

ADDENDUM

TO THE

INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

FOR THE

THORNTON ROAD/EIGHT MILE ROAD
PROPOSED DRIVE-THROUGH CAR WASH
FACILITY PROJECT (P19-0411)

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CITY OF STOCKTON, CA

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1.0 INTRODUCTION

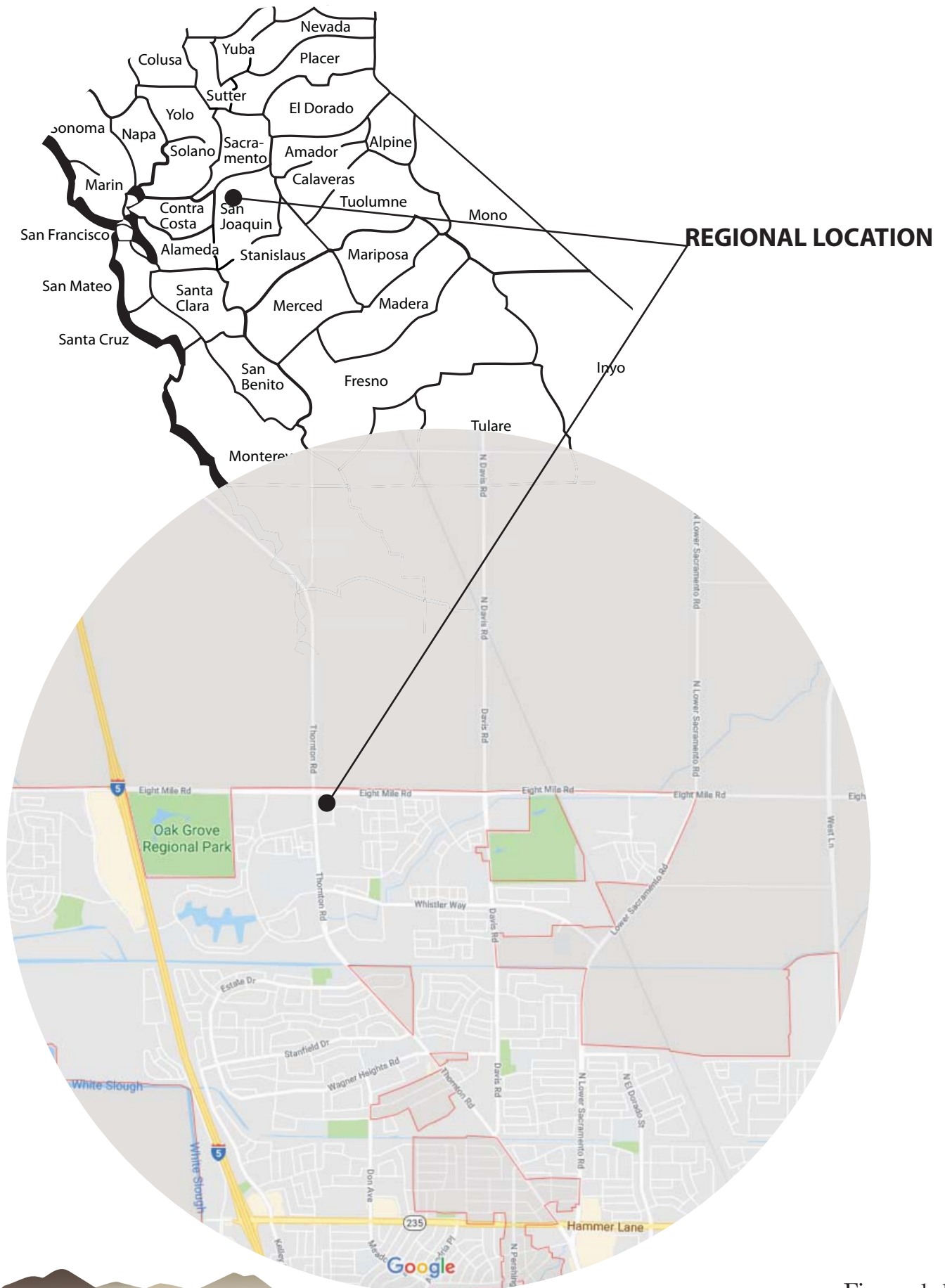
In 2017, the City of Stockton (City) approved development of the Thornton Road/Eight Mile Road ARCO Station project (“the project”). The project proposed a commercial development of approximately 2.11 acres on an approximately 10.09-acre site (Figures 1-1 through 1-5), with the remaining 7.98 acres available for future high-density residential development. The proposed commercial development in the western portion of the project site consisted of an ARCO AM/PM fueling station with a convenience store and an automated car wash structure, a fast-food restaurant, and a retail building. In accordance with the California Environmental Quality Act (CEQA), an Initial Study/Mitigated Negative Declaration (IS/MND) was prepared for the project and was circulated for public and agency review. The IS/MND was adopted by the Stockton City Council prior to project approval on January 23, 2018.

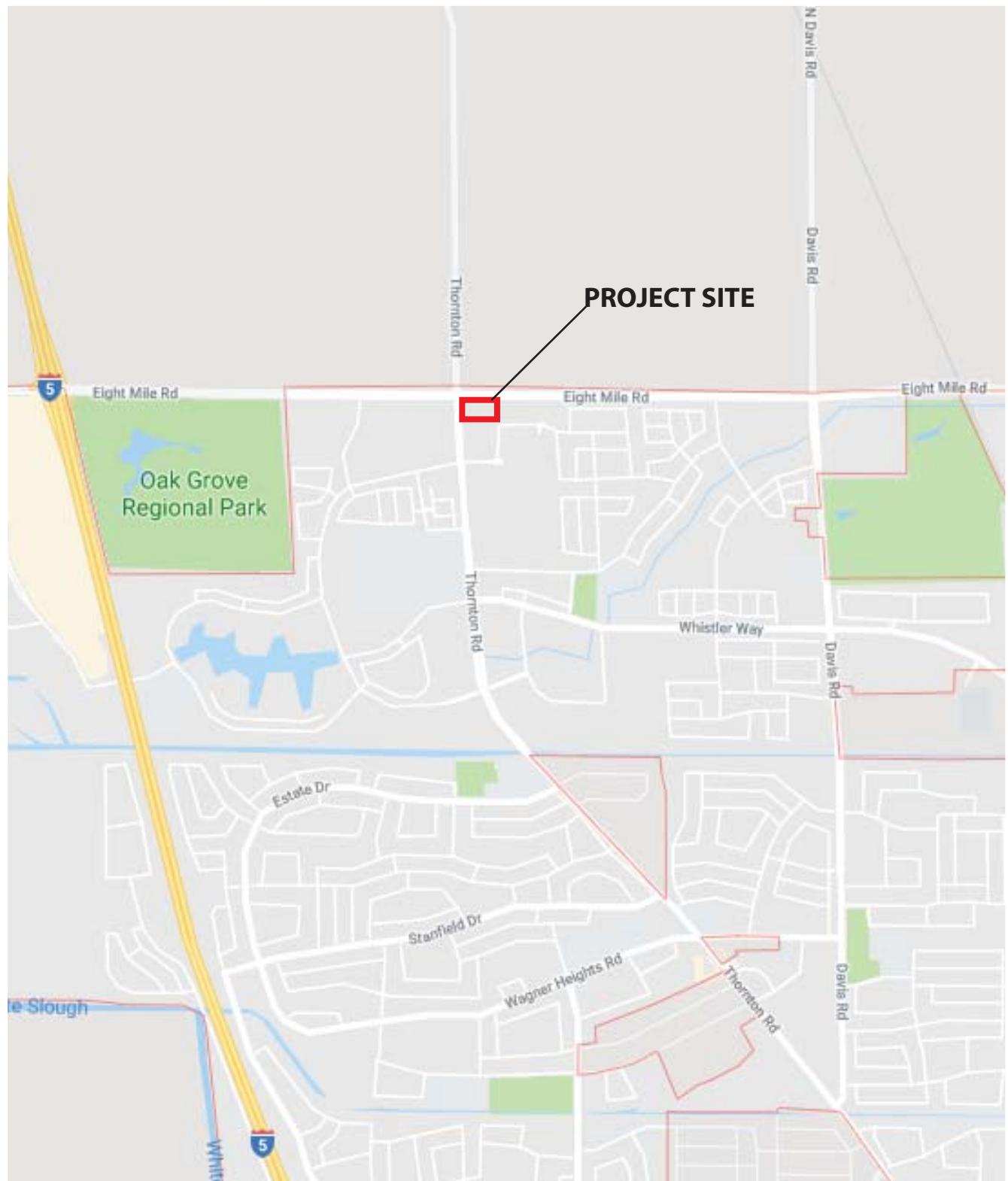
Since the IS/MND was adopted and the project was approved, the project applicant has proposed changes to the commercial development. The approved car wash would become a larger, stand-alone facility, which would be separated from the convenience store located in the southeast corner of the commercial area. Also, the proposed retail building would be eliminated. All other components of the commercial development would remain the same.

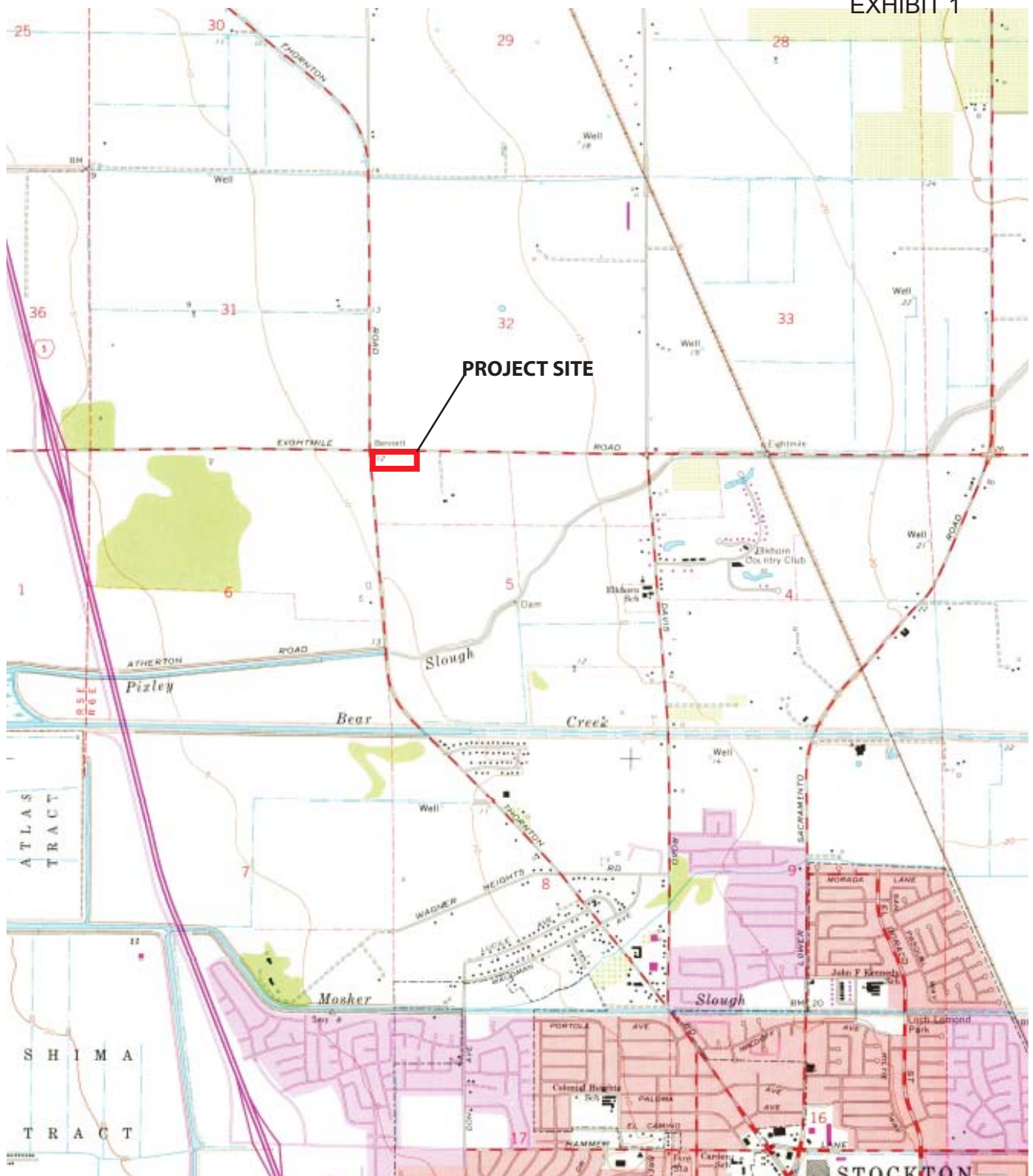
This document is an Addendum to the adopted IS/MND, which is hereby incorporated by reference. A copy of the adopted IS/MND may be reviewed at the Stockton Community Development Department office at 345 N. El Dorado Street in Stockton or online at <http://www.stocktongov.com/government/departments/communityDevelop/cdPlanEnv.html>.

This Addendum addresses the potential environmental effects of proposed project modifications under CEQA. The Addendum contains minor revisions to the adopted IS/MND, including a detailed description of changes in the project and the environmental effects resulting from those changes. The Addendum does not identify any new or substantially more severe environmental effects than were identified in the adopted IS/MND, nor does it identify the need for new or more effective mitigation measures than those described in the adopted IS/MND.

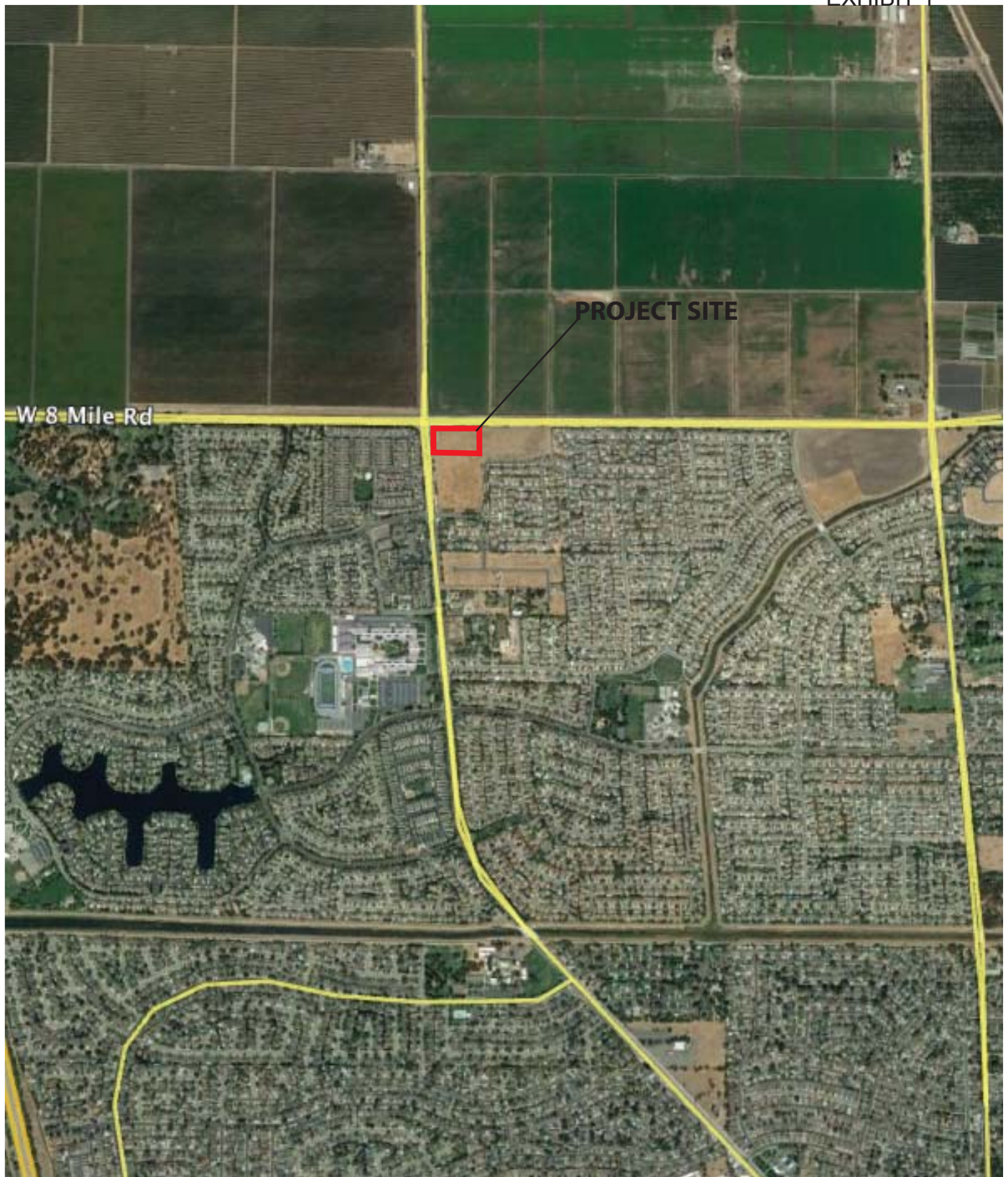
As required by CEQA, the City adopted a Mitigation Monitoring and Reporting Program (MMRP) prior to adopting the IS/MND and approving the project. The MMRP, available in Appendix A of this Addendum, describes the mitigation measures that are required to be implemented by the project throughout its construction and operation. Since the modified project will not result in new or substantially more severe environmental effects, or require new or more effective mitigation measures, the adopted MMRP remains applicable to the project.



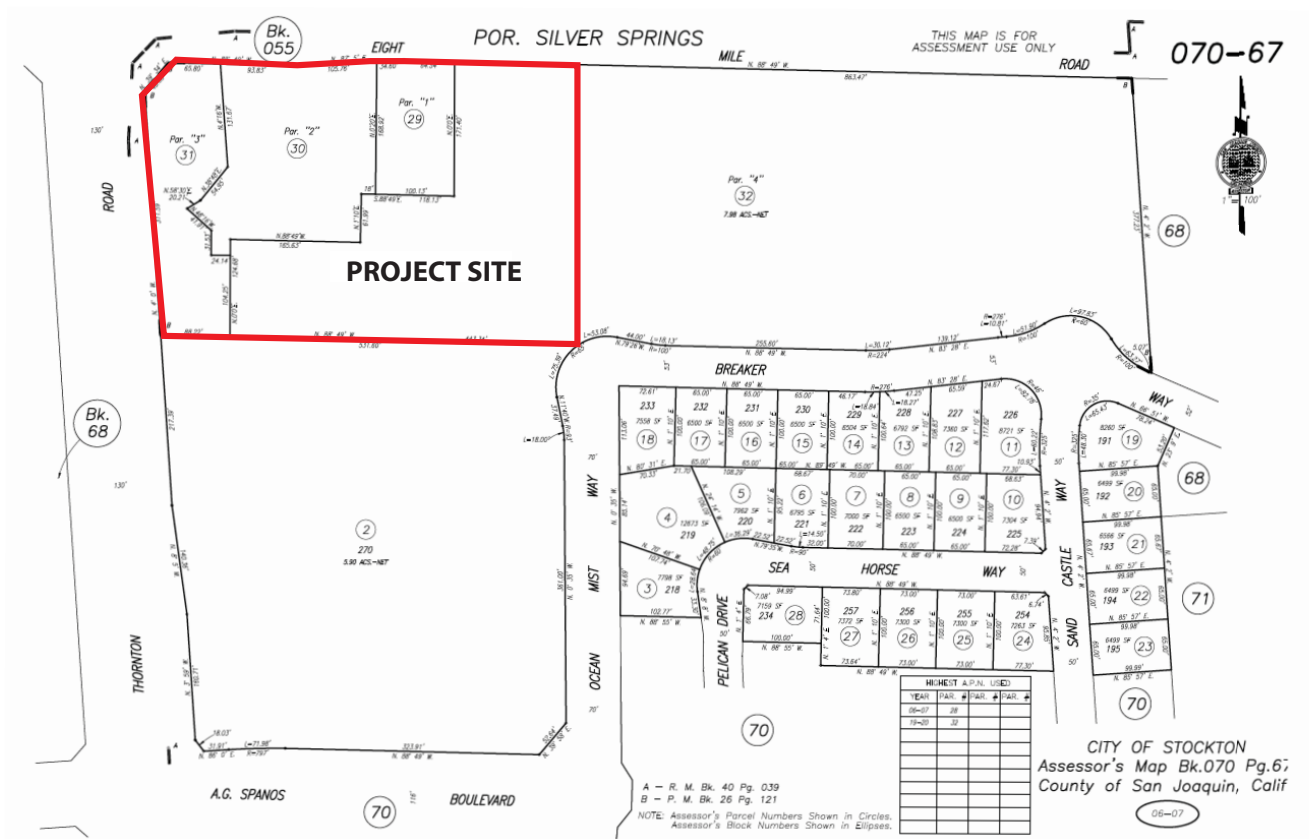




SOURCE: Lodi South 7.5 Minute Quadrangle Map



SOURCE: Google Earth



2.0 CEQA PROVISIONS RELATED TO THE ADDENDUM

In general, the certification of an EIR or the adoption of a Negative Declaration or Mitigated Negative Declaration closes the CEQA review process for a project. However, when there are changes to a project or its circumstances that require revisions to the CEQA document, CEQA offers options to streamline the subsequent environmental review. These include preparation of a subsequent EIR or Negative Declaration, a supplement to an EIR, or an addendum to the previous document. CEQA Guidelines Section 15162 describes the conditions under which a subsequent CEQA document shall be prepared. Section 15164 describes when use of an Addendum is appropriate, with reference to Sections 15162.

CEQA Guidelines Section 15162(a) states that once an EIR has been certified or a Negative Declaration has been adopted for a project, no subsequent CEQA documentation shall be prepared for that project unless the lead agency determines one or more of the following:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or Negative Declaration 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 or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
- (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 or the Negative Declaration was adopted, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR or Negative Declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found to be not 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 of the project, but the project proponents decline to adopt the mitigation measure or alternative.

CEQA Guidelines Section 15164 provides that an addendum may be used to make "minor technical changes or additions" that are necessary to assure that the adopted IS/MND is "adequate under CEQA," provided that no new important "issues about the significant effects on the environment" are raised. The provisions of Section 15164 are outlined below.

- (a) [Refers only to EIRs]
- (b) An addendum to an adopted negative declaration may be prepared if only minor changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.
- (c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.
- (d) The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.
- (e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's required findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

As is discussed in this document, the revisions to the approved project do not meet any of the criteria of CEQA Guidelines Section 15162; therefore, preparation of a subsequent document (e.g., new Negative Declaration) is not required. The project changes would not have any significant effects that were not discussed in the adopted IS/MND, and none of the significant effects identified in the adopted IS/MND would be substantially more severe than were described for the approved project. Also, all the effects identified as potentially significant in the adopted IS/MND can be reduced to a level that would be less than significant with application of the mitigation measures described in the adopted IS/MND, which were agreed to by the project applicant. No additional mitigation measures would be required.

3.0 CHANGES IN PROPOSED PROJECT AND/OR ITS CIRCUMSTANCES

This chapter generally describes the Thornton Road/Eight Mile Road ARCO Station project and discusses whether any changes to the Project Description or to the circumstances surrounding the project as they relate to the proposed project changes would be considered “major,” consistent with the criteria set forth in CEQA Guidelines Section 15162. These changes are considered in Chapter 4.0 to determine whether any new environmental impacts would occur or if previously identified significant impacts would be substantially more severe. In each section of Chapters 3.0 and 4.0, a summary of conditions as described in the adopted IS/MND is presented, along with any changes to the project or the circumstances under which the project would be undertaken. The changes are then evaluated as to whether they would be substantial enough to warrant additional CEQA review.

3.1 CHANGES TO IS/MND CHAPTER 1.0 INTRODUCTION

Chapter 1.0 in the adopted IS/MND provided an overview of the Thornton Road/Eight Mile Road ARCO Station project, the type and use of the IS/MND, the IS/MND organization, and the CEQA process for the IS/MND. Since adoption of the IS/MND, the following actions were approved by the City Council on January 23, 2018:

- The City of Stockton General Plan designation on the commercial development area outlined in the approved project was changed from High Density Residential to Commercial (Resolution 2018-01-23-1502).
- The zoning of the commercial development area outlined in the approved project was changed from RH (Residential, High Density) to CG (Commercial, General) (Ordinance 2018-01-23-1502).
- A Precise Road Plan Amendment to the Eight Mile Road Specific Plan was approved to create a right-in and right-out driveway on Eight Mile Road, along with relinquishment of access restriction on Eight Mile Road (Resolution 2018-01-23-1502).
- A relinquishment of access restriction on Thornton Road was approved to allow a right-in and right-out driveway on Thornton Road. Also, a Design Review for all buildings proposed on the site was approved (Resolution 2018-01-23-1502).

The following Use Permit and Tentative Parcel map were approved by the Planning Commission on October 26, 2017:

- A Use Permit was approved to allow the establishment of a gasoline station and convenience store with the off-sale of beer and wine (Resolution 2017-10-26-0501).

- A Parcel Map subdividing the project site into four parcels was approved by the City and was recorded by San Joaquin County. Three of the parcels cover the proposed commercial area, while the fourth parcel includes the area planned for future residential development (Resolution 2017-10-26-0501).

The portion of the project site originally proposed for a fast-food restaurant has been sold to another property owner. The restaurant site is within the northern portion of Parcel 3 of the Parcel Map. A building permit for a fast-food restaurant (Burger King) on this site was submitted to the Building and Safety Division. A Design Review application has been submitted to Planning and Engineer Service Division for processing. This Addendum considers the potential impacts of development of the fast-food restaurant as it was considered in the adopted IS/MND.

The above-described changes are within the scope of the project as described in the adopted IS/MND.

3.2 CHANGES TO IS/MND CHAPTER 2.0 PROJECT DESCRIPTION

Project as Originally Approved

The approved Thornton Road/Eight Mile Road ARCO Station project is described in detail in the adopted IS/MND. In summary, the approved project proposed to construct an ARCO fueling station and other commercial structures on 2.11 acres of an approximately 10.09-acre site at the intersection of Eight Mile Road and Thornton Road in north Stockton.

The project included three commercial structures: an ARCO gasoline station and AM/PM convenience store of approximately 3,799 square feet, a fast-food restaurant of approximately 3,462 square feet, and a retail building of approximately 4,000 square feet. The gasoline station would have 16 fuel dispensing pumps. A car wash would be attached to the convenience store building, and the fast-food restaurant would have a drive-through. Access would be provided from both Thornton Road and Eight Mile Road.

The remaining 7.98 acres were not proposed for development as part of the project, but they were designated for high-density residential development by the Stockton General Plan. For the purposes of the prior CEQA analysis, it was assumed that a residential complex consisting of three-story structures totaling 234 units – the maximum number of units that could be developed under the existing High Density Residential land use designation – ultimately would be constructed on this portion of the project site.

Proposed Land Use Actions

The project proposes an expansion of the southeastern and eastern portions of the commercial development area by approximately 0.37 acres to accommodate the proposed development shown in the revised site plan (Figure 3-1) resulting in total commercial development of 2.48 acres, an approximately 17.5% increase from the proposed project. As noted in Section 3.1 above, changes were made to the General Plan and zoning. The proposed expansion would require a new General Plan amendment and to match those granted to the approved commercial development. Figures 3-2 and 3-3 depict the proposed

General Plan amendment and zoning map amendment, respectively. An Administrative Use Permit and Design Review are required to allow the establishment of a proposed drive-through car wash facility. In addition, a lot line adjustment to the recently recorded Parcel Map is proposed to accommodate the expanded commercial area.

With the proposed commercial area expansion, approximately 7.61 acres would remain available on the parcel for future high-density residential development. Based on the maximum allowable 29 dwelling units per acre under the High Density Residential designation, the total maximum number of dwelling units that could be developed is 223 units, a decrease from 234 units considered in the adopted IS/MND. For analytical purposes, this Addendum assumes 223 units would be constructed. Otherwise, conditions related to the potential future high-density residential development would be the same as described in the adopted IS/MND.

Revised Site Development Plan

The project proposes changes in approved land uses in the commercial area (see Figure 3-1). The 4,000-square foot retail building originally proposed east of the convenience store has been eliminated. The ARCO AM/PM fueling station/convenience store would remain in the same place as under the approved site plan. The area for the approved fast-food restaurant remains available, although development is not specified on the revised site plan, and the area is no longer owned by the project applicant. As noted, a building permit for a fast-food restaurant on this area has been submitted, so this portion of the CEQA analysis has not changed. Access to the commercial project site would still be provided by one driveway each from Thornton Road and Eight Mile Road.

The car wash, which was originally proposed as an attachment to the fueling station/convenience store, would become a larger, stand-alone, drive-through facility and would be relocated to the eastern portion of the commercial development area. The car wash facility, with an approximate 4,978 square-foot footprint, would be a “tunnel” car wash, an enclosed structure with a 140-foot conveyor to move vehicles through the wash process from one end to the other; the structure would contain washing, waxing, rinsing, and drying equipment. The car wash would have a water reclamation system installed underground. Seven vacuum stations with parking spaces would be located adjacent to and southeast of the car wash facility, and four vacuum stations with parking spaces would be adjacent to and northwest of the facility. Additionally, seven vacuum stations with parking spaces would be installed north of the car wash facility near Eight Mile Road.

Access to the project site would remain as described in the adopted IS/MND – one driveway from Thornton Road and one driveway from Eight Mile Road. The Eight Mile access would be consistent with the Eight Mile Road Precise Road Plan as amended on January 23, 2018.

Table 3-1 provides a summary of permits and approvals that would be required for the project. Some of the previous approvals that applied to the original project remain valid for the revised project, such as the Eight Mile Road Precise Road Plan amendment, access restriction relinquishments along Eight Mile Road and Thornton Road, and the Use Permit for the gasoline station/convenience store.

TABLE 3-1
REQUIRED PERMITS AND APPROVALS

Agency	Permit/Approval
City of Stockton, City Council	Adoption of General Plan Amendment Adoption of change to zoning map Approval of Lot Line Adjustment
City of Stockton, Planning Commission	Recommendations to the City Council if required
City of Stockton, Community Development Department	Approval of site plan Design Review
City of Stockton, Municipal Utilities Department	Approval of construction and connection plans, project specifications
City of Stockton, Department of Public Works	Encroachment permit for construction in City roads
San Joaquin Valley Air Pollution Control District	Review and approval of fuel tanks and pumps

3.3 CHANGES TO IS/MND CHAPTER 3.0 ENVIRONMENTAL CHECKLIST FORM

Changes to the environmental setting of the project, other than those described above, or to the potential environmental effects and mitigation measures of the project, are described in detail in Chapter 4.0 of this Addendum. In summary, after detailed review, no environmental impacts related to the revised project that were not adequately addressed in the adopted IS/MND were identified, and the revised project would not cause any substantial increase in the severity of impacts described in the adopted IS/MND. However, based on project revisions and results of a noise assessment of the revised project, existing noise mitigation measures in the adopted IS/MND have been modified.

3.4 CHANGES TO IS/MND CHAPTER 4.0 SOURCES

Add the following references:

Bollard Acoustical Consultants. 2019. Environmental Noise Assessment, ARCO AM/PM Car Wash at West Eight Mile Road & Thornton Road, Stockton, California. November 7, 2019.

