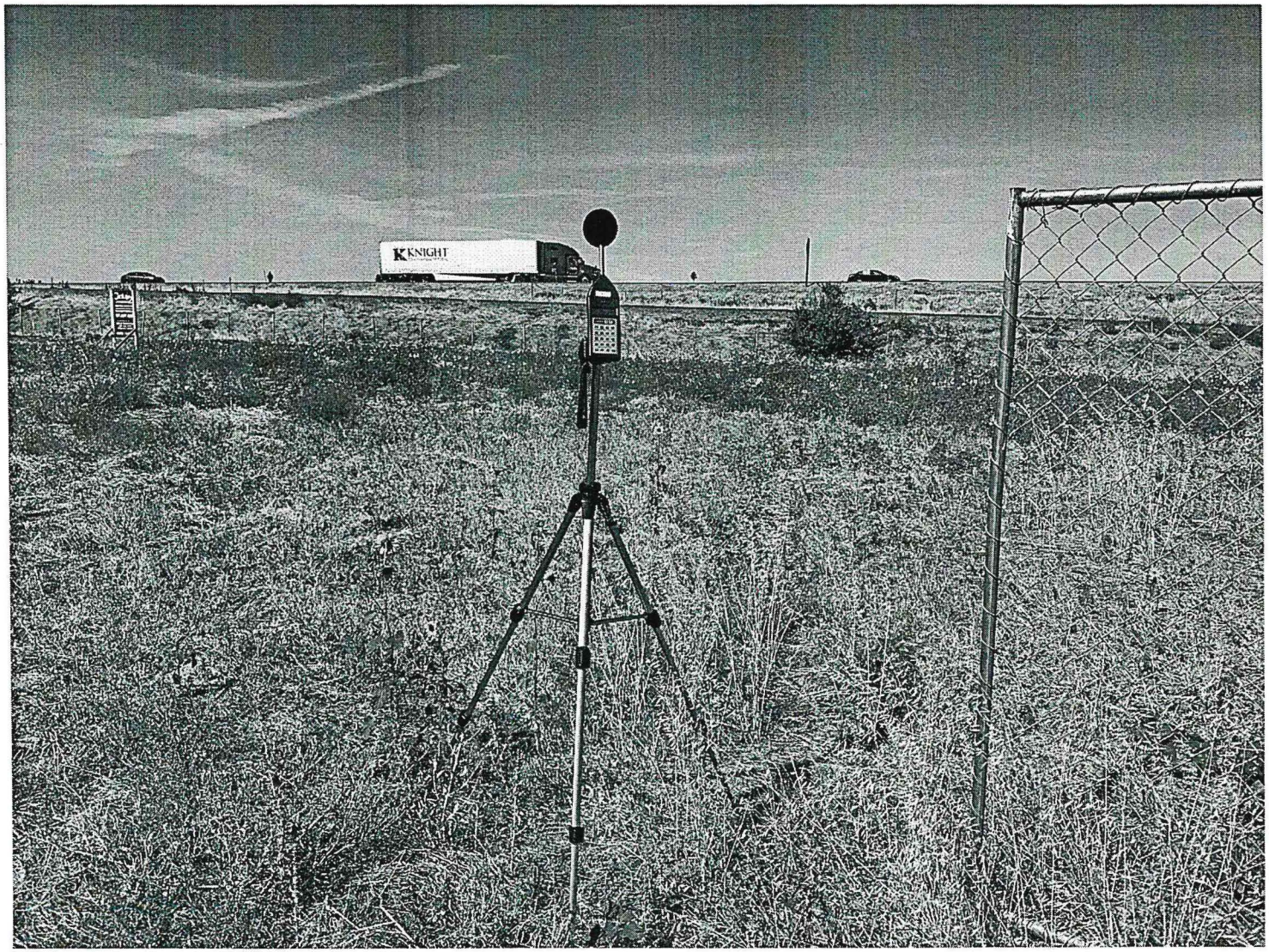


FIGURE 4: NOISE MONITORING SITE ST2