- California Air Resources Board (ARB). 2017. The 2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target (draft). January 20, 2017.
- _____. 2018. California Greenhouse Gas Emission Inventory: 2000-2016. 2018 Edition.
- California Department of Finance. 2018. Report E-5 - Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2018, with 2010 Benchmark. Released May 1, 2018.
- California Department of Forestry and Fire Protection (Cal Fire). 2007. Draft Fire Hazard Severity Zones in LRA, San Joaquin County (map). October 2, 2007.
- California Energy Commission. 2012. 2013 Building Energy Efficiency Standards for Residential and Nonresidential Buildings. May 2012.
- _____. 2018a. 2017 Integrated Energy Policy Report. CEC-100-2017-001-C. February 2018.
- _____. 2018b. Electricity Consumption by County – San Joaquin County. Available online at ecdms.energy.ca.gov/elecbycounty.aspx. Accessed July 26, 2018.
- _____. 2018c. Gas Consumption by County – San Joaquin County. Available online at ecdms.energy.ca.gov/gasbycounty.aspx. Accessed July 26, 2018.
- City of Stockton. 2014. City of Stockton Climate Action Plan. Prepared by ICF International. Adopted December 2014.
- _____. 2018. Envision Stockton 2040 General Plan Update and Utility Master Plan Supplements Draft EIR. Prepared by PlaceWorks. June 2018.
- Coffman Associates, Inc. 2009. Airport Land Use Compatibility Plan Update, San Joaquin County Aviation System, San Joaquin County, California. July 2009.
- _____. 2016. Airport Land Use Compatibility Plan Update for Stockton Metropolitan Airport. May 2016.
- KD Anderson and Associates. 2019a. Eight Mile Road & Thornton Road Convenience Center Project Revision – Traffic Analysis. March 15, 2019.
- _____. 2019b. Eight Mile Road & Thornton Road Convenience Center Project Revision – Eight Mile Road Precise Roadway Plan Amendment Traffic Analysis. March 15, 2019.
- U.S. Energy Information Administration (EIA). 2017. California State Energy Profile. Last updated October 19, 2017.

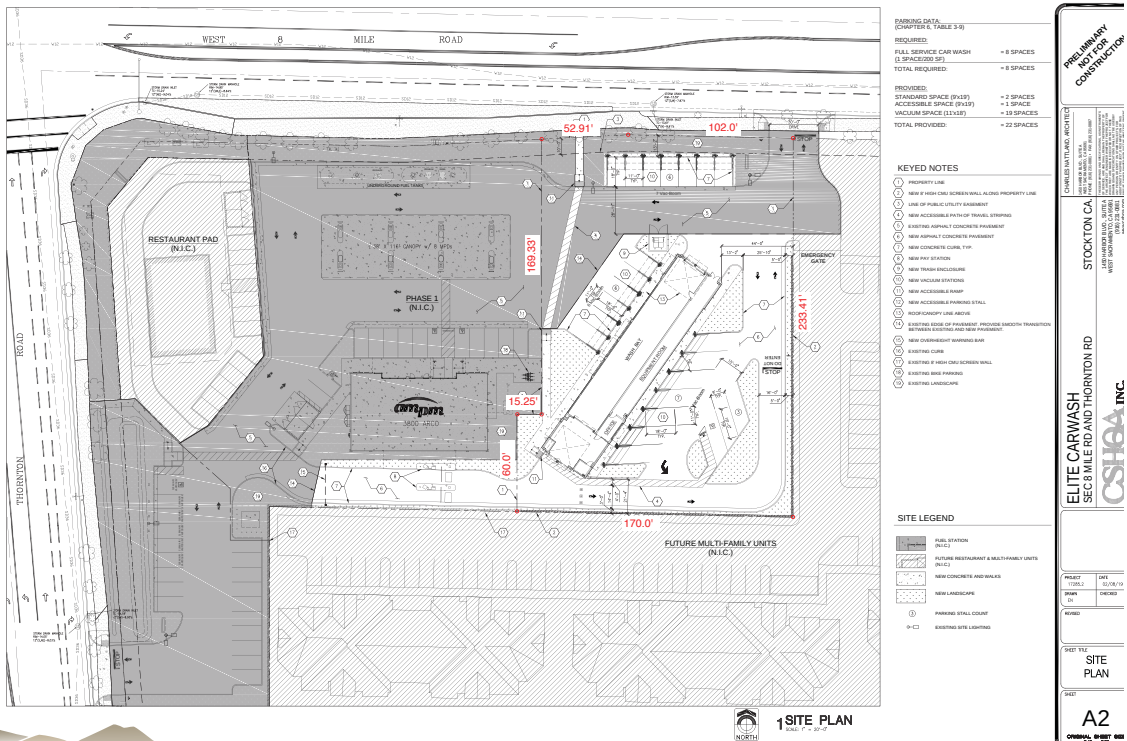
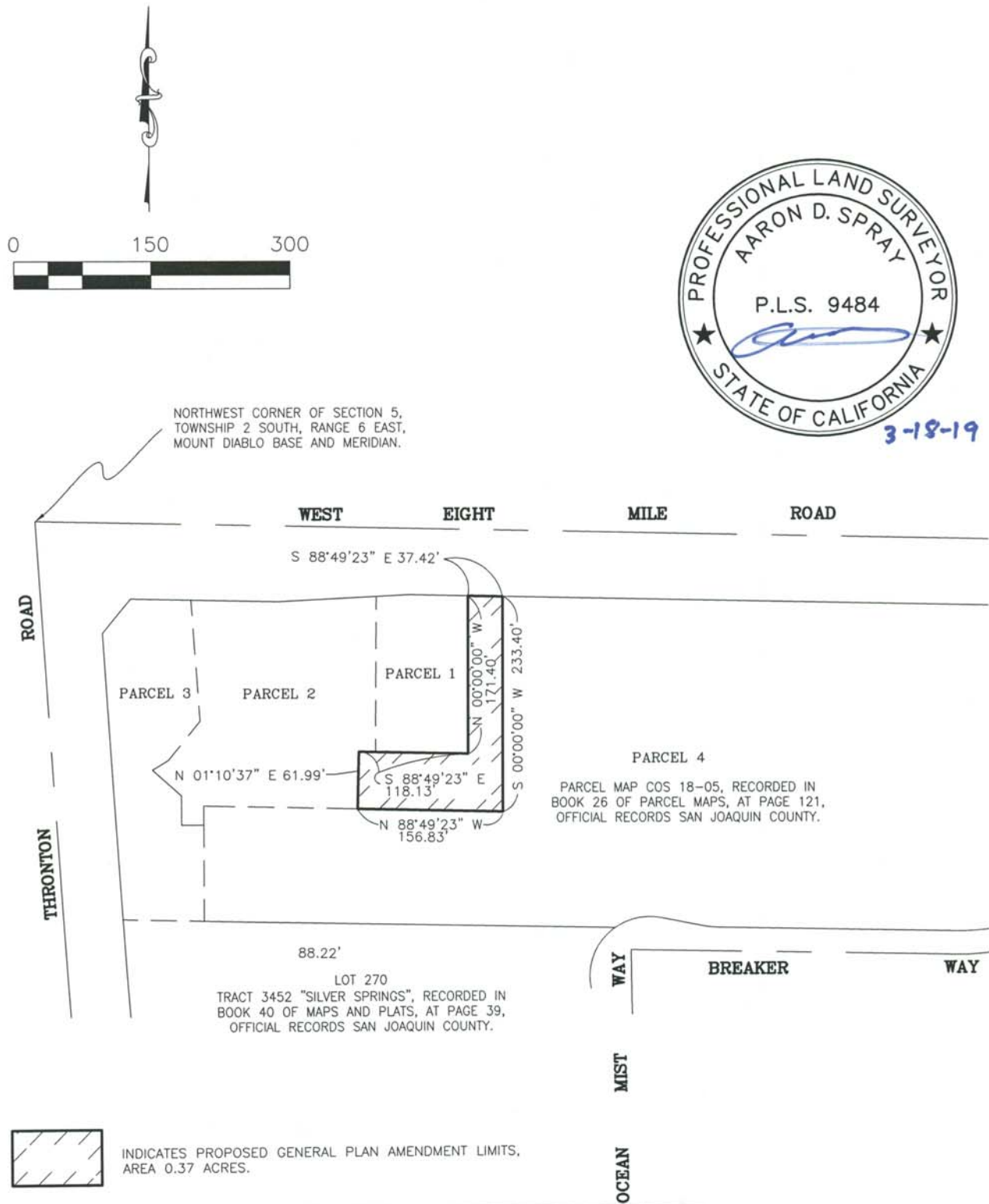


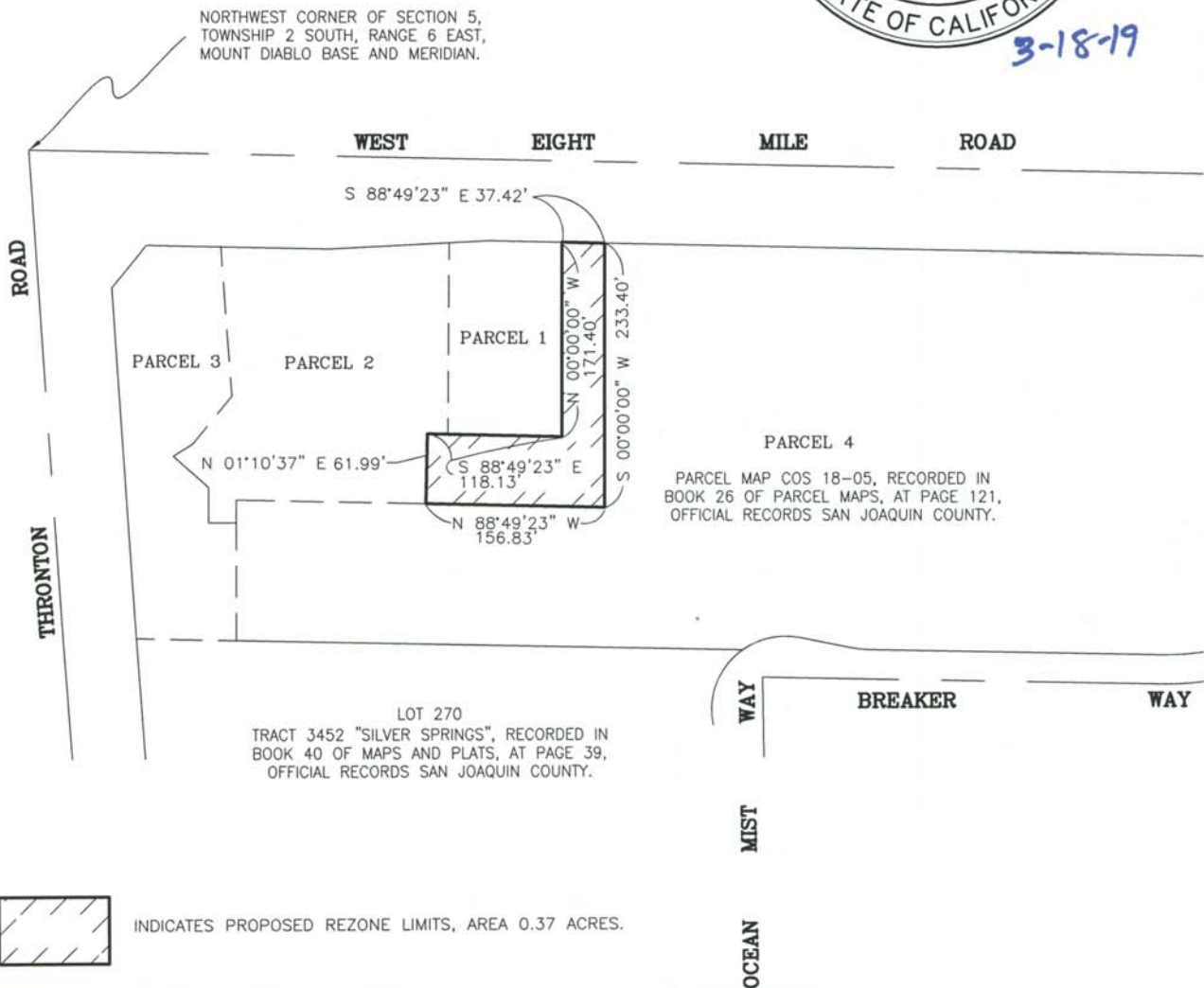
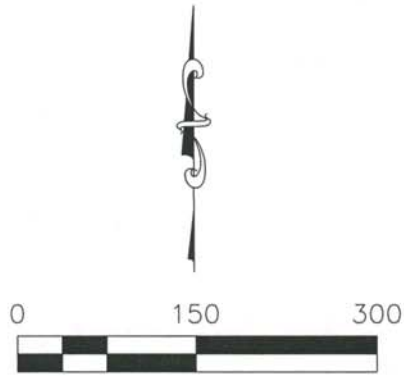
Figure 3-1
REVISED SITE PLAN



SOURCE: Dixon and Associates



Figure 3-3
PROPOSED GENERAL PLAN AMENDMENT



SOURCE: Dixon and Associates, Inc.



Figure 3-3
ZONING MAP AMENDMENT

4.0 POTENTIALLY SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE REVISED PROJECT

The City has considered the potential environmental effects of the revised Thornton Road/Eight Mile Road ARCO project in comparison to the effects described in the adopted IS/MND. The checklist below indicates the City's analysis and conclusions regarding the potential environmental effects of the revised project for each environmental issue required to be discussed by the latest version of the CEQA Guidelines. The significance findings are shown in the check boxes for each issue area, using the Initial Study checklist in CEQA Guidelines Appendix G. Entries in the check boxes signify the following:

NC – No changes in impact analysis as presented in adopted IS/MND. This includes impacts for which mitigation measures were prescribed if the mitigation measures remain applicable.

LS – Minor changes that would have less of an environmental impact than either analyzed in the adopted IS/MND or would have less of an environmental impact in general.

The positioning of these entries indicates the impacts of the revised project; e.g., an entry in the No Impact column indicates that the revised project would have no impact on the environmental issue analyzed. As described in this chapter, none of the impacts described in this Addendum would be new or more severe than those identified in the adopted IS/MND.

Since adoption of the project IS/MND, the checklist in CEQA Guidelines Appendix G has been revised to include two new environmental issues – Energy and Wildfire. Other environmental issues in the checklist remain the same; however, some of the questions associated with these issues have been revised or eliminated. Issues on the updated checklist are considered in this Addendum; however, no new or more severe impacts were identified as a result.

4.1 AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				NC
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				NC
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			NC	
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?		NC		

NARRATIVE DISCUSSION

Environmental Setting

The setting for aesthetic issues is the same as that described in the adopted IS/MND. The parcel remains vacant and contains only ruderal vegetation.

Environmental Impacts and Mitigation Measures

a) Scenic Vistas.

The adopted IS/MND stated that scenic vistas impacts would be less than significant. While the revised project would increase the footprint and change its configuration, it would not substantially change the building height. The result of the revised project would be an urban commercial development of approximately the same size and design. As with the approved project, the revised project would have no impact on scenic vistas.

b) Scenic Resources.

The adopted IS/MND stated that there are no identified scenic resources or scenic routes in the project vicinity. As with the approved project, the revised project would have physical effects on the existing aesthetic environment but no impact on scenic resources.

c) Visual Character and Quality.

The adopted IS/MND concluded that visual impacts would be less than significant. This was based on the finding that commercial development would improve the aesthetics of

the vacant project site, and both commercial and future residential development would be subject to the City's Design Review process to ensure compliance with the Citywide Design Guidelines. The revised project would have the same visual impacts as described in the adopted IS/MND. The visual impacts of the revised project would be less than significant.

d) Light and Glare.

The adopted IS/MND noted that the project would add lighting to a site that currently has none, which could negatively affect nearby residential areas as well as future residential development. Mitigation Measure AES-1 would require preparation of a photometric plan that demonstrates project lighting would be consistent with the standards under Stockton Municipal Code Section 16.32.070(A). Implementation of this mitigation measure would reduce project lighting impacts of both the approved and revised projects to a level that would be less than significant. Impacts of the revised project would therefore be unchanged.

4.2 AGRICULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				NC
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				NC
c) Result in the conversion of forest land to non-forest use?				NC
d) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?				NC

NARRATIVE DISCUSSION

Environmental Setting

The setting for agricultural issues is the same as that described in the adopted IS/MND. The project site was used for agricultural production in the past but is no longer in such use. According to the State's Farmland Mapping and Monitoring Program, lands on the project site remain designated Farmland of Local Importance; however, farmlands so designated do not meet the definition of Farmland set forth in the CEQA checklist.

Environmental Impacts and Mitigation Measures

a) Agricultural Land Conversion.

The adopted IS/MND stated that no Farmland would be converted by the project. As with the approved project, the revised project would have no impact on conversion of Farmland.

b) Zoning and Williamson Act.

The adopted IS/MND stated that the project site is not zoned for agriculture, nor is it under a Williamson Act contract. The revised project would not alter these conditions, so it would have no impact on these issues.

c) Forest Lands.

No forest lands are on the project site or in the vicinity. Neither the approved nor the revised project would have an impact on forest lands.

d) Indirect Conversion of Farmland or Forest Land.

The adopted IS/MND notes the presence of agricultural lands north of the project site, but the project would not extend infrastructure to this area. Urban development has occurred west, south, and east of the project site. The revised project would not change these conditions, so it would also have no impact regarding indirect conversion of agricultural lands.

4.3 AIR QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan?			NC	
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?			NC	
c) Expose sensitive receptors to substantial pollutant concentrations?			NC	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			NC	

NARRATIVE DISCUSSION

Environmental Setting

The setting for air quality issues is the same as that described in the adopted IS/MND. The San Joaquin Valley Air Basin remains in nonattainment status for State one-hour ozone, federal eight-hour ozone, State PM₁₀, and federal and State PM_{2.5} air quality standards. SJVAPCD rules and regulations described in the adopted IS/MND, including Regulation VIII for dust emissions and rules pertaining to emissions from fueling stations, remain in force. Since adoption of the project IS/MND, the question in the Environmental Checklist in CEQA Guidelines Appendix G regarding potential violation of air quality standards by project emissions has been eliminated. Issues related to violations of air quality standards are now part of the analysis related to consistency with adopted air quality plans.

Environmental Impacts and Mitigation Measures

a) Air Quality Plan Consistency.

The SJVAPCD has adopted several air quality plans intended to bring the San Joaquin Valley Air Basin into compliance with both federal and State ambient air quality standards. These plans include the 2013 Plan for the Revoked 1-Hour Ozone Standard, the 2007 8-Hour Ozone Plan, the 2016 8-Hour Ozone Plan, the 2007 PM₁₀ Maintenance Plan, and the 2018 Plan for the 1997, 2006, and 2012 PM_{2.5} Standards, the latter adopted in November 2018. The SJVAPCD significance thresholds for project CEQA analysis were developed in part to determine if project emissions would comply with the objectives of the adopted air quality plans.

The changes in the proposed land uses in the commercial development area could affect the emission volumes estimated in the adopted IS/MND. To determine any effect on estimated emissions, a CalEEMod run was conducted for the commercial development area with the project revisions. The estimated emissions from the proposed car wash are a rough approximation, based on traffic counts taken at a comparable car wash in Sacramento. Although the fast-food restaurant is no longer part of the project proposed by the project applicant, potential emissions from this land use were still included in the CalEEMod run.

The detailed results of the CalEEMod run are available in Appendix B of this Addendum and are summarized in Table 4-1 below. As indicated by Table 4-1, total estimated emissions from the revised commercial project increased slightly from those for the approved project as described in the adopted IS/MND. However, none of the pollutant emissions from the revised project exceed the SJVAPCD significance thresholds.

TABLE 4-1
ESTIMATED AIR POLLUTANT EMISSIONS FROM
COMMERCIAL DEVELOPMENT, APPROVED AND REVISED PROJECTS

Pollutant	SJVAPCD Significance Threshold	Construction Emissions ¹		Operational Emissions ²	
		Approved Project	Revised Project	Approved Project	Revised Project
ROG	10	0.09	0.20	1.39	1.44
NO _x	10	0.63	1.31	7.42	8.33
CO	100	0.45	1.13	9.45	9.32
SO _x	27	<0.01	<0.01	0.02	0.03
PM ₁₀	15	0.04	0.10	1.32	1.47
PM _{2.5}	15	0.04	0.08	0.37	0.41

¹ Total unmitigated emissions.

² Tons per year (unmitigated).

Sources: California Emissions Estimator Model v. 2016.3.2; SJVAPCD 2015

Since the total number of residential units would decrease as a result of the revised project, air quality emissions from the future residential development would likewise decrease. Therefore, no estimates of emissions from future residential development under the revised project were developed. As noted in the adopted IS/MND, emissions from future residential development were presented for informational purposes only, as site plans for this potential future development have not been prepared.

The adopted IS/MND noted that the project would be subject to the SJVAPCD's Indirect Source Rule (ISR), which requires specified reductions in NO_x and particulate matter emissions. The revised project would remain subject to the ISR and would still be required to comply with other applicable SJVAPCD rules and regulations regarding construction and operational emissions. Therefore, as with the approved project, impacts of the revised project related to air quality plans would be less than significant.

b) Cumulative Emissions.

As noted in a) above, commercial operational emissions associated with the project would not exceed SJVAPCD significance thresholds. However, as discussed in the adopted IS/MND, total emissions from both commercial and future residential would contribute cumulatively to air pollutant emissions in the Stockton area.

Since adoption of the project IS/MND, the City of Stockton has adopted the Stockton General Plan 2040 and has certified the EIR for the document. The Stockton General Plan 2040 EIR evaluated potential impacts of proposed development in the General Plan area on air quality, and it concluded that impacts would be significant and unavoidable, as did the Stockton General Plan 2035 EIR cited in the adopted IS/MND. A Statement of Overriding Considerations for this issue was adopted in conjunction with City adoption of the General Plan 2040 and certification of the EIR. This Statement of Overriding Considerations remains operative. As with the approved project, the revised project would not change this conclusion, and it would comply with applicable rules and regulations to reduce air pollutant emissions to the extent feasible. As a result, and pursuant to CEQA

Guidelines Section 15152(d), this environmental impact does not require additional consideration under CEQA, and revised project impacts are considered less than significant.

c) Exposure of Sensitive Receptors.

As indicated in Table 4-1 above, revised commercial project emissions would not change significantly from estimated emissions in the adopted IS/MND, and none of the revised project emissions would exceed SJVAPCD significance thresholds. As noted in the adopted IS/MND, existing or planned residences would not be significantly exposed to pollutants from project commercial operations.

As described in the adopted IS/MND, fueling station operations would involve the dispensing of gasoline, which can emit vapors that are considered toxic. Compliance with SJVAPCD Rules 4621 and 4622 would reduce the potential exposure of people using fuel pumps to potentially toxic emissions, thereby reducing potential impacts to a level that would be less than significant. Also, impacts on potential exposure to CO were analyzed and were considered less than significant. The revised project would not alter the conditions under which the analysis was conducted, so its impact on sensitive receptors would be less than significant.

d) Other Emissions.

The adopted IS/MND identified potential odor impacts from fueling station and fast-food operations, but these odors would be localized and would not affect nearby land uses. As with the approved project, the revised project would have impacts that would be less than significant.

4.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		NC		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				NC
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh,				NC

vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?

	NC		
			NC
	NC		

NARRATIVE DISCUSSION

Environmental Setting

The adopted IS/MND based its analysis of biological resource impacts on a Biological Evaluation of the project site by Bole and Associates (2016). The project site was inspected by BaseCamp Environmental staff during the preparation of this Addendum. Biological conditions on the project site have not changed from those described in the Biological Evaluation, which was the basis of the IS/MND impact analysis.

Environmental Impacts and Mitigation Measures

a) Effects on Special-Status Species.

The adopted IS/MND stated that special-status plant and wildlife species that could potentially occur in the vicinity were unlikely to occur on the project site. However, the project site was identified as providing marginal nesting habitat for western burrowing owl and potential foraging habitat for Swainson's hawk. The adopted Mitigation Measure BIO-1 would require a pre-construction survey for the presence of bird species or their nests. The adopted Mitigation Measure BIO-2 would require project participation in the SJMSCP, a habitat conservation that covers Swainson's hawk and burrowing owl. Implementation of these mitigation measures would reduce potential impacts on special-status species to a level that would be less than significant.

The proposed project would involve approximately 0.37 acres more land disturbance than the approved project, which would increase the area of impact. However, mitigation requirements would increase in scale with the increased size of the site. Therefore, impacts of the revised project related to special-status wildlife species likewise would be less than significant with implementation of the adopted mitigation measures.

b) Riparian and Other Sensitive Habitats.

There is no riparian habitat on the project site, and no other sensitive habitats were identified in the adopted IS/MND. Likewise, the enlarged site contains no sensitive habitats. The revised project would have no impact on riparian or other sensitive habitats.

c) Wetlands and Waters of the U.S.

No wetlands or other Waters of the U.S. were identified on the project site. Similarly, the enlarged commercial site contains no wetlands or Waters of the U.S.; therefore, the revised project would have no impact on wetlands or Waters of the U.S.

d) Fish and Wildlife Movement.

The adopted IS/MND noted that the presence of extensive agricultural lands and foraging habitat to the north of Eight Mile Road may attract migratory birds to the project site. Implementation of Mitigation Measure BIO-1 would reduce impacts on migratory birds and their nests, if any are found, to a level that would be less than significant. Impacts of the revised project related to special-status wildlife species likewise would be less than significant with implementation of the mitigation measure.

e) Local Biological Requirements.

The adopted IS/MND stated that no local biological requirements were applicable to the project. As with the approved project, the revised project would have no impact related to local policies or ordinances protecting biological resources.

f) Conflict with Habitat Conservation Plans.

The project site is classified as Agricultural Habitat Open Space under the SJMSCP. Mitigation Measure BIO-2 would require the project to comply with the SJMSCP, to pay any required SJMSCP fees, and to implement applicable ITMMs if covered species are found on the site. Impacts of the revised project would likewise be less than significant with implementation of the mitigation measure.

4.5 CULTURAL RESOURCES

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

NARRATIVE DISCUSSION

Environmental Setting

The adopted IS/MND based its analysis of cultural resource impacts on an archaeological survey of the project site by Genesis Society in 2016; the survey of the site extended to the entire 10 acres owned by the project applicant at the time, including the proposed commercial site expansion. Conditions on the project site have not changed from those described in the archaeological survey, which was used in the preparation of the environmental setting for cultural resources.

Prior to adoption of the project IS/MND, the State Legislature enacted AB 52, which modified CEQA procedures regarding consultation with Native American tribes on cultural resource issues. Section 4.18, Tribal Cultural Resources, discusses AB 52 in more detail.

Environmental Impacts and Mitigation Measures

a, b) Historical and Archaeological Resources.

The archaeological survey did not identify any historical or archaeological resources on the project site, but a potentially significant impact could occur if previously unknown subsurface resources are uncovered during project work. Mitigation Measure CULT-1 of the adopted IS/MND would require work to be stopped when cultural resources are uncovered until these resources can be evaluated by a qualified archaeologist and recommendations made for their disposition. This mitigation would reduce impacts on such resources to a level that would be less than significant. Impacts of the revised project related to archaeological resources likewise would be less than significant with implementation of the adopted mitigation measure.

c) Human Burials.

The adopted IS/MND stated that a potentially significant impact could occur if previously unknown burials are uncovered during project work. Compliance with the provisions of CEQA Guidelines Section 15064.5(e) and Mitigation Measure CULT-1 of the adopted IS/MND would ensure that impacts related to human burials would be less than significant. Impacts of the revised project related to human remains likewise would be less than significant.

4.6 ENERGY

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

NARRATIVE DISCUSSION

Environmental Setting

Since adoption of the project IS/MND, the Environmental Checklist in CEQA Guidelines Appendix G has been revised to include a section addressing the potential impacts of a project on energy consumption and conservation. According to the latest information from the U.S. Energy Information Administration (EIA), California consumed 7,830 trillion British thermal units (BTUs) of energy in 2016. Only Texas consumed more energy. However, consumption per capita in California was 197 million BTUs, which was 49th among all states and the District of Columbia. Transportation accounted for approximately 39.8% of the energy consumed in California, followed by industrial with 23.7%, commercial with 18.9%, and residential with 17.7% (EIA 2017). Electricity is a major energy source for residences and businesses in California. In 2016, electricity consumption in California totaled approximately 285,701 gigawatt-hours (GWh) (CEC 2018a). Natural gas is another major energy source. In 2016, natural gas consumption in California totaled approximately 12,750 million therms (CEC 2018a).

California has implemented numerous energy efficiency and conservation programs that have resulted in substantial energy savings. The State has adopted comprehensive energy efficiency standards as part of its Building Standards Code, California Codes of Regulations, Title 24. In 2009, the California Building Standards Commission adopted a voluntary Green Building Standards Code, also known as CALGreen, which became mandatory in 2011. Both Title 24 and CALGreen are implemented by the City of Stockton in conjunction with its processing of building permits.

CALGreen sets forth mandatory measures, applicable to new residential and nonresidential structures as well as additions and alterations, on water efficiency and conservation, building material conservation, interior environmental quality, and energy efficiency. California has adopted a Renewables Portfolio Standard, which requires electricity retailers in the state to generate 33% of electricity they sell from renewable energy sources (i.e., solar, wind, geothermal, hydroelectric from small generators, etc.) by the end of 2020. In 2018, SB 100 was signed into law, which increases the electricity generation requirement

from renewable sources to 60% by 2030 and requires all the state's electricity to come from carbon-free resources by 2045.

Environmental Impacts and Mitigation Measures

a) Project Energy Consumption.

The adopted IS/MND does not explicitly address project energy consumption. As with air pollutant emissions, the main sources of energy consumption would be construction activities and project operations.

Project construction would involve fuel consumption and use of other non-renewable resources. Construction equipment used for such improvements typically runs on diesel fuel or gasoline. The same fuels typically are used for vehicles that transport equipment and workers to and from a construction site. However, construction-related fuel consumption would be finite, short-term and consistent with construction activities of a similar character. This energy use would not be considered wasteful, inefficient or unnecessary.

Electricity may be used for equipment operation during construction activities. It is expected that more electrical construction equipment would be used in the future, as it would generate fewer air pollutant and GHG emissions. This electrical consumption would be consistent with construction activities of a similar character; therefore, the use of electricity in construction activities would not be considered wasteful, inefficient or unnecessary, especially since fossil fuel consumption would be reduced. Moreover, under California's Renewables Portfolio Standard, a greater share of electricity would be provided from renewable energy sources over time, so less fossil fuel consumption to generate electricity would occur.

The project would be required to comply with CALGreen and with the building energy efficiency standards of California Code of Regulations Title 24, Part 6 in effect at the time of project approval. Compliance with these standards would reduce energy consumption associated with project operations, although reductions from compliance cannot be readily quantified.

Overall, project construction and operations would not consume energy resources in a manner considered wasteful, inefficient, or unnecessary. Project impacts related to energy consumption are considered less than significant.

b) Consistency with Energy Plans.

In addition to reducing energy consumption, the proposed sustainability components would be consistent with state and local energy efficiency plans. All components would be consistent with the energy efficiency goals of CALGreen and Title 24, as well as the energy efficiency objectives of the City's Climate Action Plan (see Section 4.8, Greenhouse Gas Emissions). The project would be consistent with applicable state and local plans to increase energy efficiency. Project impacts would be less than significant.

4.7 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)				NC
ii) Strong seismic ground shaking?			NC	
iii) Seismic-related ground failure, including liquefaction?			NC	
iv) Landslides?				NC
b) Result in substantial soil erosion or the loss of topsoil?		NC		
c) Be located on 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?				NC
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?		NC		
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?				NC
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		NC		

NARRATIVE DISCUSSION

Environmental Setting

The setting for geology and soils issues is the same as that described in the adopted IS/MND. Native soil on the project site is classified as Rioblancho clay loam. There are no active or potentially active faults located in the project vicinity, but the area is subject to seismic shaking from fault features located east and west of Stockton.

Since adoption of the IS/MND, the Environmental Checklist in CEQA Guidelines Appendix G has been changed regarding paleontological resources. The question regarding

potential impacts on paleontological resources was moved from the Cultural Resources section to this section.

Environmental Impacts and Mitigation Measures

a-i) Fault Rupture Hazards.

The adopted IS/MND stated that no active or potentially active faults pass through the project site; therefore, the project would have no impact related to fault rupture. As with the approved project, the revised project would have no impact related to fault rupture.

a-ii) Seismic Ground Shaking.

The adopted IS/MND stated that the project site is subject to seismic shaking, but compliance with the adopted Uniform Building Code would minimize damage to levels that would be less than significant. The revised project would be subject to the same hazards; however, as with the approved project, impacts of the revised project related to seismic ground shaking would be less than significant.

a-iii) Seismic-Related Ground Failure.

The adopted IS/MND stated that, based on soil composition and depth to groundwater table, the project site would not be subject to liquefaction hazards; the same would be true of the revised project. As noted above, compliance with the Uniform Building Code would reduce potential seismic impacts to a level that would be less than significant. As with the approved project, impacts of the revised project related to seismic ground shaking would be less than significant.

a-iv) Landslides.

The project site is in a topographically flat area; as such, landslides would not occur. As with the approved project, the revised project would have no impact related to landslides.

b) Soil Erosion.

The adopted IS/MND noted that the Rioblancho clay loam has a low potential for water erosion. Construction activities associated with either the approved project or the revised project could loosen soils and make them more susceptible to erosion, but compliance with SJVAPCD Regulation VIII plus provisions of the Construction General Permit, along with implementation of adopted Mitigation Measure GEO-1, would reduce soil erosion impacts to a level that would be less than significant. Impacts of the revised project related to soil erosion likewise would be less than significant with implementation of the mitigation measure and compliance with applicable regulations and permits.

c) Geologic Instability.

The adopted IS/MND stated that the project site does not have unstable soils and would have no impact with appropriate engineering design. As with the approved project, the slightly enlarged site of the revised project would have no impact related to geologic instability.

d) Expansive Soils.

The adopted IS/MND noted that the shrink-swell potential on the project site ranges from low to moderate, which would also be true of the enlarged project site. Adopted Mitigation Measures GEO-2 and GEO-3 would reduce potential expansive soil impacts to a level that is less than significant. Impacts of the revised project related to expansive soils likewise would be less than significant with implementation of the adopted mitigation measures.

e) Adequacy of Soils for Sewage Disposal.

Both the approved and revised versions of the project would connect to the City's wastewater system and therefore would not require a sewage disposal system. As with the approved project, the revised project would have no impact related to soil adequacy for sewage disposal.

f) Paleontological Resources.

The adopted IS/MND noted that the geological formation underlying the project site has been a source of paleontological resources, although the site itself is unlikely to contain such resources. Adopted Mitigation Measure CULT-1 would require work to be stopped when paleontological resources are uncovered until these resources can be evaluated by a qualified paleontologist and recommendations made for their disposition. This mitigation would reduce impacts on such resources to a level that would be less than significant. Impacts of the revised project related to archaeological resources likewise would be less than significant with implementation of the mitigation measure.

4.8 GREENHOUSE GAS EMISSIONS

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

NARRATIVE DISCUSSION

Environmental Setting

The revised project's setting for greenhouse gas emissions is like that described in the adopted IS/MND. Since adoption of the project IS/MND, the State has adopted an updated Scoping Plan that sets forth strategies for achieving the SB 32 target of a GHG emissions

level of 40% below the 1990 level by 2030. The updated Scoping Plan continues many of the programs that were part of the previous Scoping Plan, including the cap-and-trade program, low-carbon fuel standards, renewable energy, and methane reduction strategies. It also addresses for the first time GHG emissions from the natural and working lands of California, including the agriculture and forestry sectors (ARB 2017). Additionally, the State Legislature extended the cap-and-trade program to the year 2030.

Environmental Impacts and Mitigation Measures

a, b) Project GHG Emissions and Consistency with GHG Reduction Plans.

Based on the CalEEMod run conducted for the revised project (see Section 4.3, Air Quality), unmitigated GHG construction emissions would be 77.55 metric tons carbon dioxide equivalent (CO₂e), and annual unmitigated GHG operational emissions would be 2,361.12 metric tons CO₂e. By comparison, the commercial development as described in the adopted IS/MND would generate 64.61 metric tons CO₂e of unmitigated construction GHG emissions and 2,290.58 metric tons CO₂e annually of unmitigated operational GHG emissions. Thus, the revised project would lead to a relatively small increase in construction and operational GHG emissions over the emissions in the adopted IS/MND.

When project features and compliance with regulations, described in the adopted IS/MND, are incorporated in the emission estimate for the revised project, the total annual operational GHG emissions from the commercial development would be 2,152.91 metric tons CO₂e – an 8.82 percent decrease from unmitigated operational emissions. Under the Stockton CAP, a project that demonstrates at least a 4% reduction in GHG emissions from “business-as-usual” (i.e., unmitigated) levels would be considered consistent with the GHG reduction objectives of the CAP. Therefore, the revised commercial development mitigated GHG emissions would be consistent with the Stockton CAP.

The revised project would reduce the amount of maximum future residential development, so GHG emissions likewise would be reduced. The impacts of the revised project on GHG emissions and reduction plans would be less than significant – the same conclusion reached in the adopted IS/MND.

4.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			NC	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			NC	

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

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

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

			NC
			NC
			NC
		NC	
		NC	

NARRATIVE DISCUSSION

Environmental Setting

The setting for hazards and hazardous materials issues is the same as that described in the adopted IS/MND. Data searches on the GeoTracker and EnviroStor databases, as well as a Phase I Environmental Site Assessment by Bole and Associates, found no record of hazardous material sites on or near the project site.

Since adoption of the project IS/MND, the San Joaquin Council of Governments (SJCOG) adopted an updated Airport Land Use Compatibility Plan for the Stockton Metropolitan Airport (Coffman Associates 2016). Among other matters, the updated plan establishes safety zones within the Airport Influence Area that indicate compatible land uses with airport operations. Areas outside the Airport Influence Area are not affected. The project site is outside the Airport Influence Area established for the Stockton Metropolitan Airport; therefore, impacts potentially related to the Stockton Metropolitan Airport are not discussed further.

Also, since adoption of the project IS/MND, the Environmental Checklist in CEQA Guidelines Appendix G has been revised to include a section addressing the potential impacts of a project as they relate to wildfires. Section 4.20, Wildfire, has the new questions in the Environmental Checklist. In addition, the Environmental Checklist no longer has a question regarding potential hazards associated with the location of a project near a private airstrip.

Environmental Impacts and Mitigation Measures

a, b) Hazardous Materials Transportation, Use and Storage.

The adopted IS/MND noted that hazardous materials would be transported, used, and stored by the fueling station, mainly fuels that would be stored in underground storage tanks. Compliance with State and local regulations related to the transport and storage of hazardous materials, including preparation of a Hazardous Materials Business Plan, would reduce potential risks associated with hazardous materials to a level that would be less than significant. As with the approved project, impacts of the revised project related to hazardous material transportation, use, storage, or release would be less than significant.

c) Release of Hazardous Materials near Schools.

There are no existing or proposed schools within one-quarter mile of the project site. As with the approved project, the revised project would have no impact related to hazardous material releases near schools.

d) Hazardous Materials Sites.

The adopted IS/MND indicates that no contaminated sites are located on the project site or the vicinity, based on results of a Phase I Environmental Site Assessment plus database searches. As with the approved project, the revised project would have no impact related to hazardous material sites.

e) Public Airports.

The adopted IS/MND states that the nearest public use airport is Kingdon Airpark, which is more than two miles to the north. An Airport Land Use Compatibility Plan for public use airports in San Joaquin County, other than Stockton Metropolitan Airport, indicates that the project site is not within the Airport Influence Area of Kingdon Airport (Coffman Associates 2009). As with the approved project, the revised project would have no impact related to public airports.

f) Emergency Response and Evacuations.

The adopted IS/MND noted that project construction would occur on private land away from the public road system and is therefore not expected to substantially obstruct emergency vehicles or any evacuation activities that may occur in the area. Project operations likewise would not obstruct any roadways. As with the approved project, impacts of the revised project related to emergency response or evacuations would be less than significant.

g) Wildland Fire Hazards.

The adopted IS/MND noted that the project site is in a predominantly agricultural and developed area, and therefore is not susceptible to any substantial wildland fire hazards. Additionally, the project would reduce the existing fire hazard on the parcel by replacing the existing grasses and weeds with a paved and developed area. As with the approved

project, impacts of the revised project related to wildland fire hazards would be less than significant. Refer to Section 4.20, Wildfire, for additional discussion.

4.10 HYDROLOGY AND WATER QUALITY

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

NARRATIVE DISCUSSION

Environmental Setting

The setting for hydrology and water quality issues is the same as that described in the adopted IS/MND. Surface water quality in the Stockton area is regulated by the City's Storm Water Management Plan and Storm Water Quality Control Criteria Plan, both prepared to ensure compliance with its NPDES permit.

SB 5, a state bill, requires future development to consider the 200-year flood event within certain Central Valley geographies, which include the project site. At the time the project IS/MND was adopted, the 200-year floodplains were not identified. Since then, the California Department of Water Resources has released maps indicating areas subject to 200-year flooding in the Stockton area. The project site is not subject to a potential 200-year flood of three feet or greater, which is a concern of SB 5 (City of Stockton 2018).

Since adoption of the project IS/MND, the Sustainable Groundwater Management Act has taken full effect. This legislation requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local water basins and adopt locally-based Groundwater Sustainability Plans. Plans for “critically overdrafted” basins must be completed and adopted by GSAs by January 31, 2020, while plans for high- and medium-priority basins have an adoption deadline of January 31, 2022. The project site is within the boundaries of the Eastern San Joaquin Subbasin, which is classified as critically overdrafted. In addition, a question has been added to the Environmental Checklist regarding potential conflicts with an adopted water quality plan or sustainable groundwater management plan.

Also, since adoption of the project IS/MND, hydrology questions in the Environmental Checklist in CEQA Guidelines Appendix G have been revised. However, the revised questions generally cover the same subject matter as the checklist used for the adopted IS/MND.

Environmental Impacts and Mitigation Measures

a) Surface Waters and Quality.

The adopted IS/MND stated that construction work could have an impact on surface water quality due to exposure of soils to potential erosion. Both the approved and revised project sites are subject to the City of Stockton’s NPDES permit, and therefore subject to the City’s SWMP and SWQCCP. Mitigation Measures HYDRO-1 through HYDRO-3 would require compliance with the City’s water quality program, which would reduce the amount of sedimentation to enter storm drainage or other surface waters. Impacts of the revised project related to surface waters and their quality likewise would be less than significant with implementation of the mitigation measures.

b) Groundwater Supplies.

The revised project would connect to the City’s water service, which in part uses groundwater. The adopted IS/MND discussed this issue and concluded that adequate water supply exists to accommodate the potential demand without additional water supplies being necessary. The project would reduce potential recharge area with development, but the project was not expected to interfere substantially with groundwater recharge such that there would be effects on aquifer volume or the groundwater table. The revised project would contribute to these effects incrementally; as with the approved project, impacts of the revised project related to groundwater would be less than significant.

c-i, ii, iii) Drainage Patterns and Runoff.

The adopted IS/MND acknowledged changes in drainage patterns and runoff volume on the project site with the project. On-site drainage will collect all runoff generated on the project site and deliver it to the City's drainage system in accordance with City standards and specifications. The revised project would not alter these conditions, so impacts related to drainage patterns and runoff likewise would be less than significant.

c-iv) Flooding Hazards.

The adopted IS/MND noted that the project site would not be within a 100-year floodplain or exposed to a 200-year flood that is three feet in depth or greater. The revised project would be subject to the same conditions, so it likewise would have no impact related to flooding.

d) Release of Pollutants in Flood, Tsunami, or Seiche Zones.

As noted, the project site is not in a flood zone or in an area that would experience tsunami or seiche hazards; the revised project would be subject to the same conditions. As with the approved project, the revised project would have no impact related to flood, tsunami, or seiche hazards.

e) Conflicts with Water Quality or Groundwater Management Plans.

As discussed in a) above, the revised project would be required to be consistent with the City's water quality plans. At this time, no sustainable groundwater management plans have been adopted for the Eastern San Joaquin Subbasin; however, as noted in b) above, the project would have no significant impact on groundwater. Project impacts on water quality and sustainable groundwater plans would be less than significant.

4.11 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				NC
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?			LS	

NARRATIVE DISCUSSION

Environmental Setting

The setting for land use issues related to the revised project is like that described in the adopted IS/MND. Since adoption of the project IS/MND, as noted in Section 3.1 of this Addendum, the General Plan designation of the commercial portion of the project site has been changed from High Density Residential to Commercial, and the zoning has been changed from RH (Residential, High Density) to CG (Commercial, General). The physical landscape on the project site and vicinity has not changed. Also, since adoption of the project IS/MND, a question in the Land Use and Planning section of the Environmental Checklist in CEQA Guidelines Appendix G related to habitat conservation plans has been deleted.

Environmental Impacts and Mitigation Measures

a) Division of Established Community.

The project would be built on a vacant site. It would not divide existing or planned residential communities in the area but would rather provide commercial services in support of both. The project would be completed at the existing site. As with the approved project, the revised project would have no impact related to a division of an established community.

b) Conflict with Land Use Plans, Policies, and Regulations.

The adopted IS/MND noted that the proposed commercial development would not be consistent with then-existing General Plan designations and zoning. As noted, these land use designations have been changed, so the approved commercial development would be consistent.

Proposed development under the revised project would occur on a slightly larger area than originally proposed. The 0.37 acres that is proposed for addition to the commercial development is currently designated High Density Residential, which is not consistent with the proposed development. Also, the proposed revised commercial development area would not be consistent with the existing parcel boundaries on the recorded Parcel Map. The project proposes a Lot Line Adjustment to move the parcel line to accommodate the drive-through car wash, a General Plan amendment from High Density Residential to Commercial, and a zoning map amendment from RH to CG to ensure the revised commercial development would be consistent with the City's General Plan designation and zoning.

The residential development was determined consistent with the existing General Plan designation and zoning at the time the project IS/MND was adopted. These designations remain consistent with the future residential development.

The adopted IS/MND analyzed the potential environmental effects of the project, and it identified mitigation measures to avoid or minimize any potentially significant environmental effects that are identified with the proposed development. With the

identified mitigation, the approved project would not conflict with land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. As with the approved project, impacts of the revised project related to land use plans, policies, or regulations would be less than significant.

4.12 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				NC
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?				NC

NARRATIVE DISCUSSION

Environmental Setting

The setting for mineral resource issues is the same as that described in the adopted IS/MND. There are no known mineral resources associated with the project site.

Environmental Impacts and Mitigation Measures

a, b) Availability of Mineral Resources.

The project site is in an area that has no identified mineral resource significance. The revised project would not alter this condition; therefore, the revised project would have no impact on mineral resources.

4.13 NOISE

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			LS	
b) Generation of excessive groundborne vibration or groundborne noise levels?			NC	

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?

		NC	
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NARRATIVE DISCUSSION

Environmental Setting

The setting for noise issues is the same as that described in the adopted IS/MND. An Environmental Noise Assessment for the revised project was prepared by Bollard Acoustical Consultants. The assessment is available in Appendix C of this Addendum. Since adoption of the project IS/MND, noise questions in the Environmental Checklist in CEQA Guidelines Appendix G have been revised. However, the revised questions generally cover the same subject matter as the checklist used for the adopted IS/MND.

Environmental Impacts and Mitigation Measures

a) Generation of Noise Exceeding Local Standards.

For both the approved and revised projects, the two potentially significant noise sources associated with the project would be the car wash and vacuum station. The noise assessment for the revised project noted that the nearest currently occupied noise-sensitive land uses to the project site are single-family residences to the west and to the southeast. Land to the immediate south and east of the project site is currently undeveloped; however, it is zoned for multi-family residential development.

Pursuant to Stockton Municipal Code Section 16.60.040, the City's maximum allowable noise standards shall be applied at the property line of the receiving land use. For this project, the receiving land use would be the future multifamily residential development adjacent to and east of the project; therefore, noise levels were estimated at the property line between the commercial development and the future multifamily development area.

The noise environment in the vicinity of the nearest noise-sensitive receivers is defined primarily by traffic noise from the local roadways. To generally quantify background noise levels at the nearest noise-sensitive locations, measurements of existing ambient noise were taken over four days at two locations near the project site, which are identified on Figure 1 of the noise assessment. The results indicated that noise levels ranged from 60 to 64 dB L_{dn} , which are in close agreement with the daytime and nighttime exterior noise level standards for residential uses set by the City. As a result, compliance with the City noise standards will ensure that the project does not result in a significant noise level increase in the community.

Noise levels generated by car wash facilities are primarily due to the drying portion of the operation. As noted in the noise assessment, the dryers are anticipated to operate in excess of 45 minutes during that hour. Based on manufacturers' information, the noise assessment estimated car wash noise levels at three locations, also identified on Figure 1 of the noise

assessment. The estimated noise levels accounted for an existing 7-foot-high wall along the residential area to the west and the proposed 8-foot-high wall along the southern and eastern boundaries of the project site. The proposed 8-foot-high wall would extend into the multifamily area along one side of the drive aisle from Eight Mile Road to the commercial development, and a portion of this wall would be constructed on the opposite side of the shared driveway from the project site. The results indicate that predicted car wash noise levels would be 38 dB L_{eq}/L_{max} at the nearest existing single-family residential property lines and 49-54 dB L_{eq}/L_{max} at the future multifamily residential property line. Both estimates would be below the City's exterior noise level standards for residential uses and below measured existing ambient noise levels. In addition, the project applicant states that the car wash would operate from 7:00 AM to 9:00 PM, so no noise from the car wash would occur at night. Adopted Mitigation Measure NOISE-3 would be revised to limit car wash operations to these hours.

The project applicant proposes the installation of an 18-stall central vacuum piping system distributed into three areas on the project site. The primary noise-generating aspects of such systems are use of the suction nozzles located at each of the stalls. Based on available data, vacuum noise exposure at the nearest noise-sensitive locations was calculated, taking into consideration the same conditions applicable to the car wash. The results indicate that predicted vacuum noise levels would be 39-40 dB L_{eq}/L_{max} at the nearest existing single-family residential property lines and 52-54 dB L_{eq}/L_{max} at the common outdoor activity area. Both estimates would be below the City's exterior noise level standards for residential uses and below measured existing ambient noise levels.

The noise assessment concluded that noise levels generated by the proposed project would satisfy the applicable City of Stockton noise level criteria at the nearest noise-sensitive locations.

The adopted IS/MND notes that temporary noise impacts would occur with project construction. Compliance with operational hours set by the Stockton Municipal Code plus implementation of Mitigation Measure NOISE-4 of the adopted IS/MND would minimize construction noise, which would reduce potential impacts to a level that would be less than significant. Impacts of the revised project related to construction noise levels likewise would be less than significant with implementation of adopted Mitigation Measure NOISE-4 plus City code compliance.

As indicated on Figure 3-1, the project would share a driveway off Eight Mile Road with the future multifamily residential development. This shared driveway is necessary to provide emergency vehicle access to the future residential development. The emergency access gate next to the shared driveway would create an opening in the barrier along the eastern property line of the project site, leading to an "acoustic leak." To minimize the amount of noise that would come through this gate, the noise assessment recommends gate construction requirements to reduce noise. Mitigation Measure NOISE-1 is revised to incorporate these requirements.

Revised Mitigation Measures

NOISE-1: A concrete masonry unit wall eight (8) feet in height shall be constructed along the southern and eastern property lines of the commercial development as shown in Figure 2 of the Environmental Noise Assessment prepared by Bollard Acoustical Consultants on November 7, 2019 (in Appendix C of this IS/MND). This includes wall construction around the proposed emergency access gate to the future multifamily residential development. To the extent feasible, the gate should have no visible gaps. As an example, a typical wrought iron fence would not be acceptable. To the extent feasible, the gap along the bottom of the gate should be minimized. The gate should be constructed of a solid material and meet one of the two following requirements:

- Minimum density of 4 pounds per square foot
- Minimum STC rating of 25

NOISE-2: The car wash shall be equipped with entrance and exit doors which shall be closed during the drying cycle and which would provide a minimum 15 dB noise reduction. Alternatively, the car wash shall be equipped with entrance and exit doors which shall be closed during the drying cycle and which would provide a minimum 10 dB noise reduction, and car wash dryers shall be selected that are 5 dB lower in noise generation than that assumed in the Environmental Noise Assessment prepared by Bollard Acoustical Consultants on November 7, 2019.

NOISE-3: Vacuum usage shall be limited to daytime hours (7:00 a.m. to 9:00 p.m.). Alternatively, a vacuum system shall be procured that is 10 dB lower in noise generation than that assumed in the Environmental Noise Assessment prepared by Bollard Acoustical Consultants on November 7, 2019.

b) Exposure to Groundborne Vibrations.

The adopted IS/MND indicated that the project would have no impact related to groundborne vibrations. The revised project would not alter this condition, so it would have no impact on groundborne vibrations.

c) Public Airport and Private Airstrip Noise.

According to the noise contours in the Airport Land Use Compatibility Plan for the San Joaquin County airport system, the project site is outside both existing and the projected (2028) 55-dBA CNEL noise contour of Kingdon Airpark, the closest public use airport to the project site (Coffman Associates 2009). The revised project would not alter this condition, so it would have no impact related to noise from airport operations.

The adopted IS/MND noted that there are no private airstrips within two miles of the project site. As with the approved project, the revised project would have no impact related to noise from private airstrips.

4.14 POPULATION AND HOUSING

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

NARRATIVE DISCUSSION

Environmental Setting

The setting for population and housing issues is the same as that described in the adopted IS/MND. As of January 1, 2018, the population of Stockton was estimated at 315,103, and the estimated number of housing units was 100,593 (California Department of Finance 2018).

Environmental Impacts and Mitigation Measures

a) Population Growth Inducement.

The adopted IS/MND stated that future residential development of the project site would have a direct effect on population, while proposed commercial development may have a limited indirect effect. The proposed expansion of the commercial development would minimally reduce the population impacts described in the adopted IS/MND. As with the approved project, impacts of the revised project related to population growth would be less than significant.

b) Displacement of Housing or People.

The project site is vacant; therefore, the project would have no impact on displacement of housing or people. The revised project would not alter this condition, so it would have no impact on displacement of housing or people.

4.15 PUBLIC SERVICES

Would the project:

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

Potentially
Significant
Impact

Less Than
Significant
with
Mitigation
Incorporated

Less Than
Significant
Impact

No Impact

i) Fire protection?

ii) Police protection?

iii) Schools?

iv) Parks?

v) Other public facilities?

		NC	
	NC		
		NC	
		NC	
		NC	

NARRATIVE DISCUSSION

Environmental Setting

The setting for public service issues is the same as that described in the adopted IS/MND. Fire protection services are currently provided by the Stockton Fire Department. Law enforcement services for the project site are currently provided by the Stockton Police Department. The project site is within the boundaries of the Lodi Unified School District. Parks and recreation services are provided by the City and the County in their respective jurisdictions.

Environmental Impacts and Mitigation Measures

a-i) Fire Protection Services.

The adopted IS/MND states that the project would generate a demand for fire protection services, but it can be served by the Stockton Fire Department without new or expanded fire protection facilities. Future development would be required to pay Public Facility Fees to the City for future construction of Fire Department facilities. As with the approved project, impacts of the revised project related to fire protection services would be less than significant.

a-ii) Police Protection Services.

The adopted IS/MND states that the project would generate a demand for police protection services, but it can be served by the Stockton Police Department without new or expanded fire protection facilities. Future development would be required to pay Public Facility Fees to the City for future construction of Police Department facilities. Potential crime

opportunities at the project site would be addressed with adopted Mitigation Measure SERV-1, which would reduce potential impacts to a level that would be less than significant. As with the approved project, impacts of the revised project related to police protection services would be less than significant with implementation of the mitigation measure.

a-iii) Schools.

The adopted IS/MND states that the proposed residential development would generate a demand for school services. Future development, both residential and commercial, would be required to pay impact fees to the Lodi Unified School District for future construction of school facilities. Under the provisions of SB 50, payment of development fees is considered full and complete mitigation for the purposes of CEQA. As with the approved project, impacts of the revised project related to school services would be less than significant with payment of impact fees.

a-iv, v) Parks and Other Public Facilities.

The adopted IS/MND states that future residential development would generate a demand for parks and other public facilities, but it can be served without new or expanded fire protection facilities. Proposed commercial development would not generate such demand. As with the approved project, impacts of the revised project related to parks and other public facilities would be less than significant.

4.16 RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?			NC	
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?			NC	

NARRATIVE DISCUSSION

Environmental Setting

The setting for recreation issues is the same as that described in the adopted IS/MND. Parks and recreational services are provided by the City of Stockton and by San Joaquin County in their respective jurisdictions.

Environmental Impacts and Mitigation Measures

a, b) Recreational Facilities.

The adopted IS/MND states that the proposed commercial development would not generate a demand for new or expanded recreational facilities or services. It was concluded that the project would not generate a need for new or expanded parks or other recreational facilities. The revised project would not directly increase needs for parks and recreational facilities; the revised project would, however, result in a small reduction in park and recreation demand associated with future high-density residential development of the remainder of the project site. As with the approved project, impacts of the revised project related to parks and other public facilities would be less than significant.

4.17 TRANSPORTATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			LS	
b) Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			LS	
c) Substantially increase hazards to a design feature (e g., sharp curves or dangerous intersections) or incompatible uses (e g, farm equipment)?				NC
d) Result in inadequate emergency access?				NC

NARRATIVE DISCUSSION

Environmental Setting

The setting for transportation issues is the same as that described in the adopted IS/MND. No changes to the local street system, local public transit routes, or bicycle and pedestrian facilities have occurred, other than the number of the nearest SJRTD bus route, which has changed from 66 to 566.

KD Anderson and Associates, which prepared the traffic study for the approved project in 2017, analyzed potential traffic impacts of the revised project, which include the expanded commercial site and the reduced future multifamily development. The analysis and conclusions are available in Appendix D of this Addendum.

The methodology used in the analysis of the traffic impacts of the revised project is the same used for the original study, with one difference. Since adoption of the project

IS/MND, the Institute of Transportation Engineers published the 10th edition of the Trip Generation Manual. The traffic study prepared as part of the adopted IS/MND used trip generation rates from the 9th edition. In accordance with current City requirements for traffic studies, the analysis for the revised project uses trip generation rates from the 10th edition of the Trip Generation Manual.

Since adoption of the project IS/MND, the Environmental Checklist in CEQA Guidelines Appendix G has been revised to include a question regarding consistency of the project with CEQA Guidelines Section 15064.3(b). Section 15064.3(b) states that “vehicle miles traveled” (VMT) is the preferred method for evaluating transportation impacts, rather than the commonly used LOS. Section 15064.3 subdivision (b) sets forth the criteria for analyzing transportation impacts using the preferred VMT metric. While a quantitative analysis of VMT is preferred, a qualitative analysis may be used if existing models or methods are not available to estimate VMT for the project being considered. At this time, the City of Stockton has not developed guidance for evaluating transportation impacts based on VMT.

In addition, further revisions in the Environmental Checklist have deleted questions related to air traffic, congestion management plans, and non-motor vehicle transportation plans. The latter two issues are now part of a question related to project consistency with transportation plans.

Environmental Impacts and Mitigation Measures

a) Consistency with Transportation Plans.

The traffic study for the approved project evaluated potential traffic impacts of the project at buildout on six intersections, plus the driveways to the development site from Eight Mile Road and Thornton Road. For the revised project, traffic impacts were evaluated at the same intersections and driveways under Existing Plus Approved Projects (EPAP) conditions, which include projects approved for construction but not yet built. Table 4-2 presents the LOS results at the six study intersections and two driveways comparing the approved project and the revised project. As shown in Table 4-2, there is no change to the LOS at the study intersections and driveways with the revised project. All study intersections and driveways would operate at LOS D or better, which meets City standards.

The traffic study also evaluated potential traffic impacts of the project at buildout on five roadway segments under EPAP conditions. Table 4-3 presents the LOS at these roadway segments with the approved project and the revised project. As shown in Table 4-3, there is no change to the LOS at the study roadway segments with the revised project. The roadway segment of Eight Mile Road from Thornton Road to Davis Road would operate at LOS E, which is considered unacceptable. However, aside from resulting in the same LOS as the approved project, the revised project would not result in an increase in traffic volume greater than five percent. Based upon criteria presented in the *Level of Service Significance Threshold* section of the 2017 traffic study for the original project, this impact is considered less than significant. All other study roadway segments would operate at LOS D or better, which meets City standards.

TABLE 4-2
LOS AT INTERSECTIONS UNDER EPAP CONDITIONS

Intersection	LOS With Approved Project		LOS With Revised Project	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Eight Mile Road/I-5 Southbound Ramps	D	B	D	B
Eight Mile Road/I-5 Northbound Ramps	C	C	C	C
Eight Mile Road/Thornton Road	D	C	D	C
Eight Mile Road/Rivermont Drive	B	C	B	C
Eight Mile Road/Davis Road	D	D	D	D
Thornton Road/A.G. Spanos Boulevard	C	C	C	C
Eight Mile Road/Project Site Driveway	A	A	A	A
Thornton Road/Project Site Driveway	A	A	A	A

EPAP- Existing Plus Approved Projects

Source: KD Anderson and Associates 2017, 2019a.

TABLE 4-3
LOS ON ROADWAY SEGMENTS UNDER EPAP CONDITIONS

Roadway Segment	LOS With Approved Project	LOS With Revised Project
Eight Mile Road - I-5 to Thornton Road	C	C
Eight Mile Road - Thornton Road to Davis Road	E	E
Thornton Road - Eight Mile Road to Bear Creek	A	A
A.G. Spanos Blvd. - Thornton Road to Ocean Mist Way	A	A
Ocean Mist Way/Breaker Way - A.G. Spanos Blvd. to Lands End	A	A

EPAP- Existing Plus Approved Projects

Source: KD Anderson and Associates 2017, 2019a.

The adopted IS/MND stated that the project would have no impact on a congestion management program. The project would not conflict with SJCOG's Regional Congestion Management Plan, since it would not contribute any traffic to the congestion management network described in the plan. As with the approved project, the revised project would have no impact on a congestion management program.

The adopted IS/MND stated that the project would not generate any need for expanded public transit service or new bike and pedestrian facilities, as the project would not generate any additional residents or housing. As with the approved project, the revised project would have no impact on non-vehicular transportation plans.

As noted in Chapter 3.0 of this Addendum, an amendment of the Eight Mile Road Precise Road Plan to include a driveway connection to Eight Mile Road was adopted, along with relinquishment of access restriction on Thornton Road to allow a driveway connection to Thornton Road. A review of potential impacts of the Precise Road Plan amendment by KD Anderson and Associates (2019b) indicated no impacts to traffic under EPAP conditions. Some impacts were noted under Cumulative conditions; these impacts are described in Section 4.21, Mandatory Findings of Significance.

b) Conflict with CEQA Guidelines Section 15064.3(b).

The adopted IS/MND did not discuss VMT. Based on the results of the CalEEMod run for the project (see Appendix B), the annual VMT under business-as-usual (unmitigated) conditions would be 3,842,797. With the incorporation of project features and regulations described in Section 4.8, Greenhouse Gas Emissions, the annual VMT would be 3,389,347 – a decrease of approximately 11.8 percent. This reduction would be consistent with State, regional, and City goals to reduce VMT. Project impacts related to VMT would be less than significant.

c) Traffic Hazards.

The project would have no impact on traffic hazards, as it would not affect public streets, either by direct alteration or by obstruction from construction activities. As with the approved project, the revised project would have no impact related to traffic hazards.

d) Emergency Access.

The adopted IS/MND indicated that construction vehicles would mostly stay off adjacent streets, and therefore would not obstruct any emergency vehicle access to the area. After project completion, emergency vehicle access to the site would not be restricted. As noted, driveways to the proposed commercial development area from Eight Mile Road and Thornton Road would be allowed. Project site access would remain essentially the same as with the approved project, and therefore the revised project would have no impact on emergency access.