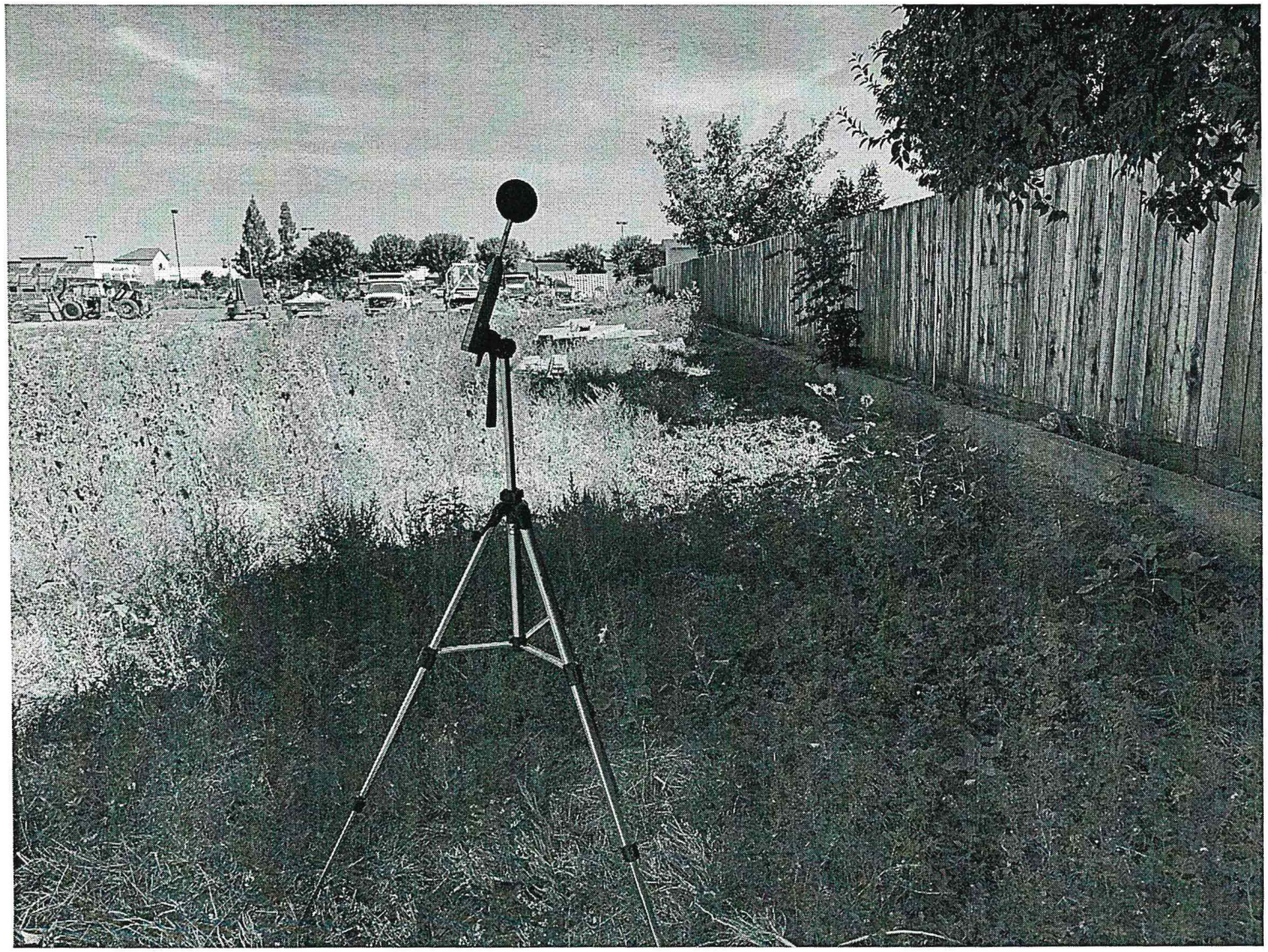
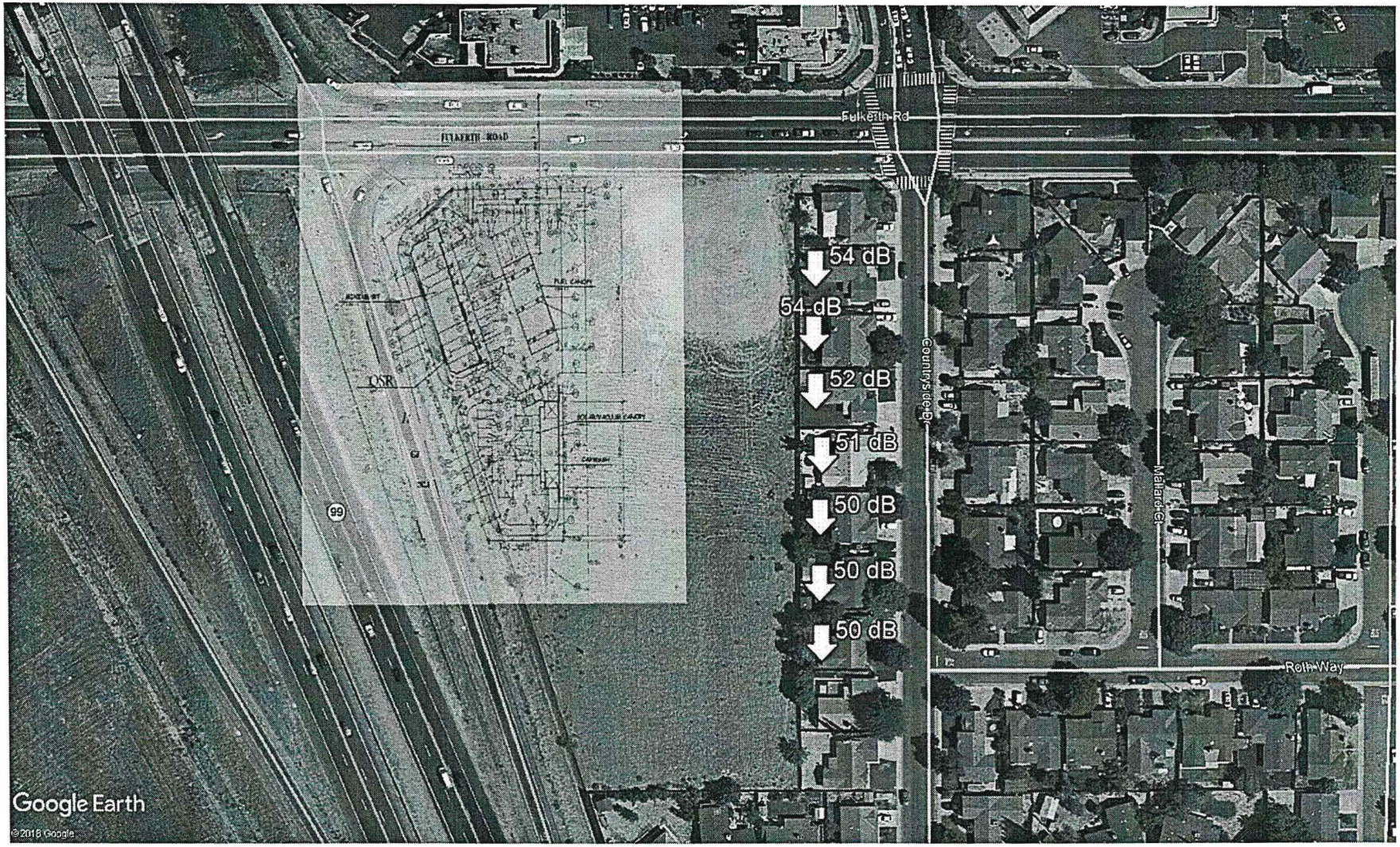