4.18 TRIBAL CULTURAL RESOURCES

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

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

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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	NC		
	NC		

NARRATIVE DISCUSSION

Environmental Setting

The adopted IS/MND discussed potential project impacts on cultural resources, including those that may be associated with Native American tribes, in its Cultural Resources section. Prior to adoption of the project IS/MND, AB 52 had taken effect. AB 52 modified CEQA procedures regarding consultation with Native American tribes on cultural resource issues.

AB 52 established a category called “tribal cultural resources,” which not only includes physical resources but also site features, places, cultural landscapes, and sacred places and objects of value to a tribe, and which are on or eligible for listing on a State or local historic register. AB 52 establishes consultation procedures between a CEQA lead agency and a tribe when a tribal cultural resource is involved. Under AB 52 procedures, the Wilton Rancheria requested consultation on the project in a letter dated March 28, 2017.

In 2016, the Governor’s Office of Planning and Research updated the Environmental Checklist in CEQA Guidelines Appendix G to include sample questions specifically addressing tribal cultural resources. Since these questions were incorporated after adoption of the project IS/MND, they were not included in the original document but are included in this Addendum. The adopted IS/MND discussed potential impacts on resources of interest to tribes in its cultural resource analysis.

Environmental Impacts and Mitigation Measures

a, b) Tribal Cultural Resources.

As noted in the adopted IS/MND, the City and Wilton Rancheria had a consultation meeting on May 3, 2017. As a result of the meeting, adopted Mitigation Measures TCR-1 through TCR-4 were added to address the concerns of the Rancheria about potential project impacts on tribal cultural resources. Implementation of the mitigation measures would reduce potential impacts on tribal cultural resources to a level that would be less than significant. As with the approved project, impacts of the revised project related to tribal cultural resources would be less than significant with implementation of the adopted mitigation measures.

4.19 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?		NC		
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			NC	
c) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			NC	
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?			NC	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			NC	

NARRATIVE DISCUSSION

Environmental Setting

The setting for utilities and service system issues is the same as that described in the adopted IS/MND. Since adoption of the project IS/MND, utility questions in the Environmental Checklist in CEQA Guidelines Appendix G have been revised. However,

the revised questions generally cover the same subject matter as the checklist used for the adopted IS/MND.

Environmental Impacts and Mitigation Measures

a) Relocation or Construction of Utility Facilities.

The adopted IS/MND stated that the project would require the extension of sewer lines to the project site. Extension of sewer lines to the project site is not expected to have a significant impact on the physical environment, as the area is substantially developed, and the project site is designated for urban development. Additional sewer lines and connections could have a potentially adverse impact on the City's wastewater system if the lines are not designed properly. Mitigation Measure UTIL-1 in the adopted IS/MND would ensure design of project wastewater facilities in accordance with City standards, thereby reducing potential impacts to a level that would be less than significant.

The adopted IS/MND stated that the project would connect to existing water lines in the area; no new or extended water mains would need to be installed. Additional water lines and connections could have a potentially adverse impact on the City's water system if the lines are not designed properly. Adopted Mitigation Measure UTIL-1 would reduce potential impacts to a level that would be less than significant.

The project would require the construction of storm drainage facilities to collect anticipated runoff from the project site once it is developed. The adopted IS/MND stated that the on-site facilities would have little environmental impact by themselves. The new facilities would require a connection to existing storm drainage facilities in the area, which would not have significant environmental impacts, as the area is substantially developed or designated for urban uses. Additional drainage facilities could have a potentially adverse impact on the City's storm drainage system if the facilities are not designed properly. Adopted Mitigation Measure UTIL-1 would reduce potential impacts to a level that would be less than significant.

The adopted IS/MND noted that electrical, telephone, and cable television lines are available in the project vicinity and can be extended to the project site as necessary. As with the approved project, impacts of the revised project related to these utilities would be less than significant with implementation of the mitigation measure.

b) Water Supplies.

The adopted IS/MND noted that the City would have an adequate water supply to serve the project site. The revised project would not alter this condition, so impacts related to water supplies likewise would be less than significant.

c) Wastewater Treatment Capacity.

The adopted IS/MND noted that the City would have adequate capacity in its Regional Wastewater Control Facility to serve the project site. The revised project would not alter this condition, so impacts related to wastewater treatment capacity likewise would be less than significant.

d, e) Solid Waste Services.

The adopted IS/MND stated that existing landfills in the County would have adequate capacity to accommodate the amount of solid waste that would be generated by the project. The project would comply with applicable federal, state and local statutes and regulations related to solid waste. As with the approved project, impacts of the revised project on solid waste services would be less than significant.

4.20 WILDFIRE

If located in or near state responsibility areas or lands classified as Very High Fire Hazard Severity Zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			NC	
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?			LS	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			LS	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			LS	

NARRATIVE DISCUSSION

Environmental Setting

Since adoption of the project IS/MND, the Environmental Checklist in CEQA Guidelines Appendix G has been revised to include a section addressing the potential impacts of a project as it relates to wildfire. As described in the adopted IS/MND, wildland fires are an annual hazard in San Joaquin County. Wildland fires burn natural vegetation on undeveloped lands and include rangeland, brush, and grass fires. Long, hot, and dry summers with temperatures often exceeding 100°F add to the County's fire hazard. Human activities are the major causes of wildland fires, while lightning causes the remaining wildland fires. High hazard areas for wildland fires are the grass-covered areas in the east and the southwest foothills of the County.

The California Department of Forestry and Fire Protection's Fire and Resource Assessment Program identifies fire threat based on a combination of two factors: 1) fire frequency, or the likelihood of a given area burning, and 2) potential fire behavior (hazard). These two factors are combined in determining the following Fire Hazard Severity Zones: Moderate,

High, Very High, Extreme. These zones apply to areas designated as State Responsibility Areas – areas in which the State has primary firefighting responsibility. The project site is not within a State Responsibility Area and therefore has not been placed in a Fire Hazard Severity Zone. The area surrounding the project site is likewise not in any designated fire hazard zone (Cal Fire 2007).

Environmental Impacts and Mitigation Measures

a) Emergency Response and Emergency Evacuation Plans.

As discussed in Section 4.9 of this Addendum, project construction is not expected to substantially obstruct emergency vehicles or any evacuations that may occur in the area. Project operations likewise would not obstruct any roadways. As with the approved project, impacts of the revised project related to emergency response or evacuations would be less than significant.

b) Exposure of Project Occupants to Wildfire Hazards.

As noted in Section 4.9 of this Addendum, the project site is in a predominantly agricultural and developed area, and the project would reduce the existing fire hazard on the parcel by replacing existing grasses and weeds. Cal Fire maps also indicate that the project site is in a low-risk wildfire area. As with the approved project, impacts of the revised project related to wildland fire hazards would be less than significant.

c) Installation and Maintenance of Infrastructure.

The project proposes the installation of roads and parking areas and the extension of utilities. The installation of these facilities is not expected to exacerbate the wildfire risk on the project site, as explained in b) above. As with the approved project, impacts of the revised project would be less than significant.

d) Risks from Runoff, Post-Fire Slope Instability, or Drainage Changes.

As noted in Section 4.7 of this Addendum, the project site is in a topographically flat area. There are no streams or other channels that cross the site. As such, it is not expected that people or structures would be exposed to significant risks from changes resulting from fires in steeper areas, including downslope or downstream flooding or landslides. As with the approved project, impacts of the revised project related to these issues would be less than significant.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or		NC		

wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

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

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

		NC	
			NC

NARRATIVE DISCUSSION

a) Findings on Biological and Cultural Resources.

The potential biological resource and cultural resource impacts of the revised project were described in the adopted IS/MND and summarized in Sections 4.4 and 4.5 of this Addendum, respectively. Potentially significant environmental effects on biological and cultural resources were identified, but implementation of mitigation measures described in the adopted IS/MND would reduce these effects to a level that would be less than significant. The project would involve the same potential biological and cultural resource effects as the approved project; therefore, impacts of the revised project related to biological and cultural resources would be less than significant.

b) Findings on Cumulatively Considerable Impacts.

According to the adopted IS/MND, a cumulative impact is an environmental impact that may result from the combination of two or more environmental impacts associated with the proposed project with each other, or the combination of one or more project impacts with related environmental impacts caused by other projects.

The revised project would have the same cumulative impacts as the approved project on most environmental issues; in some cases, the changes would have less of an impact. The potential cumulative impacts of the revised project on traffic were specifically analyzed by KD Anderson and Associates (see Appendix D). The same intersections and driveways in the original traffic study were analyzed, again using trip generation rates of the 10th edition of the Trip Generation Manual.

Table 4-4 presents the LOS at the six study intersections and the two driveways with the approved project and the revised project.

TABLE 4-4
LOS AT INTERSECTIONS UNDER CUMULATIVE CONDITIONS

Intersection	LOS With Approved Project		LOS With Revised Project	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Eight Mile Road/I-5 Southbound Ramps	B	D	B	D
Eight Mile Road/I-5 Northbound Ramps	C	E	C	E
Eight Mile Road/Thornton Road	C	D	C	D
Eight Mile Road/Rivermont Drive	A	B	A	B
Eight Mile Road/Davis Road	C	D	C	D
Thornton Road/A.G. Spanos Boulevard	C	C	C	C
Eight Mile Road/Project Site Driveway	A	A	A	A
Thornton Road/Project Site Driveway	A	A	A	A

EPAP- Existing Plus Approved Projects

Source: KD Anderson and Associates 2017, 2019.

As shown in Table 4-4, there is no change to the LOS at the study intersections and driveways with the revised project. The intersection of Eight Mile Road and the I-5 northbound ramps would operate at LOS E during the PM peak hour, which is considered unacceptable. However, aside from resulting in the same LOS as the approved project, the revised project would not result in an increase in traffic volume greater than five percent. Based upon criteria presented in the *Level of Service Significance Threshold* section of the 2017 traffic study, this impact is considered less than significant. All other study intersections and driveways would operate at LOS D or better, which meets City standards.

The traffic study also evaluated potential traffic impacts of the project at buildout on five roadway segments under Cumulative conditions. Table 4-5 presents the LOS at the five roadway segments with the approved project and the revised project. As shown in Table 4-5, there is no change to the LOS at the study roadway segments with the revised project. All study roadway segments would operate at LOS D or better, which meets City standards.

TABLE 4-5
LOS ON ROADWAY SEGMENTS UNDER CUMULATIVE CONDITIONS

Roadway Segment	LOS With Approved Project	LOS With Revised Project
Eight Mile Road - I-5 to Thornton Road	C	C
Eight Mile Road - Thornton Road to Davis Road	C	C
Thornton Road - Eight Mile Road to Bear Creek	A	A
A.G. Spanos Blvd. - Thornton Road to Ocean Mist Way	A	A
Ocean Mist Way/Breaker Way - A.G. Spanos Blvd. to Lands End	A	A

EPAP- Existing Plus Approved Projects

Source: KD Anderson and Associates 2017, 2019.

As noted in Section 4.17, Transportation, potential impacts of the proposed Eight Mile Road Precise Road Plan amendment occurred under Cumulative conditions with the project. With implementation of the Precise Road Plan amendment, seven of the eight study intersections would operate at acceptable LOS D or better during both the AM and PM peak hour. Therefore, the impacts at these intersections are considered less than significant. The intersection of Eight Mile Road and I-5 Northbound Ramps would operate at LOS C during the AM peak hour and at LOS E during the PM peak hour. LOS E is considered unacceptable. However, the proposed amendment would not increase delay by more than five seconds, compared to conditions without the amendment. Therefore, based on criteria presented in the *Significance Thresholds* section of the 2017 traffic report, this impact is considered less than significant, and no mitigation measures are required (KD Anderson 2019b). It should be noted that the same impact was identified in the adopted IS/MND.

The revised project would not introduce new environmental impacts or more severe impacts than those identified with the approved project. Therefore, the revised project would have less of a potential contribution to cumulative impacts than would the approved project. None of the potential environmental effects addressed individually in this Initial Study would combine to result in a significant effect cumulatively.

c) Findings on Adverse Effects on Human Beings.

Potential adverse effects on human beings were discussed in adopted IS/MND Section 3.3, Air Quality (TACs); Section 3.6, Geology and Soils (seismic hazards); Section 3.8, Hazards and Hazardous Materials; Section 3.9, Hydrology and Water Quality (flooding); and Section 3.16, Transportation/Traffic (traffic hazards). Potential adverse effects on human beings identified in those sections would be reduced to levels that are considered less than significant through compliance with applicable laws, regulations, and City ordinances and standards, along with mitigation measures where necessary. The revised

project would not alter these conditions; as such, the revised project would not have adverse impacts on human beings.

5.0 FINDINGS

Based on the analysis in this Addendum, the proposed changes to the Thornton Road/8 Mile Road ARCO Station project for the construction of a stand-alone, drive-through car wash facility will not involve: 1) substantial changes to the project, 2) substantial changes in the circumstances of the project, or 3) new information of substantial importance that would result in new significant environmental effects or a substantial increase in the severity of significant effects described in the adopted IS/MND for the project. The City has not identified any changes in the circumstances of the project that would involve potential for new or more severe environmental effects. The City has not identified any new information related to the project that would involve potential for new or more severe environmental effects. The analysis and conclusions in the adopted IS/MND remain relevant. Therefore, it is appropriate for the City to adopt this Addendum to the previously adopted Thornton Road/8 Mile Road ARCO Station IS/MND.

APPENDIX A
APPROVED PROJECT MMRP

CITY OF STOCKTON
CEQA, FINDINGS AND MITIGATION
MONITORING/REPORTING PROGRAM

FOR THE
THORNTON ROAD/EIGHT MILE
ROAD ARCO STATION PROJECT
2910 Eight Mile Road
Stockton, CA

City of Stockton
Project File No: P16-0667

October 12, 2017

Prepared for:

CITY OF STOCKTON
Community Development Department
345 N. El Dorado Street
Stockton, CA 95202
209-937-8444



CITY OF STOCKTON
CEQA, FINDINGS AND MITIGATION MONITORING/
REPORTING PROGRAM

FOR THE

THORNTON ROAD/EIGHT MILE ROAD
ARCO STATION PROJECT
2910 Eight Mile Road
Stockton, CA

City of Stockton
Project File No: P16-0667

October 12, 2017

Prepared for:

CITY OF STOCKTON
Community Development Department
345 N. El Dorado Street
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209-937-8266

Prepared by:

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3.0	MITIGATION REPORTING PROGRAM	12

1.0 INTRODUCTION

This document sets forth the findings of the City of Stockton Planning Commission and/or City Council (City) relating to the Thornton Road/Eight Mile Road ARCO Project as required by the California Environmental Quality Act. This document also describes the Mitigation Monitoring/Reporting Program (MMRP) for the project. The primary source document for the findings and MMRP is the Final Initial Study/Mitigated Negative Declaration for the Thornton Road/Eight Mile Road Arco Station Project (P16-0667) (the "Final IS/MND").

The project site is located at 2910 Eight Mile Road, at the southeast corner of the intersection of Thornton Road and Eight Mile Road in northern Stockton, California. When referenced as such, the IS/MND includes both the Public Review Draft of the IS/MND (September 5, 2017) and the Final IS/MND (October 9, 2017) for the project, as well as any documents, which have been incorporated into those documents by reference.

1.1 CEQA REVIEW OF PROPOSED PROJECT

The Thornton Road/Eight Mile Road ARCO Station project involves City approval of Project File No. P16-0667. The project applicant proposes to construct an ARCO fueling station and other commercial structures on 2.11 acres of an approximately 10.09-acre site at the intersection of Eight Mile Road and Thornton Road in north Stockton. The project would include three commercial structures: a fueling station and convenience store approximately 3,799 square feet, a fast-food restaurant of approximately 3,462 square feet, and a retail building of approximately 4,000 square feet. The fueling station would have 16 dispensing pumps. A carwash would be attached to the convenience store building, and the fast-food restaurant would have a drive-through. The overall commercial development would have a total of 78 parking spaces. Access would be provided off Thornton Road and Eight Mile Road

As the proposed project involves the potential to result in significant environmental effects as defined by CEQA, an Initial Study/Mitigated Negative Declaration (IS/MND) was prepared by consultants, subject to the independent review and approval of City of Stockton staff. The Draft IS/MND identified significant and/or potentially significant environmental effects that could occur in conjunction with the proposed project. The Draft IS/MND also identified mitigation measures, which would reduce the significant or potentially significant environmental effects to a "less than significant" level.

Prior to public and agency review of the Draft IS/MND, the project applicant, on behalf of any future owners, applicants, developers and/or successors-in-interest, entered into a Mitigation Agreement with the City of Stockton. The Mitigation Agreement attaches all of the mitigation measures identified in the IS/MND to the proposed project as binding conditions of approval. The Mitigation Agreement also provides that any other mitigation measures, which may be imposed on the project by responsible and/or trustee agencies, and/or by City of Stockton advisory and final decision-making bodies, will also be binding on the project.

The IS/MND was circulated for agency and public review in September of 2017. Seven agency comments were received on the IS/MND; These comments are shown and responded to in Section

3.0 of the Final IS/MND. It is anticipated that the Final IS/MND will be adopted by the City, in conjunction with this document, prior to taking action on the project.

1.2 CEQA REQUIREMENTS REGARDING FINDINGS

When an Environmental Impact Report (EIR) has been prepared for a project, CEQA requires that, prior to project approval, the Lead Agency make specified findings related to each of the significant or potentially significant environmental effects considered in the EIR. Specific findings are not required by CEQA when the agency proposes to adopt a Negative Declaration. In the interest of public disclosure, however, it is the policy of the City of Stockton to make specific findings with respect to the environmental effects addressed in an Initial Study/Mitigated Negative Declaration.

The City's findings for Negative Declarations parallel the EIR findings requirements set forth in CEQA Guidelines Section 15091. All of the potentially significant effects of the project will be reduced to less than significant by proposed mitigation measures.

CEQA findings must as a rule be based upon substantial evidence. The substantial evidence in this case consists of the information, analysis and mitigation measures described in the Draft IS/MND, as well as any other information incorporated into these documents by reference. A copy of the Final IS/MND is available for review at the Stockton Permit Center, 345 North El Dorado Street, Stockton, CA. Specific references to supporting information for each finding are provided in Column 4 of the findings and mitigation monitoring table, following.

1.3 CEQA REQUIREMENTS REGARDING MITIGATION MONITORING AND REPORTING

To ensure that mitigation measures included in a Mitigated Negative Declaration are actually implemented, CEQA requires the adoption of a mitigation monitoring or reporting program (CEQA Guidelines Section 15074). Specifically, the Guidelines require that the lead agency:

" . . . adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to mitigate or avoid significant environmental effects."

These requirements are met collectively by the Mitigation Monitoring/Reporting Table shown in Section 2.0 of this document. The table lists all of the potential environmental effects of the project that were identified in the Draft IS/MND, identifies all of the mitigation measures that address these effects, and identifies the entities that would be responsible for implementing, and monitoring implementation of, the mitigation measures.

1.4 ORGANIZATION OF THIS DOCUMENT

This document is divided into two chapters. Chapter 1.0 is this Introduction, which provides background information and a discussion of CEQA requirements related to approval of the project. Chapter 2.0 presents the Mitigation Monitoring/Reporting Program and CEQA findings for the project in the form of a table. The table lists all mitigation measures applicable to the project, identifies implementation responsibilities, sets forth the City's finding with regard to the effectiveness of mitigation measures defined for each impact, and establishes the rationale for each

finding. Section 3.0 following the table sets forth the City's Mitigation Reporting Program for the project.

2.0 MITIGATION MONITORING/REPORTING PROGRAM AND FINDINGS

The following table summarizes the significant or potentially significant environmental effects that could result from approval of the proposed project. The table identifies 1) each environmental effect and its significance prior to mitigation, 2) how each significant environmental effect would be mitigated, 3) the responsibility for implementation of each mitigation measure, 4) the responsibility for monitoring of the mitigation measures, if the project is approved, 5) the City's finding with respect to each significant environmental effect, and 6) the City's rationale for that finding. The table follows the same sequence as the impact analysis in the IS/MND. Reporting actions required to ensure that the mitigation measures are implemented are described on the last page of the table.

The City's findings with respect to the project are listed in the last column of the table, for each of the significant effects identified by the IS/MND. Codes used to identify the significance of each environmental effect after mitigation measures are applied, and the City's finding with respect to each effect, are summarized on the first page of the table. For the purposes of this document:

- A "Significant" environmental effect is a substantial adverse change in the environment (CEQA Guidelines Section 15382),
- A "Potentially Significant" effect is one which is likely, but not certain, to cause future substantial adverse changes to the environment,
- A "Cumulatively Significant" effect is a substantial adverse change in the environment that is the result of cumulative development in the City of Stockton,
- A "Significant and Unavoidable" effect is one for which there is no known or feasible mitigation, and
- A "Not Significant" effect is one that may be adverse, but is not substantial, or has been rendered so as the result of mitigation measures.

CITY OF STOCKTON
CEQA FINDINGS AND MITIGATION MONITORING/REPORTING PROGRAM
(PURSUANT TO CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 21081 AND 21081.6)

PROJECT DATA**KEY**

INITIAL STUDY FILE NO.: P16-0667 Property Owner(s): Jimenez-Thornton Ranch Address: P.O Box 965 Lodi, CA 95241 Project Applicant: PS Fuels, LLC Address: 2190 Meridian Park Blvd., Suite G Concord, CA 94520 Project Title: Thornton Road/Eight Mile Road ARCO The project applicant proposes to construct an ARCO fueling station and other commercial structures on 2.11 acres of an approximately 10.09-acre site at the intersection of Eight Mile Road and Thornton Road in north Stockton. The project would include three commercial structures: a fueling station and convenience store approximately 3,799 square feet, a fast-food restaurant approximately 3,462 square feet, and a retail building approximately 4,000 square feet. The fueling station would have 16 dispensing pumps. A carwash would be attached to the convenience store building, and the fast-food restaurant would have a drive-through. The overall commercial development would have 78 parking spaces. Access would be provided off Thornton Road and Eight Mile Road.	1. The impacts are shaded and followed by related mitigation measures, implementation and monitoring provisions, and findings. 2. Abbreviations: N/A = (Not Applicable); COS = (City of Stockton); ODS = (Owners, Developers and/or Successors-in- Interest); CDD = (Community Development Department); CD-P = (Community Development-Planning Division); CD-B = (Community Development-Building Division); PW = (Public Works Department); CM = (City Manager); CA = (City Attorney); P&R = (Parks and Recreation Department); HR = (Housing and Redevelopment Department); MUD = (Municipal Utilities Department); FD = (Fire Department); PD = (Police Department); PC = (Planning Commission); CC = (City Council); SJC = (San Joaquin County); ALUC = (Airport Land Use Commission).
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FINDINGS AND LEVEL OF SIGNIFICANCE AFTER MITIGATION

Findings for significant and potentially significant impacts identified in the Final EIR or Negative Declaration/Initial Study are listed as follows:

1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect identified in the Final EIR or Negative Declaration/Initial Study, or
2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the City of Stockton. Such changes have been adopted by such other agency, or can and should be adopted by such other agency, or
3. The City of Stockton has previously adopted findings of specific economic, social, or other considerations which make infeasible the mitigation measures and project alternatives identified in the Final EIR or Negative Declaration/Initial Study.

The level of significance (LS) of each impact after mitigation is listed as: SU= (significant and unavoidable), PS=(potentially significant), or NS=(not significant). The basis for the Findings is provided in applicable sections of the Final EIR, Negative Declaration/Initial Study, or previously adopted Findings or Statement of Overriding Considerations, as referenced in the last (fourth) column on the following pages under "Rationale."

LEAD AGENCY:

CITY OF STOCKTON
c/o Community Development Dept./Planning Division
345 North El Dorado Street, Stockton, CA 95202-1997
(209) 937-8266

Jenny Liaw Senior Planner

DATE (FINDINGS/MONITORING PROGRAM ADOPTED)

EXHIBIT 1

1. AESTHETICS			
a) Effects on Scenic Vistas. There are no significant or potentially significant impacts in this issue area.			
b) Effects on Scenic Resources. There are no significant or potentially significant impacts in this issue area.			
c) Effects on Visual Character and Quality. There are no significant or potentially significant impacts in this issue area.			
d) Project Effects on Light and Glare.			
AES-1: Site development plans shall include a photometric site plan that describes the type of lighting that will be used and the amount of illumination that would occur on the site and on the property lines of adjacent residential parcels or parcels zoned for residential uses. The photometric plan shall demonstrate that indirect illumination on the property lines is consistent with the standards set forth in Stockton Municipal Code Section 16.32.070(A). The photometric site plan shall be part of the development application package to be reviewed and approved by the City.	The ODS will be responsible for the preparation and submittal of the photometric site plan.	The CDD utilities ensure that the PMSP is reviewed approved and incorporated into building plan prints issuance of building permits	1, NS Rationale: IS MND Pages 3-10, 11
2 AGRICULTURE AND FORESTRY RESOURCES			
a) Conversion of Agricultural Land. There are no significant or potentially significant impacts in this issue area.			
b) Conflicts with Agricultural Zoning and Williamson Act. There are no significant or potentially significant impacts in this issue area.			
c) Conflicts with Forest Land Conversion and Zoning. There are no significant or potentially significant impacts in this issue area.			
d) Indirect Conversion of Farmland of Forest Land. There are no significant or potentially significant impacts in this issue area.			
3 AIR QUALITY			
a) Air Quality Plan Consistency. There are no significant or potentially significant impacts in this issue area.			
b, d) Construction Emissions. There are no significant or potentially significant impacts in this issue area.			
c) Cumulative Emissions Impacts. There are no significant or potentially significant impacts in this issue area.			
e) Odor Impacts. There are no significant or potentially significant impacts in this issue area.			
4 BIOLOGICAL RESOURCES			
a) Effects on Special-Status Species. This is a potentially significant impact.			
BIO-1: Prior to construction activities, the beginning of which occurs from March to August, the ODS shall conduct a preconstruction nest survey to determine the presence of any bird species or their nests. The survey shall be conducted by a qualified biologist, who shall make recommendations on the treatment of	The ODS will be responsible for retaining a qualified biologist to conduct the preconstruction	The CDD-BD will verify that survey requirements have been met as specified or through participation in the	1, NS Rationale:

EXHIBIT 1

any located nests that shall be implemented by the ODS, including but not limited to establishment of buffer areas and restrictions on construction equipment operations near the nest.	survey.	SJMSCP.	IS/MND Page 3-24
BIO-2: The applicant shall apply to the San Joaquin Council of Governments (SJCOG) for coverage under the San Joaquin County Multi-Species Open Space and Habitat Conservation Plan (SJMSCP). The project site will be inspected by the SJMSCP biologist, who will recommend any Incidental Take Minimization Measures (ITMMs) set forth in the SJMSCP should be implemented. The ODS shall pay the required SJMSCP fee, if any, and be responsible for the implementation of the specified ITMMs.			
b) Effects on Riparian and Other Sensitive Habitats. There are no significant or potentially significant impacts in this issue area.			
c) Effects on Wetlands. There are no significant or potentially significant impacts in this issue area.			
d) Effects on Fish and Wildlife Movement. There are no significant or potentially significant impacts in this issue area.			
e) Local Biological Requirements. There are no significant or potentially significant impacts in this issue area.			
f) Project Conflict with Habitat Conservation Plans. There are no significant or potentially significant impacts in this issue area.			
5 CULTURAL RESOURCES			
a, b) Project Impacts on Potential Historical Resources, Archaeological Resources. This is a potentially significant impact.			
CULT-1: If any subsurface cultural or paleontological resources are encountered during project construction, all construction activities in the vicinity of the encounter shall be halted until a qualified archaeologist or paleontologist, as appropriate, can examine these materials and make a determination of their significance. If the resource is determined to be significant, recommendations shall be made on further mitigation measures needed to reduce potential effects on the resource to a level that would be less than significant. Such measures could include 1) preservation in place or 2) excavation, recovery and curation by qualified professionals. The CDD shall be notified of any find, and the ODS shall be responsible for retaining qualified professionals, implementing recommended mitigation measures, and documenting mitigation efforts in a written report to the CDD, consistent with the requirements of the CEQA Guidelines.	The ODS will be responsible for retaining a qualified archeologist or paleontologist to evaluate and report archeological or paleontological resources.	The ODS will be responsible for engaging the qualified professional and prepare a report for the CDD. The CDD will verify that applicable requirements are met.	1, NS Rationale: IS/MND Pages 3-27
c) Project Impacts on Paleontological Resources and Unique Geological Features. This is a potentially significant impact, mitigated by CULT-1, above.			
d) Project Impacts on Human Burials. This is a potentially significant impact.			

6 GEOLOGY AND SOILS			
a) Exposure of New Development to Fault Rupture, Seismic and Landslide Hazards. There are no significant or potentially significant impacts in this issue area.			
b) Exposure of New Development to Soil Erosion. This is a potentially significant issue.			
GEO-1: The ODS shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) for the project and file a Notice of Intent with the State Water Resources Control Board (SWRCB) prior to commencement of construction activity, in compliance with the Construction General Permit and City of Stockton stormwater requirements. The SWPPP shall be available on the construction site at all times. The ODS shall incorporate an Erosion Control Plan consistent with all applicable provisions of the SWPPP within the site development plans. The ODS shall submit the SWRCB Waste Discharger's Identification Number to the City prior to approval of development or grading plans.	The ODS will be responsible for preparation of the SWPPP & related actions.	The PW will be responsible for ensuring that storm requirements are met in conjunction with approval of subdivision improvement plans.	1, NS Rationale: IS/MND Pages 30, 31
c) Exposure of New Development to Geologic Instability. There are no significant or potentially significant impacts in this issue area.			
d) Exposure of New Development to Expansive Soils. This is a potentially significant issue.			
GEO-2: If required by the City, the Silver Springs geotechnical report shall be updated to reflect current standards and practices. GEO-3: Prior to issuance of a grading permit, a comprehensive grading plan shall be submitted to the City Engineer that addresses potential adverse impacts on structures due to expansive soils. The City Engineer shall review and approve the grading plan and building design, and the City Engineer or designated representative shall verify the implementation in the field.	The ODS will be responsible for preparation of geotechnical studies and grading plans.	The CDD-B will be responsible for review and approval of geotechnical studies and grading plans.	1, NS Rationale: IS/MND Pages 31,32
e) Adequacy of Soils for Sewage Disposal. There are no significant or potentially significant impacts in this issue area.			
7 GREENHOUSE GAS EMISSIONS			
a) Significance of GHG Emissions. There are no significant or potentially significant impacts in this issue area.			
8 HAZARDS AND HAZARDOUS MATERIALS			
a, b) Upset and Transportation Hazards. There are no significant or potentially significant impacts in this issue area.			
c) Hazards Materials Use or Emissions Near Schools. There are no significant or potentially significant impacts in this issue area.			
d) Hazardous Materials Sites. There are no significant or potentially significant impacts in this issue area.			
e, f) Aircraft Operations Effects. There are no significant or potentially significant impacts in this issue area.			
g) Emergency Response Effects. There are no significant or potentially significant impacts in this issue area.			

h) Wildland Fire Hazards. There are no significant or potentially significant impacts in this issue area.			
9 HYDROLOGY AND WATER QUALITY			
a, f) Project Effects Surface Waters and Water Quality. This is a potentially significant impact.			
HYDRO-1: The ODS shall submit a Storm Water Quality Plan that shall include post-construction Best Management Practices (BMPs) as required by Title 13 of the SWQCCP. The Storm Water Quality Plan will be reviewed and approved by the City of Stockton Municipal Utilities Department prior to the Certificate of Occupancy.	The ODS will be responsible for design and construction of storm water quality improvements, for preparing and executing a maintenance agreement for compliance with applicable COS codes related to storm water.	The MUD will be responsible for review and approval of storm water quality plans, ensuring that a maintenance Agreement has been executed.	1, NS Rationale: IS/MND Pages 3-41,42
HYDRO-2: The ODS shall execute a Maintenance Agreement with the City for stormwater BMPs prior to receiving a Certificate of Occupancy. The ODS must remain the responsible party and provide funding for the operation, maintenance and replacement costs of the proposed treatment devices built for the subject property.			
HYDRO-3: The ODS shall comply with any and all requirements of, and pay all associated fees as required by, the City's Storm Water Pollution Prevention Program as set forth in its NPDES Storm Water Permit.			
b) Project Effects on Groundwater Supplies. There are no potentially significant or significant impacts in this issue area.			
c, d, e) Project Effects on Drainage and Runoff. There are no potentially significant or significant impacts in this issue area.			
g) Flood Exposure. There are no potentially significant or significant impacts in this issue area.			
h) Impacts on Floodways. There are no potentially significant or significant impacts in this issue area.			
i) Dam Failure Hazards. There are no potentially significant or significant impacts in this issue area.			
j) Project Exposure to Seiche, Tsunami or Mudflow Hazards. There are no potentially significant or significant impacts in this issue area.			
10 LAND USE AND PLANNING			
a) Division of Established Community. There are no potentially significant or significant impacts in this issue area.			
b) Consistency with Land Use Plans and Zoning. There are no potentially significant or significant impacts in this issue area.			
c) Conflict with Habitat Conservation Plan. There are no potentially significant or significant impacts in this issue area.			
11 MINERAL RESOURCES			
a) Availability of Mineral Resources of State Value. There are no significant or potentially significant impacts in this issue area.			
b) Availability of Mineral Resources of Local Value. There are no significant or potentially significant impacts in this issue area.			

12 NOISE			
a) Project Exposure to Noise Exceeding Local Standards. There are no significant or potentially significant impacts in this issue area.			
NOISE-1: A concrete masonry unit wall eight (8) feet in height shall be constructed along the southern and eastern property lines of the commercial development as shown in Figure 2 of the Environmental Noise Assessment prepared by Bollard Acoustical Consultants on August 31, 2016 (in Appendix E of this IS/MND). NOISE-2: The car wash shall be equipped with entrance and exit doors which shall be closed during the drying cycle and which would provide a minimum 15 dB noise reduction. Alternatively, the car wash shall be equipped with entrance and exit doors which shall be closed during the drying cycle and which would provide a minimum 10 dB noise reduction, and car wash dryers shall be selected that are 5 dB lower in noise generation than that assumed in the Environmental Noise Assessment prepared by Bollard Acoustical Consultants on August 31, 2016. NOISE-3: Vacuum usage shall be limited to daytime hours (7:00 a.m. to 7:00 p.m.). Alternatively, a vacuum system shall be procured that is 10 dB lower in noise generation than that assumed in the Environmental Noise Assessment prepared by Bollard Acoustical Consultants on August 31, 2016.	The ODS will be responsible for project design and operation in accordance with the specified mitigation standards.	The CDD-B will ensure that approved building plans reflect the specified design standards.	1, NS Rationale: IS/MND Pages 3-47,48
b) Project Exposure to Groundborne Noise. There are no significant or potentially significant impacts in this issue area.			
c) Permanent Increase in Ambient Noise. There are no significant or potentially significant impacts in this issue area.			
d) Temporary or Periodic Increase in Ambient Noise. This is a potentially significant impact.			
NOISE-4: All construction equipment used at the project site shall be fitted with mufflers in accordance with manufacturers' specifications. Mufflers shall be installed on the equipment at all times on the construction site.	The contractor will be responsible for implementing noise controls.	The CD-B will be responsible for monitoring controls on contractor activities.	1, NS Rationale: IS/MND Pages 3-47 – 3-49
e, f) Project Exposure to Aircraft Operations Noise. There are no significant or potentially significant impacts in this issue area.			
13 POPULATION AND HOUSING			
a) Population Growth Inducement. There are no significant or potentially significant impacts in this issue area.			
b, c) Displacement of Housing or People. There are no significant or potentially significant impacts in this issue area.			

14 PUBLIC SERVICES/FACILITIES			
a) Fire Protection Impacts. This is a potentially significant impact.			
b) Police Protection Impacts. This is a potentially significant impact.			
SERV-1: The ODS shall coordinate with the Stockton Police Department as required to establish adequate security and visibility of the construction site.	The ODS will be responsible for consultation with the PD, and for establishment and maintenance of security measures.	The PD will be responsible for monitoring, compliance and identifying additional measures if needed.	1,NS Rationale: IS/MND Pages 3-51,52
c) School Impacts. There are no significant or potentially significant impacts in this issue area.			
d) Park Impacts. There are no significant or potentially significant impacts in this issue area.			
e) Other Public Facilities Impacts. There are no significant or potentially significant impacts in this issue area.			
15 RECREATION			
a,b) Recreational Facilities. There are no significant or potentially significant impacts in this issue area.			
16 TRANSPORTATION/CIRCULATION			
a) Consistency with Applicable Plans, Ordinances and Policies. There are no significant or potentially significant impacts in this issue area.			
b) Conflict With Congestion Management Program. There are no significant or potentially significant impacts in this issue area.			
c) Impact on Air Traffic Patterns. There are no significant or potentially significant impacts in this issue area.			
d, e) Traffic Hazards and Emergency Access. This is a potentially significant issue area.			
TRANS-1: The ODS shall install barriers on Eight Mile Road and Thornton Road along the commercial development frontage to prevent vehicles from making left turns to the commercial development. The type of barrier shall be subject to the City's review and approval.	The ODS will be responsible for design and construction of traffic barriers to City specifications.	The PW will be responsible for review and approval of street improvement plans and construction inspection.	1,NS Rationale: IS/MND 3-57,58
17 TRIBAL CULTURAL RESOURCES			

EXHIBIT 1

TCR-1: The ODS shall retain a qualified professional archaeologist and a representative of the Wilton Rancheria to monitor all ground disturbing activities that occur within the project site. The Wilton Rancheria Native American Monitor shall be compensated per Wilton Rancheria's Tribal Inspector/Monitoring Rates 2017 Schedule of Time and Material Rates sheet. TCR-2: In the event that construction encounters evidence of human burial or scattered human remains, construction in the vicinity of the encounter shall be immediately halted until the qualified archaeologist/Wilton Rancheria Cultural Resources Officer can evaluate the nature and significance of the find. The ODS shall immediately notify the County Coroner, the Stockton Community Development Department, and the Wilton Rancheria Cultural Resources Officer. Appropriate federal and State agencies also shall be notified, in accordance with the provisions in the Archaeological Resources Protection Act (16 USC 469), Native American Graves Protection and Repatriation Act (25 U.S.C. 3001-30013), California Health and Safety Code section 7050.5, and California Public Resources Code section 5097.9 <i>et al.</i> The ODS will be responsible for compliance with the requirements of CEQA as to human remains as defined in CEQA Guidelines Section 15064.5, with California Health and Safety Code Section 7050.5, and as directed by the County Coroner. If the human remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission, stating Wilton Rancheria has been working on the project, and they will notify and appoint a Most Likely Descendant. The Most Likely Descendant will work with the archaeologist to decide the proper treatment of the human remains and any associated funerary objects. TCR-3: In the event that any other cultural resources are encountered during project construction, all construction activities in the vicinity of the encounter shall be halted until a qualified archaeologist/Wilton Rancheria Cultural Resources Officer can examine the materials and make a determination of their significance. If the resource is determined to be significant, the archaeologist shall make recommendations, in consultation with Wilton Rancheria, as to further mitigation measures needed to reduce potential effects on the resource to a level that would be less than significant. The ODS will be responsible for retaining the archaeologist and Wilton Rancheria Tribal Monitor and implementing the recommendations of the archaeologist, including submittal of a written report to the Stockton Community Development Department and the Wilton Rancheria documenting the find and its treatment. TCR-4: Construction foremen and key members of trenching crews shall be instructed to be wary of the possibility of destruction of buried cultural resource materials. They shall be instructed to recognize signs of historic and prehistoric use and their responsibility to report any such finds, or suspected finds, immediately to the archaeology consultant/Wilton Rancheria Tribal Monitor so damage to such resources may be prevented.	The ODS will be responsible for retaining qualified archeological professionals and Native American monitors to meet the specified requirements.	The CDD will be responsible for overseeing and approving, monitoring and reporting activities.	1, NS Rationale: IS/MND Pages 3-59, 60,61
18 UTILITIES/ SERVICE SYSTEMS			
a, b, e) Effects on Wastewater Systems. This is a potentially significant issue area.			
UTIL-1: The ODS shall submit detailed subdivision improvement plans prior to project construction. The improvement plans shall show all on-site and off-site utilities necessary to provide sanitary sewer, water, and storm drainage service. The plans shall be designed in accordance with the City of Stockton's most recently adopted master plans for sanitary sewer, water, and storm drainage, and with the City's Standard Specifications and Plans.	The ODS will be responsible for preparation of subdivision, improvement plans to address utility specifications	The PW will be responsible for review and approval of subdivision improvement plans.	1, NS Rationale: IS/MND

EXHIBIT 1

		Pages
		3-62,63
b, d) Effects on Water Systems and Supply. There are no significant or potentially significant impacts in this issue area.		
c) Effects on Stormwater Systems. There are no significant or potentially significant impacts in this issue area.		
f, g) Solid Waste Services. There are no significant or potentially significant impacts in this issue area.		
18 MANDATORY FINDINGS OF SIGNIFICANCE		
a) Environmental Quality, Species Impacts, Historical Resources. There are no significant or potentially significant impacts in this issue area.		
b) Cumulative Impacts. There are no significant or potentially significant impacts in this issue area.		
c) Other Substantial Adverse Effects. There are no significant or potentially significant impacts in this issue area.		

3.0 MITIGATION REPORTING PROGRAM

This section describes the mitigation reporting program established for the above-described project pursuant to Section 21081.6 of the Public Resources Code. This program consists of the following steps:

- a. The Community Development Department shall utilize the above-listed Mitigation Implementation and Monitoring Program (Section I) as a checklist of mitigation measures to be implemented for the project. Implementation of the applicable measures shall be included as a condition of all applicable discretionary approvals, improvement plans and/or construction permits.
- b. The project applicant (i.e., owner, developer, originating City department, or other responsible agency, as applicable) and/or successors-in-interest shall file a written report with the Community Development Department, which will monitor the implementation of required mitigation measures. Similarly, any public agency having jurisdiction over natural resources affected by the project shall monitor and report upon the implementation of any mitigation measures incorporated at their request. Such written report(s) shall be submitted to the Community Development Department approximately once every twelve (12) months following approval of improvement plans and/or construction permits. The written report shall briefly state the status in implementing each adopted mitigation measure.
- c. The Community Development Department shall review the monitoring report(s) and determine whether there is any unusual and substantial delay in, or obstacle to, implementing the adopted mitigation measures. In reviewing the timeliness of implementation, the Community Development Department shall consider any timetable for the project and the required mitigation measures provided by the applicant and/or other responsible agency, as applicable. The Community Development Department and other City Departments may, to the extent deemed necessary, use scheduled inspections to monitor mitigation implementation.
- d. The result of the Community Development Department's review of the annual report(s) will be provided to the applicant in writing within thirty (30) calendar days after receipt of the annual report. If the Community Development Department determines that a required mitigation measure is not being properly implemented, it shall consult with the applicant and, if possible, agree upon additional actions to be taken to implement the mitigation measures.

The Community Development Department shall be limited to imposing reasonable actions as permitted by law that will implement the required mitigation measures. Any decision of the Senior Civil Engineer related to the annual monitoring report may be appealed to the City Planning Commission and/or City Council, as applicable, within ten (10) calendar days following said written determination.

- e. Such monitoring and reporting shall continue until the Community Development Department, in consultation with the other applicable City departments, determines that compliance has been fully achieved or, for ongoing measures (e.g., maintenance of facilities), determines that existing enforcement procedures relating to conditions of approval will provide adequate verification of compliance.

APPENDIX B
AIR QUALITY MODELING RESULTS

Thornton 8 Mile ARCO - Commercial - San Joaquin County, Annual

Thornton 8 Mile ARCO - Commercial
San Joaquin County, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	3.46	1000sqft	0.08	3,462.00	0
Convenience Market With Gas Pumps	16.00	Pump	0.05	3,799.00	0
User Defined Commercial	1.00	User Defined Unit	1.00	4,978.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	51
Climate Zone	2			Operational Year	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Thornton 8 Mile ARCO - Commercial - San Joaquin County, Annual

Project Characteristics -

Land Use - Used defined commercial is carwash; user defined unit is tunnel.

Construction Phase - No demolition. Construction period six months.

Grading - Total developable area.

Architectural Coating - Per SJVAPCD Rule 4601.

Vehicle Trips - Weekday trip rates from ITE Trip Generation, 10th edition. User defined Sat and Sun rates from observations at carwash in Sacramento.

Area Coating - Per SJVAPCD Rule 4601.

Energy Use - User defined commercial assumed to have same energy use as gas station/convenience store.

Water And Wastewater - Estimated water usage.

Solid Waste - Estimated solid waste generation.

Mobile Land Use Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	160.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	4.00	5.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	2.00	5.00
tblEnergyUse	LightingElect	0.00	5.91

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tblEnergyUse	NT24E	0.00	1.98
tblEnergyUse	NT24NG	0.00	0.36
tblEnergyUse	T24E	0.00	3.90
tblEnergyUse	T24NG	0.00	11.34
tblGrading	AcresOfGrading	1.88	2.00
tblGrading	AcresOfGrading	2.50	2.00
tblLandUse	LandUseSquareFeet	3,460.00	3,462.00
tblLandUse	LandUseSquareFeet	2,258.80	3,799.00
tblLandUse	LandUseSquareFeet	0.00	4,978.00
tblLandUse	LotAcreage	0.00	1.00
tblSolidWaste	SolidWasteGenerationRate	0.00	5.00
tblVehicleTrips	CC_TTP	0.00	80.20
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	0.00	0.80
tblVehicleTrips	DV_TP	0.00	21.00
tblVehicleTrips	PB_TP	0.00	65.00
tblVehicleTrips	PR_TP	0.00	14.00
tblVehicleTrips	ST_TR	0.00	718.00
tblVehicleTrips	SU_TR	0.00	718.00
tblVehicleTrips	WD_TR	542.60	230.52
tblVehicleTrips	WD_TR	496.12	470.95
tblVehicleTrips	WD_TR	0.00	503.00
tblWater	IndoorWaterUseRate	0.00	146,000.00

2.0 Emissions Summary

Thornton 8 Mile ARCO - Commercial - San Joaquin County, Annual

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	0.2032	1.3120	1.1324	1.9600e-003	0.0308	0.0690	0.0998	0.0148	0.0665	0.0813	0.0000	162.7803	162.7803	0.0305	0.0000	163.5431
Maximum	0.2032	1.3120	1.1324	1.9600e-003	0.0308	0.0690	0.0998	0.0148	0.0665	0.0813	0.0000	162.7803	162.7803	0.0305	0.0000	163.5431

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	0.2032	1.3120	1.1324	1.9600e-003	0.0162	0.0690	0.0852	7.3000e-003	0.0665	0.0737	0.0000	162.7801	162.7801	0.0305	0.0000	163.5429
Maximum	0.2032	1.3120	1.1324	1.9600e-003	0.0162	0.0690	0.0852	7.3000e-003	0.0665	0.0737	0.0000	162.7801	162.7801	0.0305	0.0000	163.5429

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	47.48	0.00	14.66	50.74	0.00	9.27	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2020	6-30-2020	0.4758	0.4758
2	7-1-2020	9-30-2020	0.5615	0.5615
		Highest	0.5615	0.5615

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	0.0507	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	3.9000e-004
Energy	2.6000e-003	0.0236	0.0198	1.4000e-004		1.7900e-003	1.7900e-003		1.7900e-003	1.7900e-003	0.0000	87.3704	87.3704	3.2800e-003	1.0500e-003	87.7648
Mobile	1.3867	8.3080	9.2052	0.0263	1.4444	0.0242	1.4686	0.3873	0.0227	0.4100	0.0000	2,427.1161	2,427.1161	0.2276	0.0000	2,432.8060
Waste						0.0000	0.0000		0.0000	0.0000	9.1062	0.0000	9.1062	0.5382	0.0000	22.5602
Water						0.0000	0.0000		0.0000	0.0000	0.4326	2.3191	2.7516	0.0445	1.0700e-003	4.1841
Total	1.4399	8.3316	9.2252	0.0264	1.4444	0.0260	1.4704	0.3873	0.0245	0.4118	9.5388	2,516.8059	2,526.3447	0.8136	2.1200e-003	2,547.3155

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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	0.0507	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	3.9000e-004
Energy	2.6000e-003	0.0236	0.0198	1.4000e-004		1.7900e-003	1.7900e-003		1.7900e-003	1.7900e-003	0.0000	87.3704	87.3704	3.2800e-003	1.0500e-003	87.7648
Mobile	1.3668	8.1167	8.7511	0.0242	1.2740	0.0224	1.2963	0.3416	0.0210	0.3626	0.0000	2,237.3451	2,237.3451	0.2224	0.0000	2,242.9040
Waste						0.0000	0.0000		0.0000	0.0000	2.2765	0.0000	2.2765	0.1345	0.0000	5.6400
Water						0.0000	0.0000		0.0000	0.0000	0.3461	1.8552	2.2013	0.0356	8.6000e-004	3.3473
Total	1.4200	8.1403	8.7711	0.0243	1.2740	0.0242	1.2981	0.3416	0.0228	0.3644	2.6226	2,326.5712	2,329.1938	0.3958	1.9100e-003	2,339.6565

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	1.38	2.30	4.92	7.84	11.80	6.97	11.72	11.80	6.98	11.51	72.51	7.56	7.80	51.35	9.91	8.15

3.0 Construction Detail

Construction Phase

Thornton 8 Mile ARCO - Commercial - San Joaquin County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2020	3/31/2020	5	0	
2	Site Preparation	Site Preparation	4/1/2020	4/7/2020	5	5	
3	Grading	Grading	4/15/2020	4/21/2020	5	5	
4	Building Construction	Building Construction	4/29/2020	12/8/2020	5	160	
5	Paving	Paving	10/14/2020	10/20/2020	5	5	
6	Architectural Coating	Architectural Coating	10/21/2020	10/27/2020	5	5	

Acres of Grading (Site Preparation Phase): 2

Acres of Grading (Grading Phase): 2

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 18,359; Non-Residential Outdoor: 6,120; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Thornton 8 Mile ARCO - Commercial - San Joaquin County, 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

[illegible]

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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	0.0000	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					0.0142	0.0000	0.0142	7.3600e-003	0.0000	7.3600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0700e-003	0.0459	0.0193	4.0000e-005		2.0500e-003	2.0500e-003		1.8900e-003	1.8900e-003	0.0000	3.7816	3.7816	1.2200e-003	0.0000	3.8122
Total	4.0700e-003	0.0459	0.0193	4.0000e-005	0.0142	2.0500e-003	0.0163	7.3600e-003	1.8900e-003	9.2500e-003	0.0000	3.7816	3.7816	1.2200e-003	0.0000	3.8122

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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	8.0000e-005	6.0000e-005	5.7000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1414
Total	8.0000e-005	6.0000e-005	5.7000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1414

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					6.4100e-003	0.0000	6.4100e-003	3.3100e-003	0.0000	3.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0700e-003	0.0459	0.0193	4.0000e-005		2.0500e-003	2.0500e-003		1.8900e-003	1.8900e-003	0.0000	3.7816	3.7816	1.2200e-003	0.0000	3.8122
Total	4.0700e-003	0.0459	0.0193	4.0000e-005	6.4100e-003	2.0500e-003	8.4600e-003	3.3100e-003	1.8900e-003	5.2000e-003	0.0000	3.7816	3.7816	1.2200e-003	0.0000	3.8122

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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	8.0000e-005	6.0000e-005	5.7000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1414
Total	8.0000e-005	6.0000e-005	5.7000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1414

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					0.0124	0.0000	0.0124	6.3200e-003	0.0000	6.3200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3700e-003	0.0377	0.0161	4.0000e-005		1.7100e-003	1.7100e-003		1.5700e-003	1.5700e-003	0.0000	3.0974	3.0974	1.0000e-003	0.0000	3.1224
Total	3.3700e-003	0.0377	0.0161	4.0000e-005	0.0124	1.7100e-003	0.0141	6.3200e-003	1.5700e-003	7.8900e-003	0.0000	3.0974	3.0974	1.0000e-003	0.0000	3.1224

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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	8.0000e-005	6.0000e-005	5.7000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1414
Total	8.0000e-005	6.0000e-005	5.7000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1414

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					5.5600e-003	0.0000	5.5600e-003	2.8400e-003	0.0000	2.8400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3700e-003	0.0377	0.0161	4.0000e-005		1.7100e-003	1.7100e-003		1.5700e-003	1.5700e-003	0.0000	3.0974	3.0974	1.0000e-003	0.0000	3.1224
Total	3.3700e-003	0.0377	0.0161	4.0000e-005	5.5600e-003	1.7100e-003	7.2700e-003	2.8400e-003	1.5700e-003	4.4100e-003	0.0000	3.0974	3.0974	1.0000e-003	0.0000	3.1224

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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	8.0000e-005	6.0000e-005	5.7000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1414
Total	8.0000e-005	6.0000e-005	5.7000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1413	0.1413	0.0000	0.0000	0.1414

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	0.1624	1.1831	1.0551	1.7600e-003		0.0637	0.0637		0.0615	0.0615	0.0000	145.2337	145.2337	0.0270	0.0000	145.9077
Total	0.1624	1.1831	1.0551	1.7600e-003		0.0637	0.0637		0.0615	0.0615	0.0000	145.2337	145.2337	0.0270	0.0000	145.9077

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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	6.5000e-004	0.0189	4.0300e-003	5.0000e-005	1.0600e-003	1.0000e-004	1.1600e-003	3.1000e-004	1.0000e-004	4.1000e-004	0.0000	4.2976	4.2976	2.7000e-004	0.0000	4.3043
Worker	1.2800e-003	9.2000e-004	9.0400e-003	3.0000e-005	2.5500e-003	2.0000e-005	2.5700e-003	6.8000e-004	2.0000e-005	6.9000e-004	0.0000	2.2605	2.2605	6.0000e-005	0.0000	2.2620
Total	1.9300e-003	0.0198	0.0131	8.0000e-005	3.6100e-003	1.2000e-004	3.7300e-003	9.9000e-004	1.2000e-004	1.1000e-003	0.0000	6.5581	6.5581	3.3000e-004	0.0000	6.5663

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	0.1624	1.1831	1.0551	1.7600e-003		0.0637	0.0637		0.0615	0.0615	0.0000	145.2335	145.2335	0.0270	0.0000	145.9076
Total	0.1624	1.1831	1.0551	1.7600e-003		0.0637	0.0637		0.0615	0.0615	0.0000	145.2335	145.2335	0.0270	0.0000	145.9076

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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	6.5000e-004	0.0189	4.0300e-003	5.0000e-005	1.0600e-003	1.0000e-004	1.1600e-003	3.1000e-004	1.0000e-004	4.1000e-004	0.0000	4.2976	4.2976	2.7000e-004	0.0000	4.3043
Worker	1.2800e-003	9.2000e-004	9.0400e-003	3.0000e-005	2.5500e-003	2.0000e-005	2.5700e-003	6.8000e-004	2.0000e-005	6.9000e-004	0.0000	2.2605	2.2605	6.0000e-005	0.0000	2.2620
Total	1.9300e-003	0.0198	0.0131	8.0000e-005	3.6100e-003	1.2000e-004	3.7300e-003	9.9000e-004	1.2000e-004	1.1000e-003	0.0000	6.5581	6.5581	3.3000e-004	0.0000	6.5663

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	2.1000e-003	0.0211	0.0222	3.0000e-005		1.1700e-003	1.1700e-003		1.0800e-003	1.0800e-003	0.0000	2.9414	2.9414	9.3000e-004	0.0000	2.9647
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.1000e-003	0.0211	0.0222	3.0000e-005		1.1700e-003	1.1700e-003		1.0800e-003	1.0800e-003	0.0000	2.9414	2.9414	9.3000e-004	0.0000	2.9647

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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	1.3000e-004	9.0000e-005	9.2000e-004	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2296	0.2296	1.0000e-005	0.0000	0.2297
Total	1.3000e-004	9.0000e-005	9.2000e-004	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2296	0.2296	1.0000e-005	0.0000	0.2297

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	2.1000e-003	0.0211	0.0222	3.0000e-005		1.1700e-003	1.1700e-003		1.0800e-003	1.0800e-003	0.0000	2.9414	2.9414	9.3000e-004	0.0000	2.9647
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.1000e-003	0.0211	0.0222	3.0000e-005		1.1700e-003	1.1700e-003		1.0800e-003	1.0800e-003	0.0000	2.9414	2.9414	9.3000e-004	0.0000	2.9647

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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	1.3000e-004	9.0000e-005	9.2000e-004	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2296	0.2296	1.0000e-005	0.0000	0.2297
Total	1.3000e-004	9.0000e-005	9.2000e-004	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2296	0.2296	1.0000e-005	0.0000	0.2297

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	0.0284					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1000e-004	4.2100e-003	4.5800e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6396
Total	0.0290	4.2100e-003	4.5800e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6396

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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	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0177	0.0177	0.0000	0.0000	0.0177
Total	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0177	0.0177	0.0000	0.0000	0.0177

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	0.0284					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1000e-004	4.2100e-003	4.5800e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6396
Total	0.0290	4.2100e-003	4.5800e-003	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6396

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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	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0177	0.0177	0.0000	0.0000	0.0177
Total	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0177	0.0177	0.0000	0.0000	0.0177

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

Increase Diversity

Increase Transit Accessibility

Improve Pedestrian Network

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.3668	8.1167	8.7511	0.0242	1.2740	0.0224	1.2963	0.3416	0.0210	0.3626	0.0000	2,237.345 1	2,237.345 1	0.2224	0.0000	2,242.904 0
Unmitigated	1.3867	8.3080	9.2052	0.0263	1.4444	0.0242	1.4686	0.3873	0.0227	0.4100	0.0000	2,427.116 1	2,427.116 1	0.2276	0.0000	2,432.806 0

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	3,688.32	3,271.52	2670.08	1,868,465	1,647,986
Fast Food Restaurant with Drive Thru	1,629.49	2,498.22	1877.81	1,671,570	1,474,325
User Defined Commercial	503.00	718.00	718.00	302,762	267,036
Total	5,820.81	6,487.74	5,265.89	3,842,797	3,389,347

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	29	21	50
User Defined Commercial	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.552050	0.036079	0.182449	0.124563	0.019215	0.004844	0.016098	0.055414	0.001187	0.001496	0.005121	0.000613	0.000871
Fast Food Restaurant with Drive Thru	0.552050	0.036079	0.182449	0.124563	0.019215	0.004844	0.016098	0.055414	0.001187	0.001496	0.005121	0.000613	0.000871
User Defined Commercial	0.552050	0.036079	0.182449	0.124563	0.019215	0.004844	0.016098	0.055414	0.001187	0.001496	0.005121	0.000613	0.000871

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	61.6775	61.6775	2.7900e-003	5.8000e-004	61.9191
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	61.6775	61.6775	2.7900e-003	5.8000e-004	61.9191
NaturalGas Mitigated	2.6000e-003	0.0236	0.0198	1.4000e-004		1.7900e-003	1.7900e-003		1.7900e-003	1.7900e-003	0.0000	25.6930	25.6930	4.9000e-004	4.7000e-004	25.8457
NaturalGas Unmitigated	2.6000e-003	0.0236	0.0198	1.4000e-004		1.7900e-003	1.7900e-003		1.7900e-003	1.7900e-003	0.0000	25.6930	25.6930	4.9000e-004	4.7000e-004	25.8457

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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	44448.3	2.4000e-004	2.1800e-003	1.8300e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.3719	2.3719	5.0000e-005	4.0000e-005	2.3860
Fast Food Restaurant with Drive Thru	378777	2.0400e-003	0.0186	0.0156	1.1000e-004		1.4100e-003	1.4100e-003		1.4100e-003	1.4100e-003	0.0000	20.2130	20.2130	3.9000e-004	3.7000e-004	20.3331
User Defined Commercial	58242.6	3.1000e-004	2.8600e-003	2.4000e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	3.1081	3.1081	6.0000e-005	6.0000e-005	3.1265
Total		2.5900e-003	0.0236	0.0198	1.4000e-004		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	25.6930	25.6930	5.0000e-004	4.7000e-004	25.8457

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	44448.3	2.4000e-004	2.1800e-003	1.8300e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.3719	2.3719	5.0000e-005	4.0000e-005	2.3860
Fast Food Restaurant with Drive Thru	378777	2.0400e-003	0.0186	0.0156	1.1000e-004		1.4100e-003	1.4100e-003		1.4100e-003	1.4100e-003	0.0000	20.2130	20.2130	3.9000e-004	3.7000e-004	20.3331
User Defined Commercial	58242.6	3.1000e-004	2.8600e-003	2.4000e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	3.1081	3.1081	6.0000e-005	6.0000e-005	3.1265
Total		2.5900e-003	0.0236	0.0198	1.4000e-004		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	25.6930	25.6930	5.0000e-004	4.7000e-004	25.8457

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	44790.2	13.0300	5.9000e-004	1.2000e-004	13.0810
Fast Food Restaurant with Drive Thru	108534	31.5737	1.4300e-003	3.0000e-004	31.6974
User Defined Commercial	58690.6	17.0738	7.7000e-004	1.6000e-004	17.1407
Total		61.6775	2.7900e-003	5.8000e-004	61.9191

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	44790.2	13.0300	5.9000e-004	1.2000e-004	13.0810
Fast Food Restaurant with Drive Thru	108534	31.5737	1.4300e-003	3.0000e-004	31.6974
User Defined Commercial	58690.6	17.0738	7.7000e-004	1.6000e-004	17.1407
Total		61.6775	2.7900e-003	5.8000e-004	61.9191

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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	0.0507	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	3.9000e-004
Unmitigated	0.0507	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	3.9000e-004

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6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.8400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0478					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	3.9000e-004
Total	0.0507	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	3.9000e-004

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	2.8400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0478					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	3.9000e-004
Total	0.0507	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.7000e-004	3.7000e-004	0.0000	0.0000	3.9000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.2013	0.0356	8.6000e-004	3.3473
Unmitigated	2.7516	0.0445	1.0700e-003	4.1841

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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	0.167315 / 0.102548	0.4209	5.4700e-003	1.3000e-004	0.5970
Fast Food Restaurant with Drive Thru	1.05023 / 0.0670357	2.0546	0.0343	8.2000e-004	3.1577
User Defined Commercial	0.146 / 0	0.2761	4.7700e-003	1.1000e-004	0.4295
Total		2.7516	0.0445	1.0600e-003	4.1841

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.133852 / 0.0820383	0.3367	4.3700e-003	1.1000e-004	0.4776
Fast Food Restaurant with Drive Thru	0.840181 / 0.0536286	1.6437	0.0274	6.6000e-004	2.5262
User Defined Commercial	0.1168 / 0	0.2209	3.8100e-003	9.0000e-005	0.3436
Total		2.2013	0.0356	8.6000e-004	3.3473

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.2765	0.1345	0.0000	5.6400
Unmitigated	9.1062	0.5382	0.0000	22.5602

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8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	39.86	8.0912	0.4782	0.0000	20.0457
User Defined Commercial	5	1.0150	0.0600	0.0000	2.5145
Total		9.1062	0.5382	0.0000	22.5602

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	9.965	2.0228	0.1195	0.0000	5.0114
User Defined Commercial	1.25	0.2537	0.0150	0.0000	0.6286
Total		2.2765	0.1345	0.0000	5.6400

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

APPENDIX C
REVISED NOISE STUDY

Environmental Noise Assessment

ARCO AM/PM Car Wash at West Eight Mile Road & Thornton Road

Stockton, California

BAC Job # 2016-148

Prepared For:

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Prepared By:

Bollard Acoustical Consultants, Inc.