FIGURE 5: CAR WASH NOISE LEVELS AT NEARBY RESIDENTIAL LAND USES



APPENDIX A

ACOUSTICAL TERMINOLOGY

AMBIENT NOISE LEVEL: The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

CNEL: Community Noise Equivalent Level. The average equivalent sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m.

DECIBEL, dB: A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

DNL/L_{dn}: Day/Night Average Sound Level. The average equivalent sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m.

L_{eq}: Equivalent Sound Level. The sound level containing the same total energy as a time varying signal over a given sample period. L_{eq} is typically computed over 1, 8 and 24-hour sample periods.

NOTE: The CNEL and DNL represent daily levels of noise exposure averaged on an annual basis, while L_{eq} represents the average noise exposure for a shorter time period, typically one hour.

L_{max}: The maximum noise level recorded during a noise event.

L_n: The sound level exceeded "n" percent of the time during a sample interval (L_{90}, L_{50}, L_{10}, etc.). For example, L_{10} equals the level exceeded 10 percent of the time.

A-2

ACOUSTICAL TERMINOLOGY

NOISE EXPOSURE CONTOURS: Lines drawn about a noise source indicating constant levels of noise exposure. CNEL and DNL contours are frequently utilized to describe community exposure to noise.

NOISE LEVEL REDUCTION (NLR): The noise reduction between indoor and outdoor environments or between two rooms that is the numerical difference, in decibels, of the average sound pressure levels in those areas or rooms. A measurement of Anoise level reduction@ combines the effect of the transmission loss performance of the structure plus the effect of acoustic absorption present in the receiving room.

SEL or SENEL: Sound Exposure Level or Single Event Noise Exposure Level. The level of noise accumulated during a single noise event, such as an aircraft overflight, with reference to a duration of one second. More specifically, it is the time-integrated A-weighted squared sound pressure for a stated time interval or event, based on a reference pressure of 20 micropascals and a reference duration of one second.

SOUND LEVEL: The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.

SOUND TRANSMISSION CLASS (STC): The single-number rating of sound transmission loss for a construction element (window, door, etc.) over a frequency range where speech intelligibility largely occurs.

APPENDIX B
EXAMPLES OF SOUND LEVELS

NOISE SOURCE	SOUND LEVEL	SUBJECTIVE DESCRIPTION
AMPLIFIED ROCK 'N ROLL ▸	120 dB	
JET TAKEOFF @ 200 FT ▸		DEAFENING
	100 dB	
BUSY URBAN STREET ▸		VERY LOUD
	80 dB	
FREEWAY TRAFFIC @ 50 FT ▸		LOUD
CONVERSATION @ 6 FT ▸	60 dB	
TYPICAL OFFICE INTERIOR ▸		MODERATE
SOFT RADIO MUSIC ▸	40 dB	
RESIDENTIAL INTERIOR ▸		FAINT
WHISPER @ 6 FT ▸	20 dB	
HUMAN BREATHING ▸		VERY FAINT
	0 dB