Paul Bollard, President

November 7, 2019



Introduction

The proposed project consists of the construction of a new ARCO AM/PM minimart, gas station, and car wash located at the southeast corner of West Eight Mile Road and Thornton Road in the City of Stockton, California. Existing land uses in the project vicinity include residential uses to the west and southeast, commercial/office zoning to the south, and agricultural zoning to the north. The project site area with identified land uses is shown on Figure 1. Figure 2 provides the proposed project site plan.

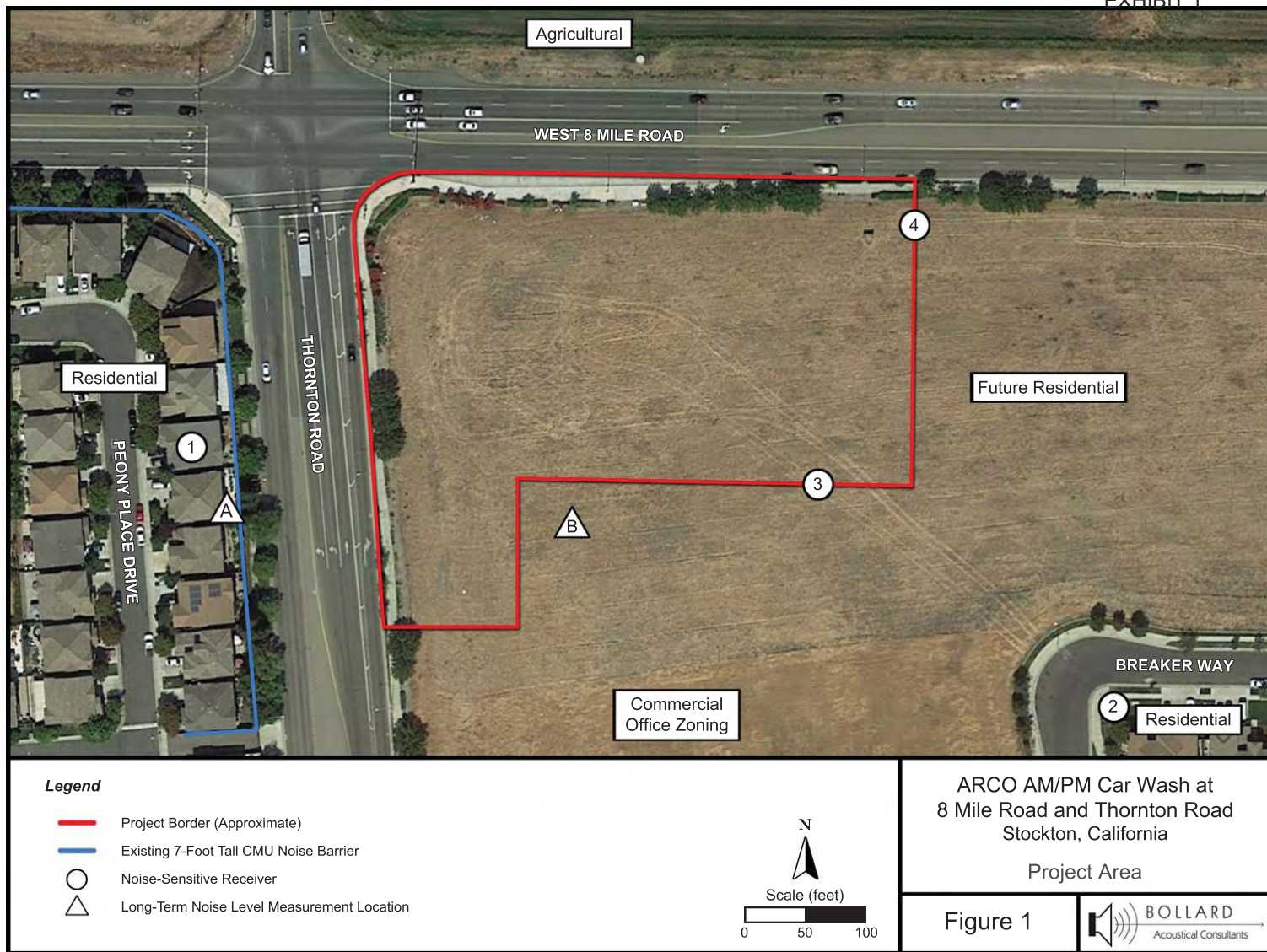
Due to the proximity of the proposed project to the existing residences, as well as proximity to future residential uses to the immediate east and south of the project site, the project applicant has retained Bollard Acoustical Consultants, Inc. (BAC) to prepare an acoustical analysis for this project. The purposes of this analysis are to quantify noise levels associated with the proposed project, to assess the state of compliance of those noise levels with applicable noise standards, and if necessary, to recommend measures to reduce those noise levels to acceptable limits at the nearest noise sensitive uses.

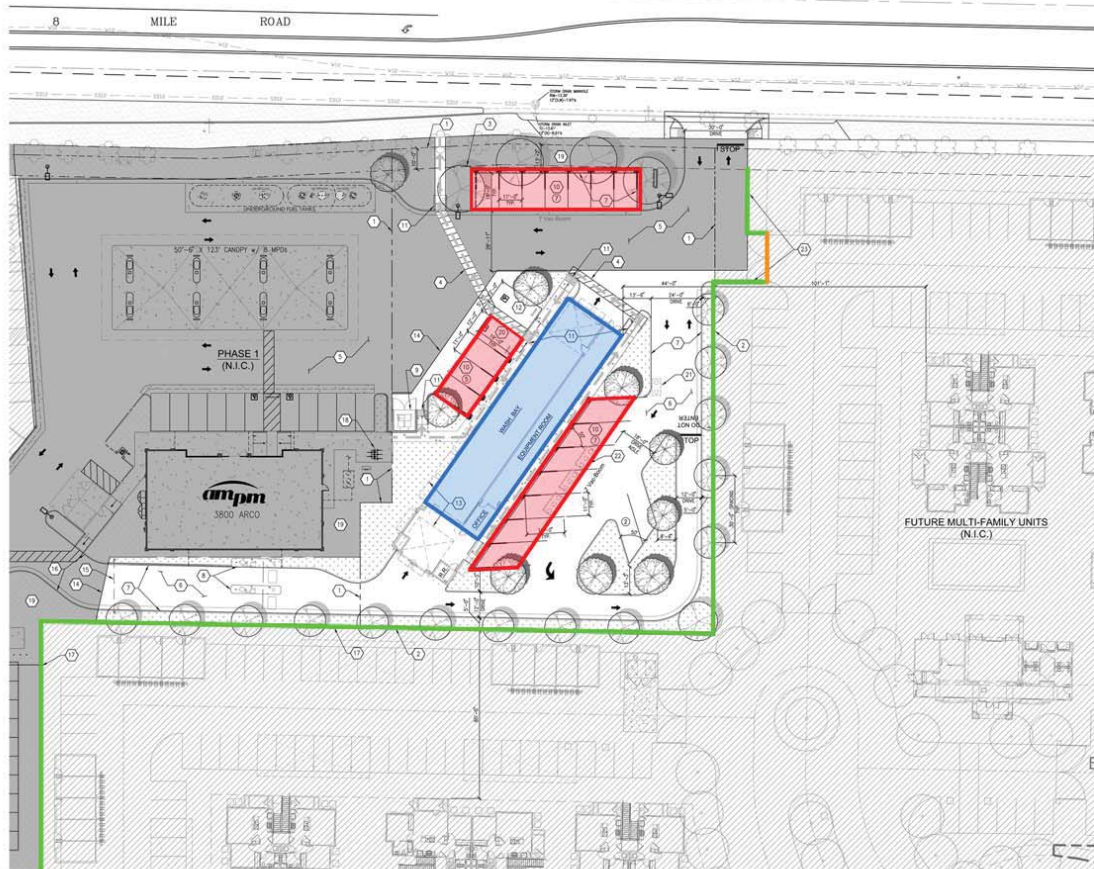
Background on Noise and Acoustical Terminology

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz).

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure), as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in decibel levels correspond closely to human perception of relative loudness.

The perceived loudness of sound is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighing the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels. Please see Appendix A for definitions of acoustical terminology used in this report. Appendix B illustrates common noise levels associated with various sources.



**Legend**

- Proposed Car Wash Tunnel
- Proposed Vacuum Stalls
- Proposed 8-Foot Tall Noise Barrier
- Proposed Emergency Vehicle Access Gate

ARCO AM/PM Car Wash at
8 Mile Road and Thornton Road
Stockton, California

Project Site Plan

Figure 2



Community noise is commonly described in terms of the “ambient” noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}) over a given time period (usually one hour). The L_{eq} is the foundation of the Day-Night Average Level noise descriptor, L_{dn} , and shows very good correlation with community response to noise.

Criteria for Acceptable Noise Exposure

City of Stockton General Plan

The Envision Stockton 2040 General Plan contains noise policies and actions pertinent to the proposed project. Specifically, Action SAF-2.5C requires noise produced by commercial uses to not exceed 75 dB L_{dn} /CNEL at the nearest property line.

City of Stockton Municipal Code

Part II of Table 3-1 from Section 16.60.040 of the City of Stockton Municipal Code establishes acceptable noise level limits for non-transportation (stationary) noise sources applicable at the property line of occupied noise-sensitive land uses. That table is reproduced below as Table 1.

Table 1 Maximum Allowable Noise Exposure for Stationary Noise Sources City of Stockton Municipal Code		
Noise Level Descriptor	Daytime 7 a.m. to 10 p.m.	Nighttime 10 p.m. to 7 a.m.
Hourly L_{eq} , dB	55	45
Maximum Level (L_{max}), dB	75	65
1. The noise standard shall be applied at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards shall be applied on the receiving side of noise barriers or other property line noise mitigation measures. 2. Each of the noise level standards specified shall be decreased by five (5) for impulse noise, simple tone noise, or noise consisting primarily of speech or music. Source: Section 16.60.040, Table 3-1, Part II, of the City of Stockton Municipal Code.		

Noise Standards Applied to the Project

Pursuant to Action SAF-2.5C of the Envision Stockton 2040 General Plan, project-related noise levels were assessed relative to the property line 75 dB L_{dn} /CNEL noise level standard. As indicated on Figure 2, the proposed noise-generating sources (i.e. car wash drying system and vacuum stalls) are located on the east side of the project site. Therefore, the 75 dB L_{dn} /CNEL noise level standard was conservatively assessed at the eastern property line where the highest project-related noise-generation would be expected. Because the L_{dn} and CNEL noise metrics are typically within close agreement (1 dB), this assessment focuses on compliance with the L_{dn} noise metric.

As indicated on Figure 1, the nearest existing noise-sensitive land uses are single-family residences to the west and to the southeast, across Thornton Road and Breaker Way, respectively. The project site is also bordered to the south and east by a future noise-sensitive land use zoned for multi-family residential. According to the project applicant, the proposed car wash hours of operation would be 7 AM to 9 PM. Therefore, the City of Stockton Municipal Code daytime noise level standards 55 dB L_{eq} and 75 dB L_{max} were applied at the property line of these noise-sensitive land uses.

The land use to the immediate south and east is currently undeveloped and zoned for multi-family residential (MFR). As shown on Figure 2, a shared driveway is proposed along the northeast corner of the project site. The shared driveway is necessary to provide emergency vehicle access (EVA) for the future MFR development. Due to the presence of the shared driveway, a noise barrier cannot be located along the property line where the City of Stockton noise level standards are applied. Based on email correspondence received from City staff (Kevin Colin, Planning Manager – October 10, 2019), in this instance where a shared driveway is required for EVA, the Table 1 noise standards may be applied on the opposite side of the drive aisle rather than at the property line. In order to provide screening of the project noise sources at the adjacent MFR property despite the required EVA access, the proposed noise barrier extends into the MFR property and is located on the opposite side of the drive aisle. The location of the barrier is shown on Figure 2.

Existing Ambient Noise Environment

The noise environment in the vicinity of the nearest noise-sensitive receivers is defined primarily by traffic noise from the local roadways. To generally quantify background noise levels at the nearest noise-sensitive locations, Bollard Acoustical Consultants, Inc. conducted two long-term (24-hour) ambient noise level measurements in the project vicinity from August 18 to 21, 2016. Noise level measurements at Site A, representative of the existing ambient noise exposure at the residences to the west, were conducted in the backyard of 10928 Peony Place Drive. Noise level measurements at Site B were intended to be representative of the existing ambient noise exposure at the residentially zoned parcel to the south and east. The noise measurement locations are depicted on Figure 1 and a summary of the measurement results is provided in Table 2. Detailed noise measurement results can be seen numerically and graphically in Appendix C and D, respectively.

Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used to complete the noise level measurement survey. The meters were calibrated before use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

Table 2 Summary of Continuous Hourly Ambient Noise Monitoring ARCO AM/PM Car Wash at West Eight Mile Road & Thornton Road – Stockton, California								
Site ¹	Date	L _{dn} (dB)	Average Measured Hourly Noise Levels ² (dB)					
			Daytime (7 a.m. to 10 p.m.)			Nighttime (10 p.m. to 7 a.m.)		
			L _{eq}	L ₅₀	L _{max}	L _{eq}	L ₅₀	L _{max}
A	8/18/16	60	57	55	75	52	49	69
	8/19/16	61	57	55	78	53	51	69
	8/20/16	64	58	57	76	56	54	74
	8/21/16	61	57	55	76	54	54	69
B	8/18/16	61	56	55	72	54	52	68
	8/19/16	62	57	55	76	55	53	70
	8/20/16	63	57	55	74	54	51	72
	8/21/16	61	56	54	74	53	50	69
Notes: ¹ Noise monitoring locations identified on Figure 1. ² Detailed noise monitoring results are provided in Appendices C and D. Source: Bollard Acoustical Consultants, Inc. (2019)								

The background noise level data provided in Table 2 indicate that noise levels measured at the nearest noise-sensitive receiver locations are in close agreement with the daytime and nighttime exterior noise level standards for residential uses shown in Table 1. As a result, compliance with the Table 1 noise standards will ensure that the project does not result in a significant noise level increase in the community.

Evaluation of Car Wash Noise Levels

Based on the experience of Bollard Acoustical Consultants, noise levels generated by car wash facilities are primarily due to the drying portion of the operation. According to the project applicant, the proposed car wash will utilize the Proto-Vest, Inc. WindShear 30 HP Drying System equipped with the Silencer Package. The manufacturer's specifications, provided as Appendix E, indicate that the reference sound level 50 feet from the exit is 63 dB. Figure 2 illustrates the location of the proposed car wash tunnel.

When the car wash is operating at maximum capacity, the dryers are anticipated to operate in excess of 45 minutes during that hour. The reference noise levels provided in Appendix E represent maximum (L_{max}) dryer noise levels. Because the dryers could potentially operate in excess of 45 minutes during any hour, average (L_{eq}) noise levels would essentially be equivalent to maximum noise levels. Assuming standard spherical spreading loss (-6 dB per doubling of distance), car wash dryer noise exposure at the nearest noise-sensitive locations was calculated and the results of those calculations are presented below in Table 3. The predicted noise levels shown in Table 3 take into consideration the shielding provided by the existing 7-foot tall noise barrier to the west and the proposed 8-foot tall noise barrier along the eastern and southern

project boundaries. The existing and proposed noise barriers are illustrated on Figures 1 and 2, respectively.

Table 3 Predicted Car Wash Noise Levels ARCO AM/PM Car Wash at West Eight Mile Road & Thornton Road – Stockton, California			
Receiver ID	Description	Distance (feet)	Predicted Noise Levels, Leq/Lmax (dB)
1	Existing SFR – Property Line ¹	420	38
2	Existing SFR – Property Line ²	350	38
3	Future MFR – Southern Property Line ³	50	54
4	Future MFR – Eastern Property Line ⁴	95	49
Notes: ¹ A -7 dB offset was applied at the single-family residences represented by Receiver 1 to account for the shielding provided by the existing 7-foot tall CMU wall. The location of the existing CMU wall is illustrated on Figure 1. ² A -8 dB offset was applied at the single-family residences represented by Receiver 2 to account for the shielding provided by the proposed 8-foot tall CMU wall. The location of the proposed wall is illustrated on Figure 2. ³ A -8 dB offset was applied at the future multi-family development represented by Receiver 3 to account for the shielding provided by the proposed 8-foot tall CMU wall. The location of the proposed wall is illustrated on Figure 2. ⁴ Car wash noise levels were assessed on the opposite side of the shared drive aisle. A -8 dB offset was applied at the future multi-family development represented by Receiver 4 to account for the shielding provided by the proposed 8-foot tall CMU wall. The location of the proposed wall is illustrated on Figure 2. Source: Bollard Acoustical Consultants, Inc. (2019)			

Assessment Relative to City of Stockton Municipal Code at Existing Single-Family Residences

The Table 3 data indicate that predicted car wash noise levels at the nearest existing single-family residential property lines would be 38 dB Leq/Lmax, satisfying the City of Stockton Municipal Code daytime noise level standards of 55 dB Leq and 75 dB Lmax. Furthermore, predicted car wash noise levels would be well below measured daytime ambient noise levels shown in Table 2. As a result, no further consideration of additional noise mitigation measures would be warranted for this aspect of the project.

Assessment Relative to City of Stockton Municipal Code at Future Multi-Family Residences

The Table 3 data indicate that predicted car wash noise levels at the property lines of the future multi-family residential land use would be 49-54 dB Leq/Lmax, satisfying the City of Stockton Municipal Code daytime noise level standards of 55 dB Leq and 75 dB Lmax. Furthermore, predicted car wash noise levels would be below measured daytime ambient noise levels shown in Table 2. As a result, no further consideration of additional noise mitigation measures would be warranted for this aspect of the project.

Assessment Relative to City of Stockton General Plan

The City of Stockton General Plan applies a 75 dB L_{dn} noise level standard at the property line of proposed commercial land uses. As indicated previously, the highest project-related noise-generation would be expected at the northeast corner of the project site where the car wash drying assembly and vacuum stalls would be located. Because the L_{dn} (Day/Night Noise Level) noise level metric is a 24 hour average, the noise source hours of operation and duration of operation during each hour must be known. The project applicant has indicated that the car wash hours of operation would be 7 AM to 9 PM. Given a reference noise level of 63 dB at 50 feet, a setback of 95 feet from the car wash exit to the opposite side of the drive aisle along the northeastern property line, a worst-case dryer operation of 45 minutes per hour from 7 AM to 9 PM, the resulting L_{dn} was calculated to be 55 dB. Car wash noise levels would be further reduced by the proposed 8-foot tall noise barrier on the east side of the drive aisle (-8 dB). The resulting car wash noise level of 47 dB L_{dn} would satisfy the commercial property line noise level standard of 75 dB L_{dn} by a wide margin. As a result, no further consideration of additional noise mitigation measures would be warranted for car wash generated noise relative to the General Plan 75 dB L_{dn} noise level standard.

Evaluation of Vacuum Noise Levels

The project applicant proposes the installation of an 18-stall central vacuum piping system offered by Sonny's Car Wash. The noise-generating turbine producer will be contained with the equipment room adjacent to the car wash tunnel. Based on BAC's experience and field observations with similarly configured car washes, noise impacts due to the operation of the vacuum turbine producer are not expected due to the significant transmission loss provided by the equipment room building facade. As a result, no further analysis would be warranted for the vacuum turbine producer.

The 18 vacuum stalls would be distributed into three areas on the project site as shown on Figure 2. Based on noise level measurements conducted by BAC staff at recently completed car wash projects with central vacuum piping systems, the primary noise-generating aspects of such systems are use of the suction nozzles located at each of the stalls. BAC file data indicate that a distance of 50 feet from the center of a lot with 12-18 vacuum stalls, overall vacuum noise levels are approximately 65 dB.

Because the vacuums were assumed to be in continuous operation for a full hour, hourly average (L_{eq}) and maximum (L_{max}) noise levels would be equivalent. Assuming standard spherical spreading loss (-6 dB per doubling of distance), vacuum noise exposure at the nearest noise-sensitive locations was calculated and the results of those calculations are presented below in Table 4. Distances were scaled from the center of the vacuum stall area nearest to the noise-sensitive property lines. The predicted noise levels shown in Table 4 take into consideration the shielding provided by the existing 7-foot tall noise barrier to the west and the proposed 8-foot tall noise barrier along the eastern and southern project boundaries. The existing and proposed noise barriers are illustrated on Figures 1 and 2, respectively.

Table 4 Predicted Vacuum Noise Levels ARCO AM/PM Car Wash at West Eight Mile Road & Thornton Road – Stockton, California			
Receiver ID	Description	Distance (feet)	Predicted Noise Levels, Leq/Lmax (dB)^{1,2}
1	Existing SFR – Property Line ¹	450	39
2	Existing SFR – Property Line ²	350	40
3	Future MFR – Southern Property Line ³	70	54
4	Future MFR – Eastern Property Line ⁴	90	52
Notes: ¹ A -7 dB offset was applied at the single-family residences represented by Receiver 1 to account for the shielding provided by the existing 7-foot tall CMU wall. The location of the existing CMU wall is illustrated on Figure 1. ² A -8 dB offset was applied at the single-family residences represented by Receiver 2 to account for the shielding provided by the proposed 8-foot tall CMU wall. The location of the proposed wall is illustrated on Figure 2. ³ A -8 dB offset was applied at the future multi-family development represented by Receiver 3 to account for the shielding provided by the proposed 8-foot tall CMU wall. The location of the proposed wall is illustrated on Figure 2. ⁴ Vacuum noise levels were assessed on the opposite side of the shared drive aisle. A -8 dB offset was applied at the future multi-family development represented by Receiver 4 to account for the shielding provided by the proposed 8-foot tall CMU wall. The location of the proposed wall is illustrated on Figure 2. Source: Bollard Acoustical Consultants, Inc. (2019)			

Assessment Relative to City of Stockton Municipal Code at Existing Single-Family Residences

The Table 4 data indicate that predicted vacuum noise levels at the nearest existing single-family residential property lines would be 39-40 dB Leq/Lmax, satisfying the City of Stockton Municipal Code daytime noise level standards of 55 dB Leq and 75 dB Lmax. Furthermore, predicted vacuum noise levels would be well below measured daytime ambient noise levels shown in Table 2. As a result, no further consideration of additional noise mitigation measures would be warranted for this aspect of the project.

Assessment Relative to City of Stockton Municipal Code at Future Multi-Family Residences

The Table 4 data indicate that predicted vacuum noise levels at the property lines of the future multi-family residential land use would be 52-54 dB Leq/Lmax, satisfying the City of Stockton Municipal Code daytime noise level standards of 55 dB Leq and 75 dB Lmax. Furthermore, predicted vacuum noise levels would be below measured daytime ambient noise levels shown in Table 2. As a result, no further consideration of additional noise mitigation measures would be warranted for this aspect of the project.

Assessment Relative to City of Stockton General Plan

The City of Stockton General Plan applies a 75 dB Ldn noise level standard at the property line of proposed commercial land uses. As indicated previously, the highest project-related noise-generation would be expected at the northeast corner of the project site where the car wash drying assembly and vacuum stalls would be located. Because the Ldn (Day/Night Noise Level) noise

level metric is a 24 hour average, the noise source hours of operation and duration of operation during each hour must be known. Given a vacuum reference noise level of 65 dB at 50 feet, a setback of 90 feet from the center of the northernmost vacuum area to the opposite side of the drive aisle along the northeastern property line, a worst-case vacuum stall operation of 60 minutes per hour from 7 AM to 9 PM, the resulting L_{dn} was calculated to be 58 dB. Vacuum noise levels would be further reduced by the proposed 8-foot tall noise barrier on the east side of the drive aisle (-8 dB). The resulting vacuum noise level of 50 dB L_{dn} would satisfy the commercial property line noise level standard of 75 dB L_{dn} by a wide margin. As a result, no further consideration of additional noise mitigation measures would be warranted for vacuum generated noise relative to the General Plan 75 dB L_{dn} noise level standard.

Conclusions

Noise levels generated by the proposed ARCO AM/PM Car Wash at West Eight Mile Road & Thornton Road are predicted to satisfy the applicable City of Stockton noise level criteria at the nearest noise-sensitive property lines. The proposed 8-foot tall noise barrier along the southern and eastern property lines is predicted to provide the required noise attenuation of project noise sources. At the northeast corner of the project site, however, the emergency vehicle access allows for an opening in the proposed solid noise barrier. This opening would create a significant acoustic leak in the continuous solid noise barrier. The following recommendations for the emergency vehicle access gate are provided to ensure compliance with the City of Stockton noise level criteria:

Emergency Vehicle Access Gate Construction Requirements

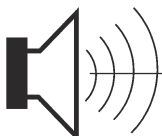
1. To the extent feasible, the gate should have no visible gaps. As an example, a typical wrought iron fence would not be acceptable.
2. To the extent feasible, the gap along the bottom of the gate should be minimized.
3. The gate should be constructed of a solid material and meet one of the two following requirements:
 - a. Minimum density of 4 lbs per square foot
 - b. Minimum STC rating of 25

These conclusions are based on the site plan shown in Figure 2, the manufacturers' noise level data, and on the assumptions stated herein. Deviations from these plans or data could cause noise levels to differ from those predicted in this assessment. Please contact BAC at (916) 663-0500 or paulb@bacnoise.com with any questions or requests for additional information.

Appendix A

Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
L_{dn}	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
L_{eq}	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Masking	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.
Noise	Unwanted sound.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the Maximum level, which is the highest RMS level.
RT₆₀	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 sabin.
SEL	A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy of the event into a 1-s time period.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.



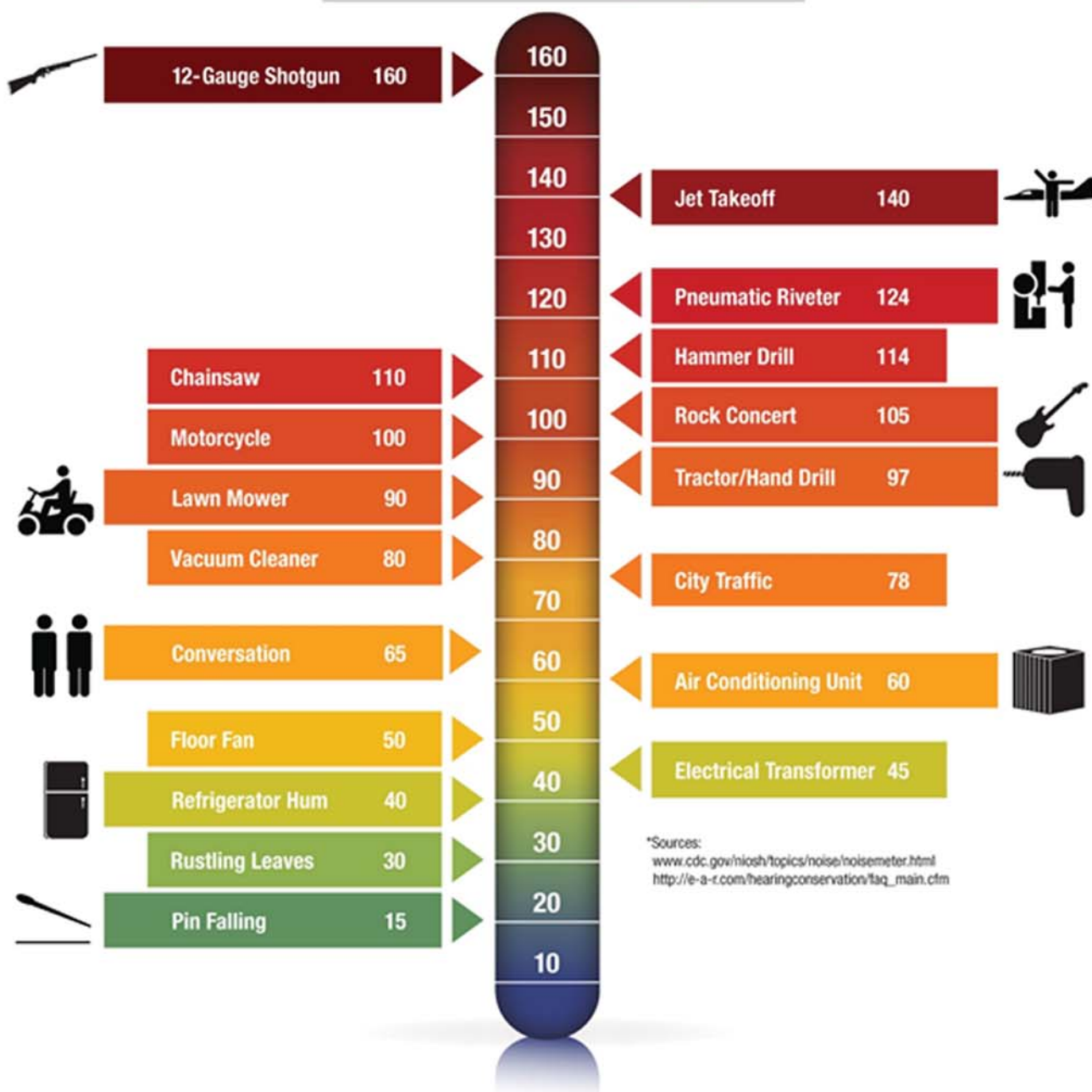
BOLLARD

Acoustical Consultants

Appendix B

Typical A-Weighted Sound Levels of Common Noise Sources

Decibel Scale (dBA)*



Appendix C-1
Ambient Noise Monitoring Results - Site A
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Thursday, August 18, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	52	68	43	58	55	52	49	45
1:00 AM	50	66	40	57	53	51	48	45
2:00 AM	49	67	39	56	52	48	44	42
3:00 AM	50	67	40	57	54	50	47	42
4:00 AM	51	66	41	58	56	52	48	44
5:00 AM	54	74	44	59	57	54	51	46
6:00 AM	56	72	44	63	60	57	54	47
7:00 AM	58	73	46	64	61	59	56	50
8:00 AM	57	79	44	63	60	57	55	49
9:00 AM	55	69	46	62	59	56	53	48
10:00 AM	56	72	46	62	59	57	54	50
11:00 AM	57	78	45	63	59	56	53	49
12:00 PM	55	70	45	61	58	56	54	49
1:00 PM	56	79	46	61	59	57	54	51
2:00 PM	57	75	48	64	61	58	56	52
3:00 PM	57	72	48	63	60	58	56	52
4:00 PM	57	69	49	62	60	58	56	53
5:00 PM	58	77	51	63	60	59	57	53
6:00 PM	58	77	44	63	60	58	56	52
7:00 PM	57	76	49	63	60	58	56	52
8:00 PM	60	87	49	63	59	57	55	51
9:00 PM	55	75	48	60	58	56	53	50
10:00 PM	53	69	45	59	57	54	51	47
11:00 PM	53	75	46	59	56	52	50	48

Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	57	75	47	62	60	57	55	51
High	60	87	51	64	61	59	57	53
Low	55	69	39	60	58	56	53	48

Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	52	69	42	58	56	52	49	45
High	56	75	46	63	60	57	54	48
Low	49	66	39	56	52	48	44	42

Ldn:	60
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% Daytime Energy:	82%	% Nighttime Energy:	18%
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Appendix C-2
Ambient Noise Monitoring Results - Site A
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Friday, August 19, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	51	66	45	58	55	51	49	47
1:00 AM	51	64	46	56	54	51	50	48
2:00 AM	50	68	46	56	53	51	49	47
3:00 AM	51	64	45	57	54	51	49	47
4:00 AM	52	66	45	58	55	52	50	47
5:00 AM	53	65	47	59	56	54	52	49
6:00 AM	55	72	46	61	59	56	54	49
7:00 AM	57	74	46	63	60	58	56	51
8:00 AM	56	72	46	62	59	57	54	49
9:00 AM	56	86	47	61	58	55	53	49
10:00 AM	55	77	47	61	58	56	53	49
11:00 AM	56	76	47	61	58	56	53	50
12:00 PM	55	74	48	61	58	56	53	50
1:00 PM	56	76	47	61	58	56	54	50
2:00 PM	60	85	48	65	59	57	55	51
3:00 PM	61	89	45	64	61	58	56	52
4:00 PM	58	75	44	63	60	59	56	52
5:00 PM	61	86	48	65	61	58	56	52
6:00 PM	57	74	47	64	60	58	56	51
7:00 PM	57	74	47	63	60	57	55	50
8:00 PM	56	72	46	62	59	56	54	49
9:00 PM	56	76	44	62	58	56	53	48
10:00 PM	56	84	46	61	58	55	53	48
11:00 PM	56	75	45	64	59	56	53	49

Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	57	78	46	62	59	57	55	50
High	61	89	48	65	61	59	56	52
Low	55	72	44	61	58	55	53	48

Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	53	69	46	59	56	53	51	48
High	56	84	47	64	59	56	54	49
Low	50	64	45	56	53	51	49	47

Ldn:	61
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% Daytime Energy:	81%	% Nighttime Energy:	19%
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Appendix C-3
Ambient Noise Monitoring Results - Site A
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Saturday, August 20, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	58	72	48	64	62	59	57	53
1:00 AM	55	67	50	60	58	56	54	52
2:00 AM	55	66	48	60	58	55	53	50
3:00 AM	55	70	48	60	57	55	53	51
4:00 AM	53	67	48	57	56	54	52	50
5:00 AM	53	62	48	57	56	54	52	49
6:00 AM	60	89	50	61	58	55	54	51
7:00 AM	58	81	50	62	60	58	56	53
8:00 AM	58	76	49	64	60	58	56	52
9:00 AM	57	73	50	62	60	58	56	54
10:00 AM	58	79	51	62	60	58	57	54
11:00 AM	58	72	51	63	61	59	58	55
12:00 PM	58	72	51	62	60	58	57	55
1:00 PM	58	75	50	63	61	59	57	54
2:00 PM	63	90	51	64	61	59	57	54
3:00 PM	57	70	50	62	60	58	57	54
4:00 PM	58	74	51	63	60	59	58	55
5:00 PM	61	87	52	63	61	59	58	56
6:00 PM	59	77	51	64	61	59	58	55
7:00 PM	57	73	49	63	60	58	56	53
8:00 PM	56	72	48	61	58	56	55	52
9:00 PM	57	76	50	61	59	57	55	53
10:00 PM	60	91	48	61	58	56	54	50
11:00 PM	56	81	47	61	58	56	54	50

Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	58	76	50	63	60	58	57	54
High	63	90	52	64	61	59	58	56
Low	56	70	47	61	58	56	55	52

Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	56	74	48	60	58	55	54	51
High	60	91	50	64	62	59	57	53
Low	53	62	47	57	56	54	52	49

Ldn:	64
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% Daytime Energy:	71%	% Nighttime Energy:	29%
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Appendix C-4
Ambient Noise Monitoring Results - Site A
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Sunday, August 21, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	55	71	48	59	57	56	54	51
1:00 AM	55	73	48	59	57	55	54	50
2:00 AM	53	69	47	57	55	54	52	50
3:00 AM	54	65	48	58	57	55	54	50
4:00 AM	55	65	49	58	57	55	54	52
5:00 AM	53	63	49	57	55	54	53	51
6:00 AM	55	66	49	59	57	55	54	52
7:00 AM	57	84	49	60	57	56	55	52
8:00 AM	55	72	49	59	57	55	54	51
9:00 AM	55	71	49	59	57	55	54	51
10:00 AM	56	71	51	61	59	57	56	53
11:00 AM	57	71	52	61	59	58	57	54
12:00 PM	58	70	53	62	60	58	57	55
1:00 PM	58	71	51	63	60	59	57	54
2:00 PM	57	78	50	63	59	57	56	53
3:00 PM	56	74	49	62	58	56	55	52
4:00 PM	58	84	50	62	58	56	55	52
5:00 PM	56	75	50	61	59	57	55	52
6:00 PM	61	89	49	63	59	57	55	52
7:00 PM	59	84	45	65	60	58	55	51
8:00 PM	56	75	45	61	59	57	54	50
9:00 PM	55	72	46	61	58	56	53	49
10:00 PM	55	71	47	60	58	55	53	49
11:00 PM	56	77	44	60	58	56	54	50

Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	57	76	49	61	59	57	55	52
High	61	89	53	65	60	59	57	55
Low	55	70	44	59	57	55	53	49

Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	54	69	48	59	57	55	54	50
High	56	77	49	60	58	56	54	52
Low	53	63	44	57	55	54	52	49

Ldn:	61
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% Daytime Energy:	76%	% Nighttime Energy:	24%
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Appendix C-5
Ambient Noise Monitoring Results - Site B
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Thursday, August 18, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	51	60	43	57	55	52	49	46
1:00 AM	51	67	43	57	54	51	49	46
2:00 AM	50	63	43	57	54	51	48	46
3:00 AM	52	66	43	58	56	53	50	46
4:00 AM	54	64	44	59	57	55	52	48
5:00 AM	56	70	47	61	59	57	55	51
6:00 AM	59	79	50	63	61	59	57	54
7:00 AM	59	72	48	63	61	59	58	55
8:00 AM	56	70	45	61	59	57	55	51
9:00 AM	54	66	44	60	57	55	53	48
10:00 AM	55	80	41	59	56	54	52	47
11:00 AM	53	71	40	58	56	54	51	47
12:00 PM	53	67	42	58	56	54	51	46
1:00 PM	54	75	42	59	57	54	52	47
2:00 PM	55	66	44	60	58	56	54	50
3:00 PM	55	73	44	61	58	56	54	50
4:00 PM	56	67	46	61	59	58	56	52
5:00 PM	57	70	47	62	60	58	57	52
6:00 PM	58	74	49	62	60	59	57	53
7:00 PM	58	80	48	63	60	58	57	53
8:00 PM	60	85	51	62	60	58	57	54
9:00 PM	56	69	48	61	59	57	55	52
10:00 PM	56	77	48	60	58	56	54	51
11:00 PM	54	70	46	59	57	54	52	49

Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	56	72	45	61	58	57	55	50
High	60	85	51	63	61	59	58	55
Low	53	66	40	58	56	54	51	46

Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	54	68	45	59	57	54	52	49
High	59	79	50	63	61	59	57	54
Low	50	60	43	57	54	51	48	46

Ldn:	61
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% Daytime Energy:	72%	% Nighttime Energy:	28%
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Appendix C-6
Ambient Noise Monitoring Results - Site B
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Friday, August 19, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	52	66	45	58	56	53	51	48
1:00 AM	53	70	41	61	57	53	50	45
2:00 AM	51	67	41	59	55	51	48	45
3:00 AM	53	67	42	59	56	53	50	45
4:00 AM	54	64	47	60	58	55	53	50
5:00 AM	57	66	51	61	59	57	56	53
6:00 AM	58	69	49	63	61	59	57	54
7:00 AM	58	71	49	62	60	59	57	54
8:00 AM	57	70	46	62	60	58	56	52
9:00 AM	55	77	43	60	58	55	53	48
10:00 AM	54	69	42	59	57	54	53	47
11:00 AM	55	77	41	60	57	54	52	48
12:00 PM	53	66	42	58	57	54	52	47
1:00 PM	54	72	42	59	57	55	53	48
2:00 PM	58	82	45	63	59	57	55	52
3:00 PM	63	92	46	62	59	58	56	51
4:00 PM	57	70	46	62	60	58	57	52
5:00 PM	63	90	47	65	61	59	58	54
6:00 PM	58	75	48	63	61	59	57	54
7:00 PM	58	73	49	63	61	59	57	54
8:00 PM	58	77	50	62	60	59	57	54
9:00 PM	57	73	49	62	60	58	57	53
10:00 PM	56	79	46	61	59	57	55	51
11:00 PM	56	78	47	62	58	56	54	50

Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	57	76	46	61	59	57	55	51
High	63	92	51	65	61	59	58	54
Low	53	66	41	58	57	54	52	47

Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	55	70	45	60	58	55	53	49
High	58	79	51	63	61	59	57	54
Low	51	64	41	58	55	51	48	45

Ldn:	62
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% Daytime Energy:	77%	% Nighttime Energy:	23%
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Appendix C-7
Ambient Noise Monitoring Results - Site B
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Saturday, August 20, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	54	72	41	59	57	54	52	47
1:00 AM	51	64	38	57	55	53	49	44
2:00 AM	49	65	38	56	53	50	46	41
3:00 AM	49	61	36	56	54	50	46	41
4:00 AM	51	64	39	57	55	52	48	43
5:00 AM	53	67	43	58	57	55	52	47
6:00 AM	63	92	47	63	59	57	55	51
7:00 AM	57	76	50	61	59	58	56	54
8:00 AM	56	72	44	61	59	57	55	51
9:00 AM	56	72	43	61	58	56	55	50
10:00 AM	55	72	45	60	58	56	54	50
11:00 AM	55	70	44	60	58	56	54	50
12:00 PM	55	66	44	60	58	56	54	50
1:00 PM	55	70	44	61	58	56	54	50
2:00 PM	63	90	45	65	59	57	55	51
3:00 PM	56	72	47	61	59	57	56	52
4:00 PM	57	73	47	63	60	58	56	52
5:00 PM	62	87	46	63	60	58	56	52
6:00 PM	58	81	49	63	60	59	57	53
7:00 PM	58	71	48	63	60	59	57	53
8:00 PM	57	70	49	62	60	58	56	52
9:00 PM	57	74	51	62	60	58	57	53
10:00 PM	61	89	48	62	59	58	56	53
11:00 PM	57	75	44	63	59	57	55	50

Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	57	74	46	62	59	57	55	52
High	63	90	51	65	60	59	57	54
Low	55	66	36	60	58	56	54	50

Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	54	72	42	59	56	54	51	46
High	63	92	48	63	59	58	56	53
Low	49	61	36	56	53	50	46	41

Ldn:	63
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% Daytime Energy:	68%	% Nighttime Energy:	32%
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Appendix C-8
Ambient Noise Monitoring Results - Site B
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Sunday, August 21, 2016

Hour	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
12:00 AM	53	68	40	60	57	54	52	46
1:00 AM	57	84	40	60	56	53	50	44
2:00 AM	50	61	38	56	54	51	47	42
3:00 AM	50	65	38	57	54	50	47	43
4:00 AM	51	67	38	58	55	51	48	43
5:00 AM	52	67	40	58	56	53	50	45
6:00 AM	54	67	44	60	57	55	52	48
7:00 AM	57	82	44	62	58	55	53	49
8:00 AM	55	72	43	61	58	56	54	48
9:00 AM	54	66	43	59	57	55	53	49
10:00 AM	54	66	43	60	57	55	53	48
11:00 AM	55	77	42	60	57	55	53	48
12:00 PM	53	65	42	58	57	54	52	47
1:00 PM	54	67	41	60	57	55	53	48
2:00 PM	55	71	42	61	58	55	53	49
3:00 PM	55	70	43	60	58	55	53	49
4:00 PM	57	80	46	61	59	57	56	51
5:00 PM	58	76	48	63	60	58	57	52
6:00 PM	64	94	46	64	61	59	57	53
7:00 PM	59	79	48	64	61	59	57	52
8:00 PM	58	72	50	62	60	58	57	54
9:00 PM	57	69	50	61	59	57	56	53
10:00 PM	54	67	43	60	58	55	53	48
11:00 PM	54	75	41	60	58	55	52	45

Daytime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	56	74	45	61	58	56	54	50
High	64	94	50	64	61	59	57	54
Low	53	65	38	58	57	54	52	47

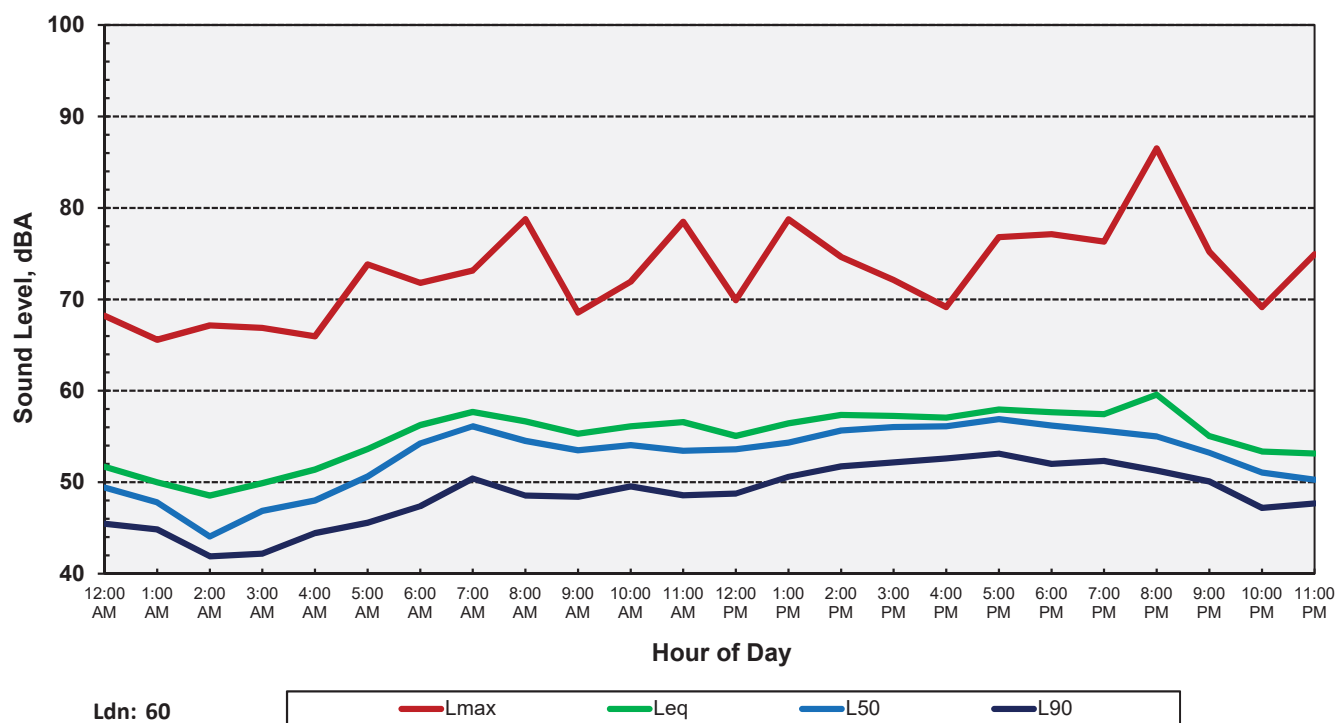
Nighttime	Leq	Lmax	Lmin	L02	L08	L25	L50	L90
Average	53	69	40	59	56	53	50	45
High	57	84	44	60	58	55	53	48
Low	50	61	38	56	54	50	47	42

Ldn:	61
-------------	----

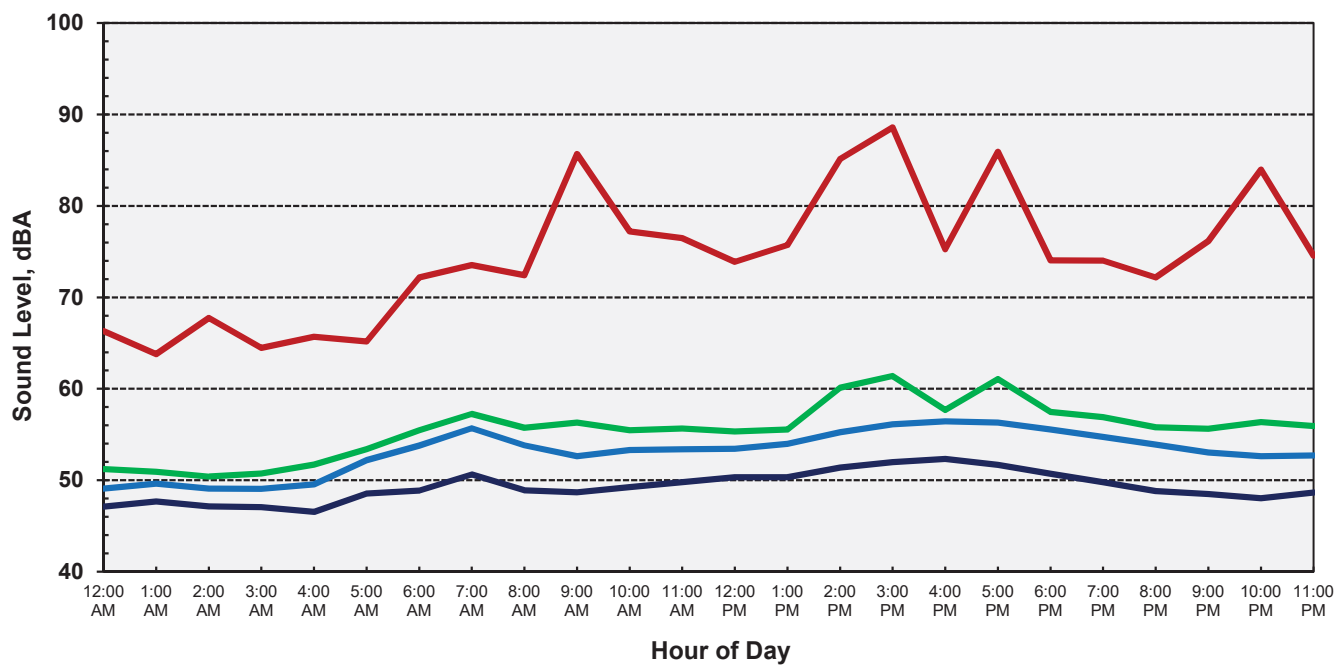
% Daytime Energy:	80%	% Nighttime Energy:	20%
--------------------------	-----	----------------------------	-----



Appendix D-1
Ambient Noise Monitoring Results - Site A
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Thursday, August 18, 2016



Appendix D-2
Ambient Noise Monitoring Results - Site A
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Friday, August 19, 2016



Ldn: 61

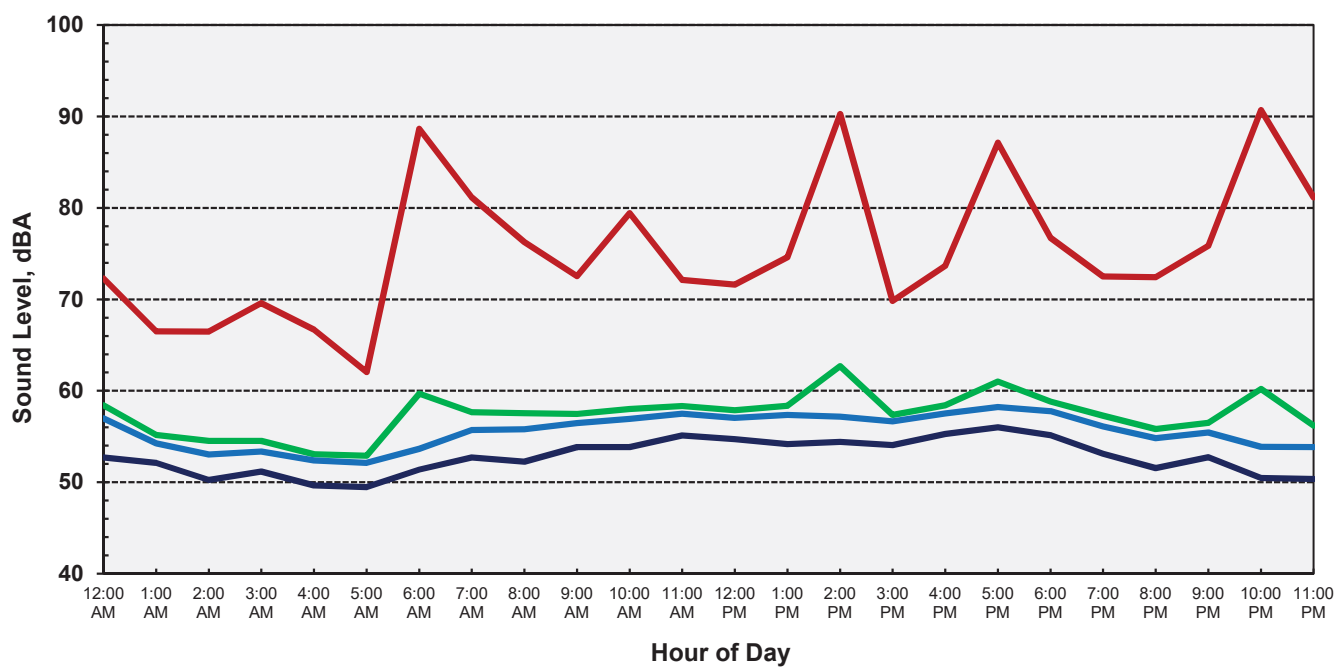
Lmax

Leq

L50

L90

Appendix D-3
Ambient Noise Monitoring Results - Site A
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Saturday, August 20, 2016



Ldn: 64

Lmax

Leq

L50

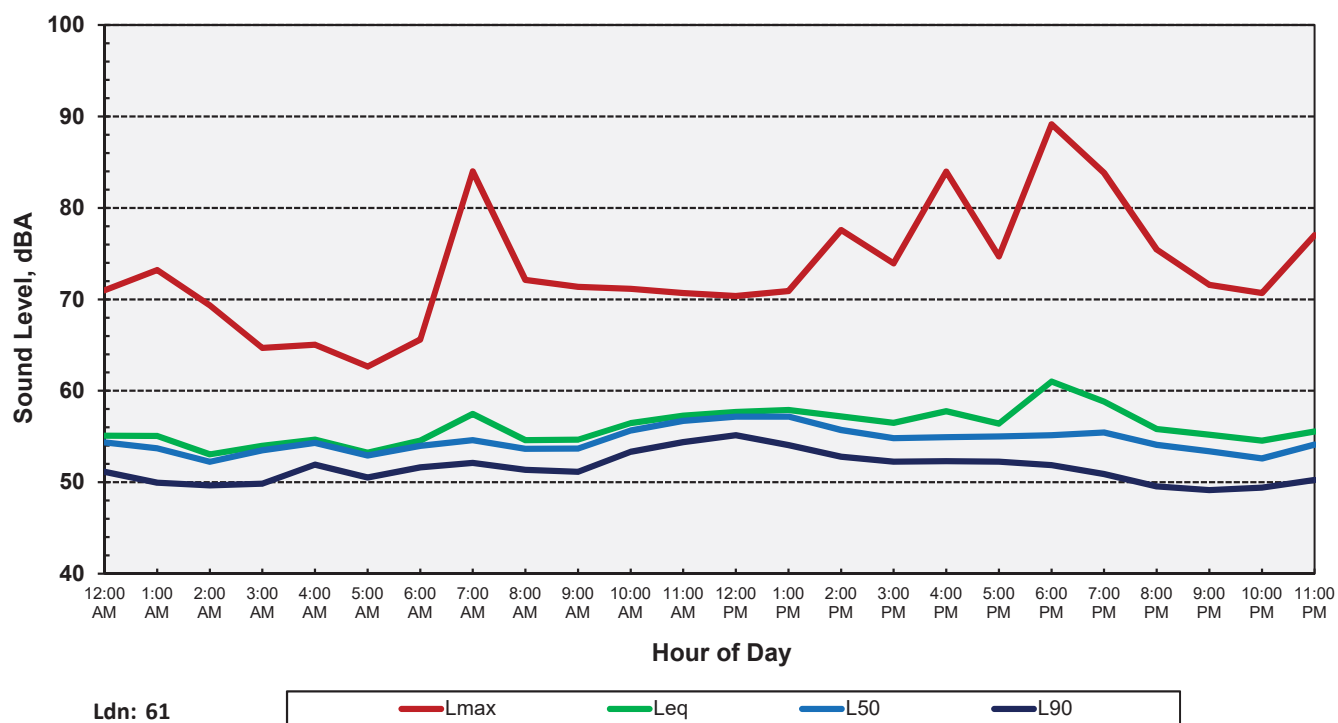
L90



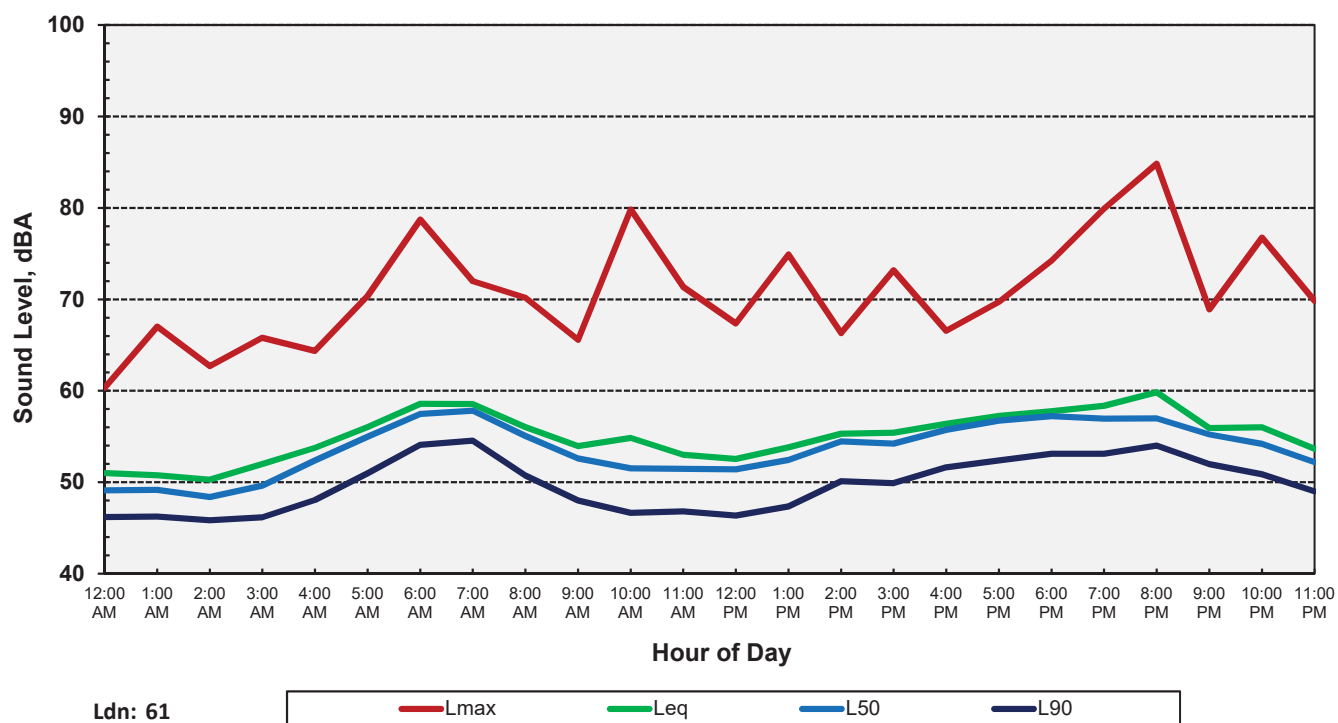
BOLLARD

Acoustical Consultants

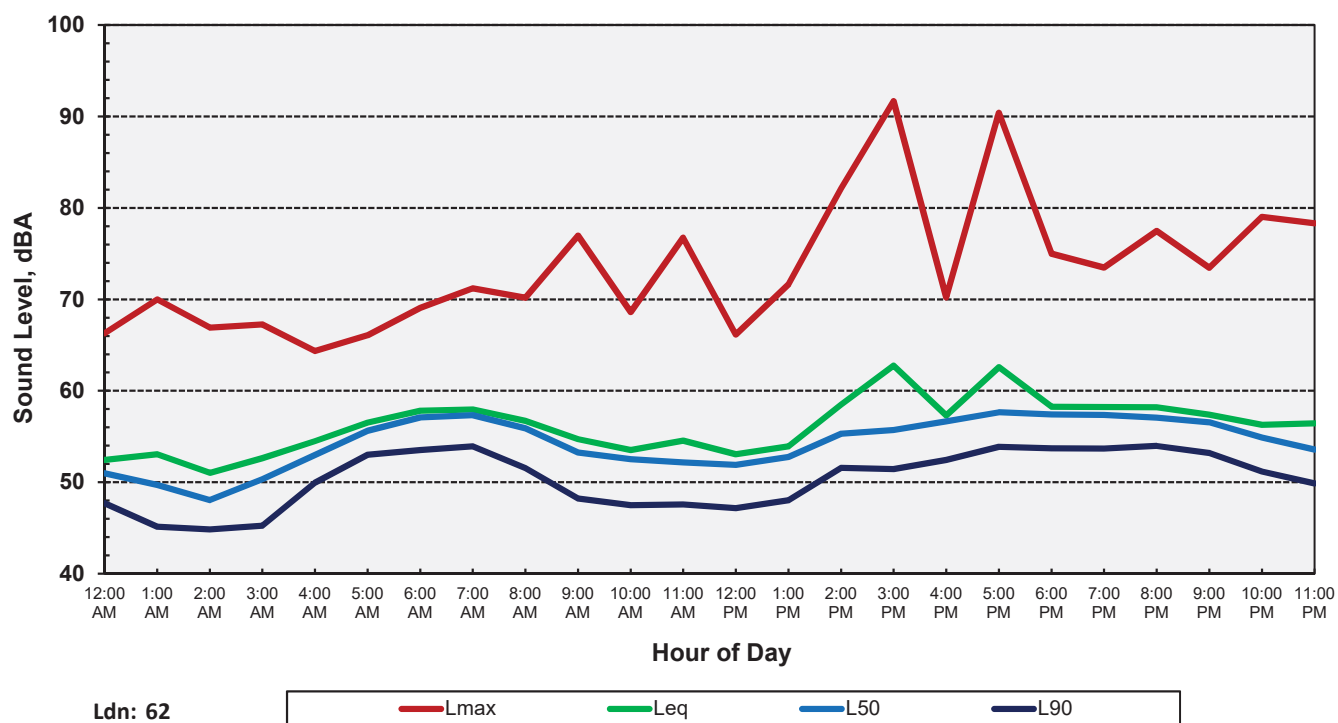
Appendix D-4
Ambient Noise Monitoring Results - Site A
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Sunday, August 21, 2016



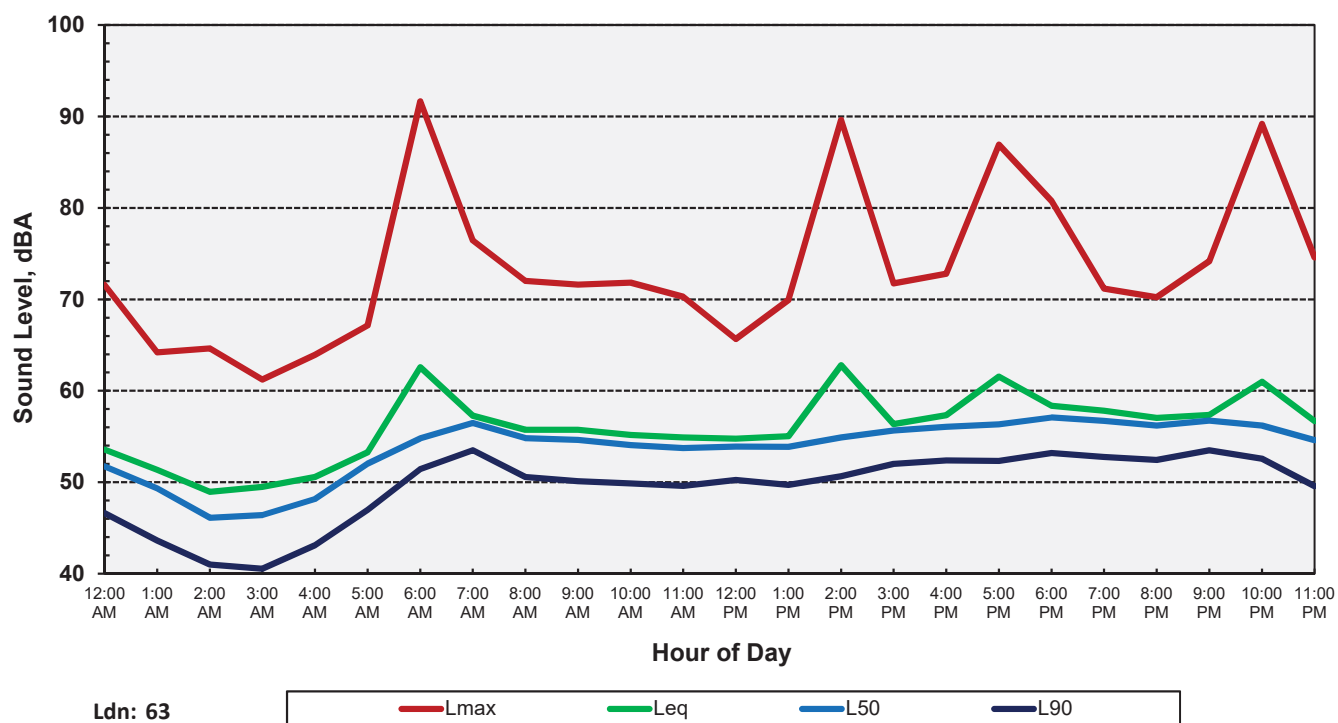
Appendix D-5
Ambient Noise Monitoring Results - Site B
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Thursday, August 18, 2016



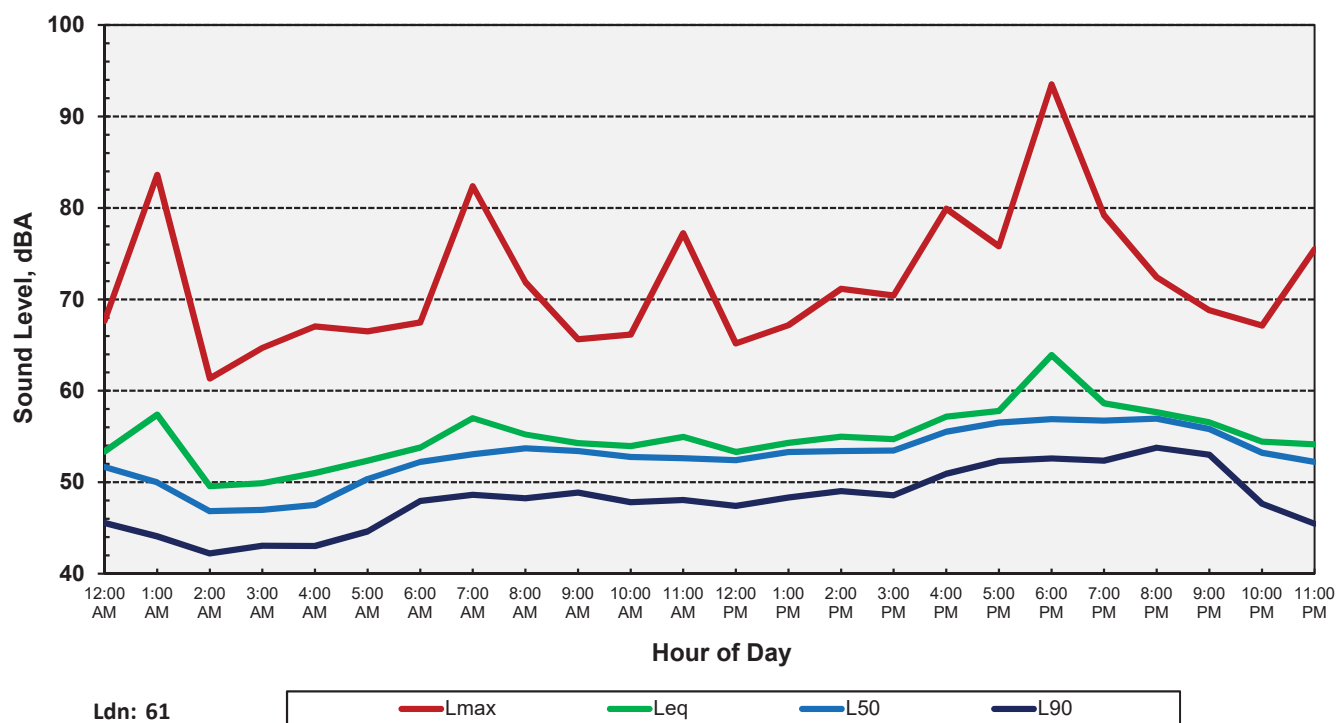
Appendix D-6
Ambient Noise Monitoring Results - Site B
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Friday, August 19, 2016



Appendix D-7
Ambient Noise Monitoring Results - Site B
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Saturday, August 20, 2016



Appendix D-8
Ambient Noise Monitoring Results - Site B
ARCO AM/PM Car Wash at 8 Mile Road & Thorton Road - Stockton, CA
Sunday, August 21, 2016



Ldn: 61

Appendix E

SILENCER PACKAGE

Reduce Blower Motor Noise

General Description

The Proto-Vest "Silencer Package" was developed to enable our dryers to meet OSHA, federal, state and local noise reduction standards. The OSHA permissible noise exposure is 85 dB for an 8-hour shift. By reducing noise levels into the 70 dB to 80 dB range, you can be assured of a pleasant environment for both your employees and customers. The Silencer Package reduces decibel levels on Proto-Vest dryers on an average of 10 decibels making them approximately 10 times quieter than the un-silenced models! The Silencing Package is an optional product for any Proto-Vest dryer.

Decibel Level Readings

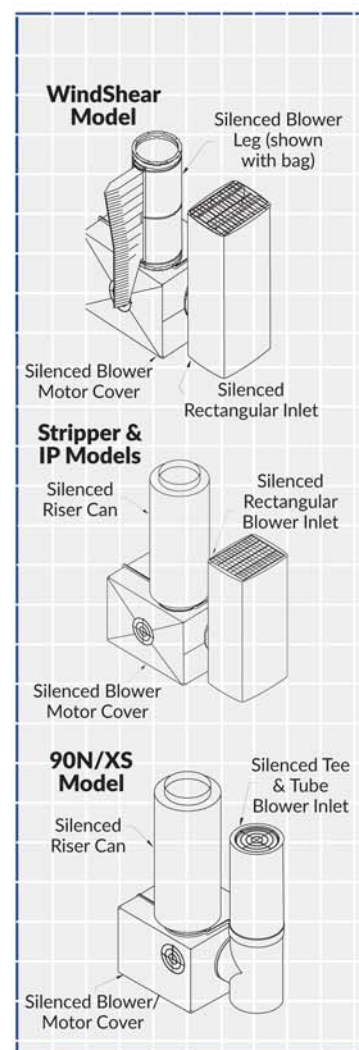
With Silencer (WS)	Without Silencer (WOS)	IP Stripper - 30hp Dryer:	
Windshear InBay - (2) 30hp Dryer:		WS: 10 ft=85 dBa; WS: 20 ft=79 dBa; WS: 30 ft=75.5 dBa; WS: 40 ft=73 dBa; WS: 50 ft=71 dBa;	WOS: 10 ft=91 dBa WOS: 20 ft=85 dBa WOS: 30 ft=81.5 dBa WOS: 40 ft=79 dBa WOS: 50 ft=77 dBa
WS: 40 ft=76 dBa; WS: 50 ft=74 dBa; WS: 60 ft=72.4 dBa;	WOS: 40 ft=82 dBa WOS: 50 ft=80 dBa WOS: 60 ft=78.4 dBa	IP330 - 30hp Dryer: WS: 10 ft=76.9 dBa; WS: 20 ft=70.9 dBa; WS: 30 ft=67.4 dBa; WS: 40 ft=64.9 dBa; WS: 50 ft=63 dBa;	WOS: 10 ft=91 dBa WOS: 20 ft=84.9 dBa WOS: 30 ft=81.4 dBa WOS: 40 ft=78.9 dBa WOS: 50 ft=77 dBa
Windshear - 30hp Dryer: WS: 10 ft=76.9 dBa; WS: 20 ft=70.9 dBa; WS: 30 ft=67.4 dBa; WS: 40 ft=64.9 dBa; WS: 50 ft=63 dBa;			
WOS: 10 ft=91 dBa WOS: 20 ft=84.9 dBa WOS: 30 ft=81.4 dBa WOS: 40 ft=78.9 dBa WOS: 50 ft=77 dBa		IP345 - 45hp Dryer: WS: 10 ft=78.9 dBa; WS: 20 ft=83 dBa; WS: 30 ft=79.5 dBa; WS: 40 ft=77 dBa; WS: 50 ft=75 dBa;	WOS: 10 ft=95.5 dBa WOS: 20 ft=89.5 dBa WOS: 30 ft=85.9 dBa WOS: 40 ft=83.5 dBa WOS: 50 ft=81.5 dBa
Windshear II - (2) 30hp Dryer: WS: 10 ft=88 dBa; WS: 20 ft=81.9 dBa; WS: 30 ft=78.4 dBa; WS: 40 ft=75.4 dBa; WS: 50 ft=74 dBa;			
WOS: 10 ft=99 dBa WOS: 20 ft=92.9 dBa WOS: 30 ft=89.4 dBa WOS: 40 ft=86.9 dBa WOS: 50 ft=85 dBa		TailWind - 30hp Dryer: WS: 10 ft=85 dBa; WS: 20 ft=79 dBa; WS: 30 ft=75.5 dBa; WS: 40 ft=73 dBa; WS: 50 ft=71 dBa;	WOS: 10 ft=91 dBa WOS: 20 ft=85 dBa WOS: 30 ft=83.5 dBa WOS: 40 ft=79 dBa WOS: 50 ft=77 dBa
S130 - 30hp Dryer: WS: 10 ft=76.9 dBa; WS: 20 ft=70.9 dBa; WS: 30 ft=67.4 dBa; WS: 40 ft=64.9 dBa; WS: 50 ft=63 dBa;			
WOS: 10 ft=91 dBa WOS: 20 ft=84.9 dBa WOS: 30 ft=81.4 dBa WOS: 40 ft=78.9 dBa WOS: 50 ft=77 dBa		90N/90XS - 15hp Dryers: WS: 10 ft=74.5 dBa; WS: 20 ft=68.5 dBa; WS: 30 ft=64.9 dBa; WS: 40 ft=62.4 dBa; WS: 50 ft=60.5 dBa;	WOS: 10 ft=82.9 dBa WOS: 20 ft=76.9 dBa WOS: 30 ft=73.4 dBa WOS: 40 ft=70.9 dBa WOS: 50 ft=69 dBa
SideShot - 15hp Dryer: WS: 10 ft=74.5 dBa; WS: 20 ft=68.5 dBa; WS: 30 ft=64.9 dBa; WS: 40 ft=62.4 dBa; WS: 50 ft=60.5 dBa;			
WOS: 10 ft=82.9 dBa WOS: 20 ft=76.9 dBa WOS: 30 ft=73.4 dBa WOS: 40 ft=70.9 dBa WOS: 50 ft=69 dBa		(Proto-Vest's Silencing Package is standard on all of the Untouchable series.)	
SideShot II - 30hp Dryer: WS: 10 ft=76.9 dBa; WS: 20 ft=70.9 dBa; WS: 30 ft=67.4 dBa; WS: 40 ft=64.9 dBa; WS: 50 ft=63 dBa;			
WOS: 10 ft=91 dBa WOS: 20 ft=84.9 dBa WOS: 30 ft=81.4 dBa WOS: 40 ft=78.9 dBa WOS: 50 ft=77 dBa		Proto-Vest Patents: U.S.: 3,942,430; 4,161,801; 4,409,035; 4,418,442; 4,433,450; 4,445,251; 4,446,592; 4,589,140; 4,700,476; 5,027,714; 5,184,269; 5,187,881; 5,195,200	

(Proto-Vest's Silencing Package is standard on all of the Untouchable series.)

Proto-Vest Patents:

U.S.: 3,942,430; 4,161,801; 4,409,035; 4,418,442; 4,433,450; 4,445,251; 4,446,592; 4,589,160; 4,700,426; 5,027,714; 5,184,369; 5,187,881; 5,195,207; 5,280,665; 5,421,102; 5,553,346; 5,886,648; 5,901,461; 5,950,324; 5,960,564; 6,038,781; 6,176,024; 6,519,872; others pending.

Canada: 1,021,996; 1,111,328; 1,190,453; 1,201,040; 1,197,439; 1,219,195; 1,219,192; 1,219,194; 1,258,026; 1,219,193; 2,013,749; 2,071,568; 2,071,239; 2,071,388; others pending.



*Specifications subject to change without notice.
NOTE: Proto-Vest dryer's dimensions will vary with the Silencer Package.

7400 N. Glen Harbor Blvd., Glendale, AZ 85307
800-521-8218 • 623-872-8300 • Fax 623-872-6150
www.protovest.com

APPENDIX D
TRAFFIC REPORT UPDATE

March 15, 2019

Ms. Surina Mann
OEM Petroleum, LLC
2190 Meridian Park Boulevard, Suite G
Concord, CA 94520

Subject: *Eight Mile Road & Thornton Road Convenience Center Project Revision – Traffic Analysis*

Dear Ms. Mann -

On behalf of KD Anderson & Associates (KDA), I am pleased to submit this letter report presenting our focused traffic analysis of the Eight Mile Road & Thornton Road Convenience Center project. As described in more detail below, this analysis focuses on a proposed revision to the project. The following is:

- an executive summary of the analysis,
- an introduction to this letter report,
- our understanding of the project revision,
- a description of the methods used in the analysis, and
- the results of the analysis.

Enclosed in a separate file is a technical appendix presenting level of service (LOS) calculation worksheets.

EXECUTIVE SUMMARY

The July 19, 2017 *Traffic Impact Study for the Eight Mile Road & Thornton Road Convenience Center Project* (KD Anderson & Associates 2017) presented a full traffic analysis of the Eight Mile Road & Thornton Road Convenience Center project as it was then proposed. The composition of land uses in the proposed project has recently changed. This letter report presents a focused traffic analysis of proposed revisions to the project.

The *Traffic Impact Study for the Eight Mile Road & Thornton Road Convenience Center Project* (2017 TIS) used vehicle trip generation rates from the then-most recent Institute of Transportation Engineers (ITE) *Trip Generation Manual 9th Edition* (Institute of Transportation Engineers 2012). After the 2017 TIS was prepared, a new edition of this document was

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OEM Petroleum, LLC
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published. The analysis presented in this letter report used vehicle trip generation rates from the current-most recent ITE *Trip Generation Manual 10th Edition* (Institute of Transportation Engineers 2017).

The combination of revised land uses and updated trip generation rates results in the Eight Mile Road & Thornton Road Convenience Center project being expected to generate more vehicle trips, compared to the 2017 TIS. However, as described in this letter report, the revised traffic analysis concludes there would not be any new significant project-related traffic impacts, and no additional mitigation measures would be required.

INTRODUCTION

As described in more detail below, this letter report is not intended to be a full standalone traffic impact study. This letter report focuses on changes to project-related land uses, and changes to the methodology applied in the 2017 TIS. For full documentation of the traffic analysis, the reader is referred to the 2017 TIS (KD Anderson & Associates 2017).

Enclosed with this letter report are those figures and tables from the 2017 TIS which have been revised. Figures and tables which have not been revised are not included in this letter report, and may be found in the 2017 TIS. This approach has been applied to focus the content of this letter report on the changes that result from the revised analysis.

PROJECT UNDERSTANDING

The Eight Mile Road & Thornton Road Convenience Center project site is located on the southeast corner of the intersection of Eight Mile Road & Thornton Road. At the time the 2017 TIS was prepared, the project included the following:

- a 4,000 building square feet retail commercial structure,
- a 3,462 building square feet quick service restaurant,
- an am/pm convenience store with a 16-position vehicle fueling area and a car wash, and
- 234 multiple family dwelling units.

The land use composition and quantities of the Eight Mile Road & Thornton Road Convenience Center project have recently changed and now includes the following (Simpson pers. comm.):

- a standalone automated car wash,
- a 3,462 building square feet quick service restaurant,
- an am/pm convenience store with a 16-position vehicle fueling area, and
- 223 multiple family dwelling units.

KDA

A site plan showing the revised commercial portion of the Eight Mile Road & Thornton Road Convenience Center project as currently proposed is presented in the enclosed **Figure 4** (Farmer pers comm.).

ANALYSIS METHODS

The traffic analysis presented in this letter report will be used by the City of Stockton in a California Environmental Quality Act (CEQA) addendum to the 2017 Initial Study/ Mitigated Negative Declaration (2017 IS/MND) prepared for the Eight Mile Road & Thornton Road Convenience Center project (City of Stockton 2017). The 2017 IS/MND included traffic analysis presented in the 2017 TIS. As a result, the technical approaches and assumptions applied in the analysis for this letter report are, to the extent appropriate, consistent with those applied in the 2017 TIS. The following aspects of the 2017 TIS are applied in this letter report, are described in detail in the 2017 TIS, are not repeated in this letter report, and are incorporated by reference into this letter report:

- existing conditions,
- near-term future Existing Plus Approved Projects (EPAP) background traffic volumes,
- long-term future Cumulative background traffic volumes,
- project-related trip distribution,
- near-term future EPAP lane geometrics,
- long-term future Cumulative lane geometrics,
- intersection LOS analysis software and methods,
- roadway segment LOS analysis methods, and
- significance thresholds.

The following describes aspects of the analysis presented in this letter report which are different from the 2017 TIS.

Land Use Quantities

Both the types of land uses and the land use quantities included in the proposed Eight Mile Road & Thornton Road Convenience Center project have changed. As noted earlier in the *Project Understanding* section of this letter report, at the time the 2017 TIS was prepared, the project included the following:

- a 4,000 building square feet retail commercial structure,
- a 3,462 building square feet quick service restaurant,
- an am/pm convenience store with a 16-position vehicle fueling area and a car wash, and
- 234 multiple family dwelling units.

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OEM Petroleum, LLC
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Proposed land uses in the Eight Mile Road & Thornton Road Convenience Center project now include the following:

- a standalone automated car wash,
- a 3,462 building square feet quick service restaurant,
- an am/pm convenience store with a 16-position vehicle fueling area, and
- 223 multiple family dwelling units.

In summary, the changes to the proposed project are:

- the 4,000 building square feet retail commercial structure is no longer proposed,
- the car wash previously associated with the am/pm convenience store is now proposed as a standalone automated car wash, and
- the number of proposed multiple family dwelling units has decreased from 234 to 223.

Trip Generation

The 2017 TIS was prepared using vehicle trip generation rates from the then-most recent ITE *Trip Generation Manual 9th Edition* (Institute of Transportation Engineers 2012). After the 2017 TIS was prepared, a new edition of this document was published. In consultation with City of Stockton staff (McDowell pers. comm.), the traffic analysis presented in this letter report used vehicle trip generation rates from the current-most recent ITE *Trip Generation Manual 10th Edition* (Institute of Transportation Engineers 2017).

Trip generation rates applied in the traffic analysis prepared for this letter report are shown in the enclosed **Table 7**. These trip generation rates were applied to the land uses described above in the *Land Use Quantities* section of this letter report. The resulting trip generation estimate is presented in the enclosed **Table 8**. As shown in **Table 8**, the project would generate an adjusted total of:

- 3,664 trips per day,
- 270 trips during the a.m. peak hour, and
- 301 trips during the p.m. peak hour.

The trip generation estimates presented in the enclosed **Table 8** are greater than the estimates presented in **Table 8** of the 2017 TIS.

KDA

ANALYSIS RESULTS

Changes to the Eight Mile Road & Thornton Road Convenience Center project land uses and changes to vehicle trip generation rates would result in changes to the analysis results for the two scenarios evaluated in the 2017 TIS that included the proposed project:

- the EPAP Plus Project scenario, and
- the Cumulative Plus Project scenario.

Changes to project land uses and trip generation rates would not change the analysis results for the three scenarios that did not include the proposed project:

- the Existing Conditions scenario,
- the EPAP No Project scenario, and
- the Cumulative No Project scenario.

To focus on the changes that result from the revised analysis, the results of the analysis of the two “Plus Project” are presented in this letter report. Analysis of the three “No Project” scenarios that have not changed is not presented in this letter report, and may be found in the 2017 TIS (KD Anderson & Associates 2017).

The following is a description of the results of the traffic analysis of the two “Plus Project” scenarios conducted for this letter report.

EPAP Plus Project Scenario

The following describes the results of the analysis of the revised EPAP Plus Project scenario.

Traffic Volumes. Traffic that would be generated by the revised Eight Mile Road & Thornton Road Convenience Center project was added to EPAP No Project volumes. The enclosed **Figure 9** displays the project-related-only traffic volumes for each study intersection in the a.m. peak hour and p.m. peak hour. The enclosed **Figure 10** displays the resulting EPAP Plus Project traffic volumes anticipated for each study intersection in the peak hours.

The enclosed **Table 10** displays daily traffic volumes for study roadway segments under EPAP Plus Project conditions.

Intersection Levels of Service. The enclosed **Table 11** presents the a.m. peak hour and p.m. peak hour LOS at each study intersection under EPAP Plus Project conditions. The worksheets presenting the calculation of LOS are included in the technical appendix.

KDA

Traffic volumes under EPAP Plus Project conditions would be generally higher than under EPAP No Project conditions and, as a result, vehicle delay at study intersections under EPAP Plus Project conditions would be higher than under EPAP No Project conditions.

Under EPAP Plus Project conditions, LOS at all eight study intersections would be at acceptable LOS D or better during both the a.m. peak hour and the p.m. peak hour. This impact is considered to be less than significant. No mitigation measures are required.

Roadway Segment Levels of Service. A summary of LOS on the five study roadway segments under EPAP Plus Project conditions is presented in **Table 10**. Four of the five roadway segments would operate at acceptable LOS D or better. The impact of the proposed project on these four roadway segments is considered to be less than significant. No mitigation measures are required.

Under EPAP Plus Project conditions, the roadway segment Eight Mile Road from Thornton Road to Davis Road would operate at LOS E. LOS E is considered unacceptable. However, the project would not result in an increase in traffic volume greater than five percent. Therefore, based on criteria presented in the *Level of Service Significance Threshold* section of the 2017 TIS, this impact is considered to be less than significant. No mitigation measures are required.

Cumulative Plus Project Scenario

The following describes the results of the analysis of the revised Cumulative Plus Project scenario.

Traffic Volumes. Based on methods described in the 2017 TIS, traffic that would be generated by the revised Eight Mile Road & Thornton Road Convenience Center project under long-term future cumulative conditions at each study intersection in the a.m. peak hour and p.m. peak hour is shown in the enclosed **Figure 12**. The enclosed **Figure 13** displays the Cumulative Plus Project traffic volumes anticipated for each study intersection in the peak hours.

The enclosed **Table 14** displays daily traffic volumes for study roadway segments under Cumulative Plus Project conditions.

Intersection Levels of Service. The enclosed **Table 15** presents the a.m. peak hour and p.m. peak hour LOS at each study intersection under Cumulative Plus Project conditions. The worksheets presenting the calculation of LOS are included in the technical appendix.

Traffic volumes under Cumulative Plus Project conditions would be generally higher than under Cumulative No Project conditions and, as a result, vehicle delay at study intersections under Cumulative Plus Project conditions would be higher than Cumulative No Project conditions.

KDA

Ms. Surina Mann
OEM Petroleum, LLC
March 15, 2019
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Under Cumulative Plus Project conditions, LOS at seven of the eight study intersections would be at acceptable LOS D or better during both the a.m. peak hour and the p.m. peak hour. No improvements are needed at these seven intersections to achieve acceptable LOS.

Under Cumulative Plus Project conditions, the intersection of Eight Mile Road & I-5 Northbound Ramps would operate at LOS C with 23.5 seconds of delay during the a.m. peak hour, and LOS E with 64.0 seconds of delay during the p.m. peak hour. LOS E is considered unacceptable. However, the increase in delay from Cumulative No Project conditions is not greater than five seconds. Therefore, based on criteria presented in the *Level of Service Significance Threshold* section of the 2017 TIS, this impact is considered less than significant and no mitigation measures are required.

Roadway Segment Levels of Service. A summary of LOS on the five study roadway segments under Cumulative Plus Project conditions is presented in **Table 14**. All five study roadway segments would operate at acceptable LOS D or better. Therefore, the impact on these roadway segments is considered to be less than significant. No mitigation measures are needed at these roadway segments.

CLOSING

Thank you for this opportunity to provide traffic analysis services on Eight Mile Road & Thornton Road Convenience Center project. If you have any questions about this report, please contact me via E-mail message at wshijo@kdanderson.com or call me at 916/660-1555.

Sincerely,

KD Anderson & Associates, Inc.



Wayne Shijo
Project Manager

enclosures

KDA

REFERENCES

Publications Cited

Institute of Transportation Engineers. 2012. Trip Generation Manual, 9th Edition. Washington, D.C.

Institute of Transportation Engineers. 2017. Trip Generation Manual, 10th Edition. Washington, D.C.

KD Anderson & Associates 2017. Traffic Impact Study for the Eight Mile Road & Thornton Road Convenience Center Project. Loomis, CA.

Stockton, City of. 2017. Public Review Draft - Initial Study/ Mitigated Negative Declaration for the Thornton Road/Eight Mile Road Arco Station Project - 2910 Eight Mile Road, Stockton, CA - City of Stockton Project File No. P16-0667. Stockton, CA.

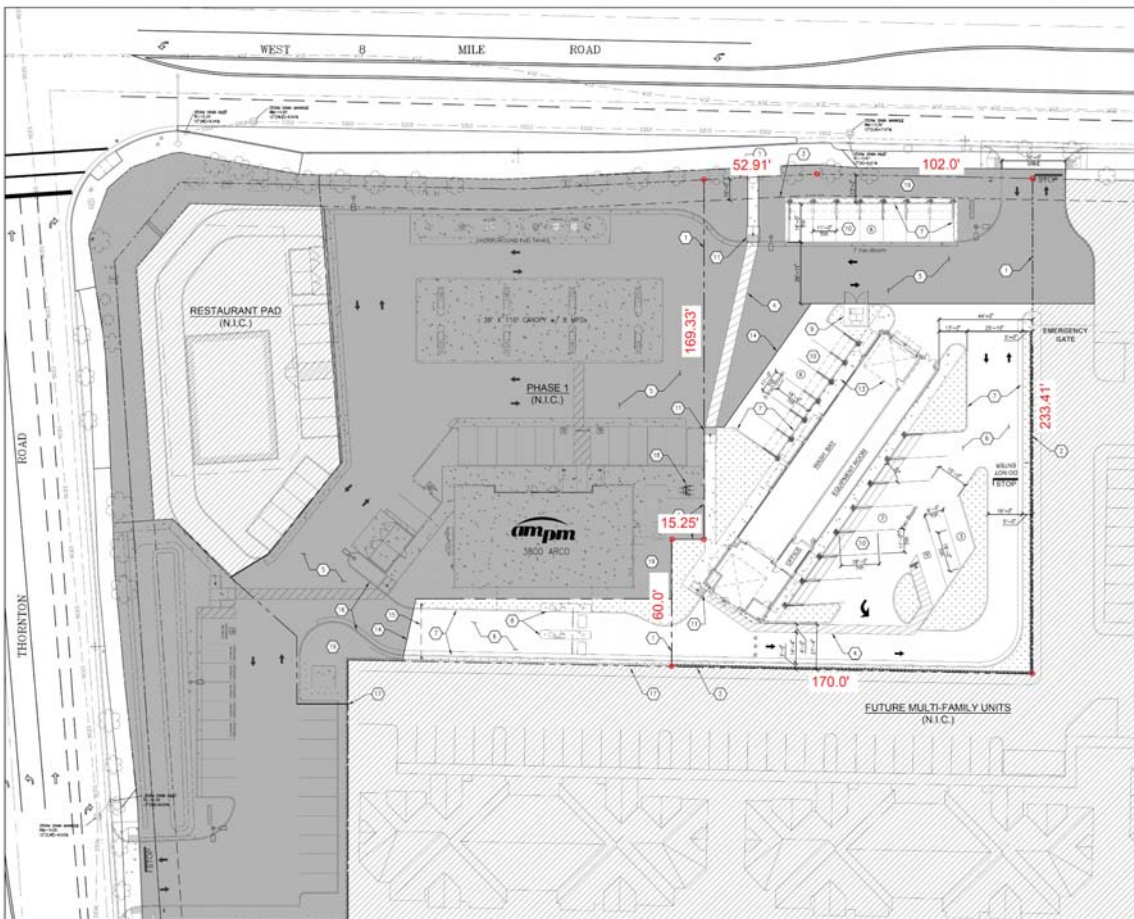
Personal Communications

Farmer, Terry. BaseCamp Environmental, Inc. March 13, 2019 E-mail message to Wayne Shijo, KD Anderson & Associates.

McDowell, Michael. Deputy Director – Planning & Engineering. City of Stockton Community Development Department. February 26, 2019 E-mail message to Wayne Shijo, KD Anderson & Associates.

Simpson, Charlie. BaseCamp Environmental, Inc. March 9, 2019 E-mail message to Wayne Shijo, KD Anderson & Associates.

EXHIBIT 1



PARKING DATA (CHAPTERS, TABLE 3-6)	
REQUIRED:	
FULL SERVICE CAR WASH (1 SPACE/200 SF)	= 8 SPACES
TOTAL REQUIRED:	= 8 SPACES
PROVIDED:	
STANDARD SPACE (5'x10')	= 2 SPACES
ACCESSIBLE SPACE (5'x10')	= 1 SPACE
VACUUM SPACE (11'x18')	= 19 SPACES
TOTAL PROVIDED:	= 22 SPACES

KEYED NOTES

- 1 PROPERTY LINE
- 2 NEW 8' HIGH CRUI SCREEN WALL ALONG PROPERTY LINE
- 3 LINE OF PUBLIC UTILITY EASEMENT
- 4 NEW ACCESSIBLE PATH OF TRAVEL STRIPING
- 5 EXISTING ASPHALT CONCRETE PAVEMENT
- 6 NEW ASPHALT CONCRETE PAVEMENT
- 7 NEW CONCRETE CURB, TYP.
- 8 NEW PAY STATION
- 9 NEW TRASH ENCLOSURE
- 10 NEW VACUUM STATION
- 11 NEW ACCESSIBLE RAMP
- 12 NEW ACCESSIBLE PARKING STALL
- 13 ROOFGARDEN LINE ABOVE
- 14 EXISTING EDGE OF PAVEMENT PROVIDE SMOOTH TRANSITION BETWEEN EXISTING AND NEW PAVEMENT
- 15 NEW OVERSIGHT WARNING BAR
- 16 EXISTING CURB
- 17 EXISTING 8' HIGH CRUI SCREEN WALL
- 18 EXISTING BIKE PARKING
- 19 EXISTING LANDSCAPE

SITE LEGEND

- FUEL STATION (N.I.C.)
- FUTURE RESTAURANT & MULTI-FAMILY UNITS (N.I.C.)
- NEW CONCRETE AND WALKS
- NEW LANDSCAPE
- PARKING STALL COUNT
- EXISTING SITE LIGHTING

1 SITE PLAN
Scale: 1" = 30'-0"

PRELIMINARY
NOT FOR
CONSTRUCTION

CHAMBERLAND ARCHITECT
1400 WILSON BLVD., SUITE 100
STOCKTON, CA 95210
(209) 938-1000
www.chamberland.com

STOCKTON CA
ELITE CARWASH
SEC 8 MILE RD AND THORNTON RD
CSHOA INC.

PROJECT TYPE	DATE 05/16/19
DRAWN BY	CHECKED
REVIEW	
SHEET TITLE SITE PLAN	
SHEET A2 ORIGINAL SHEET BEER - 34 - 35 -	

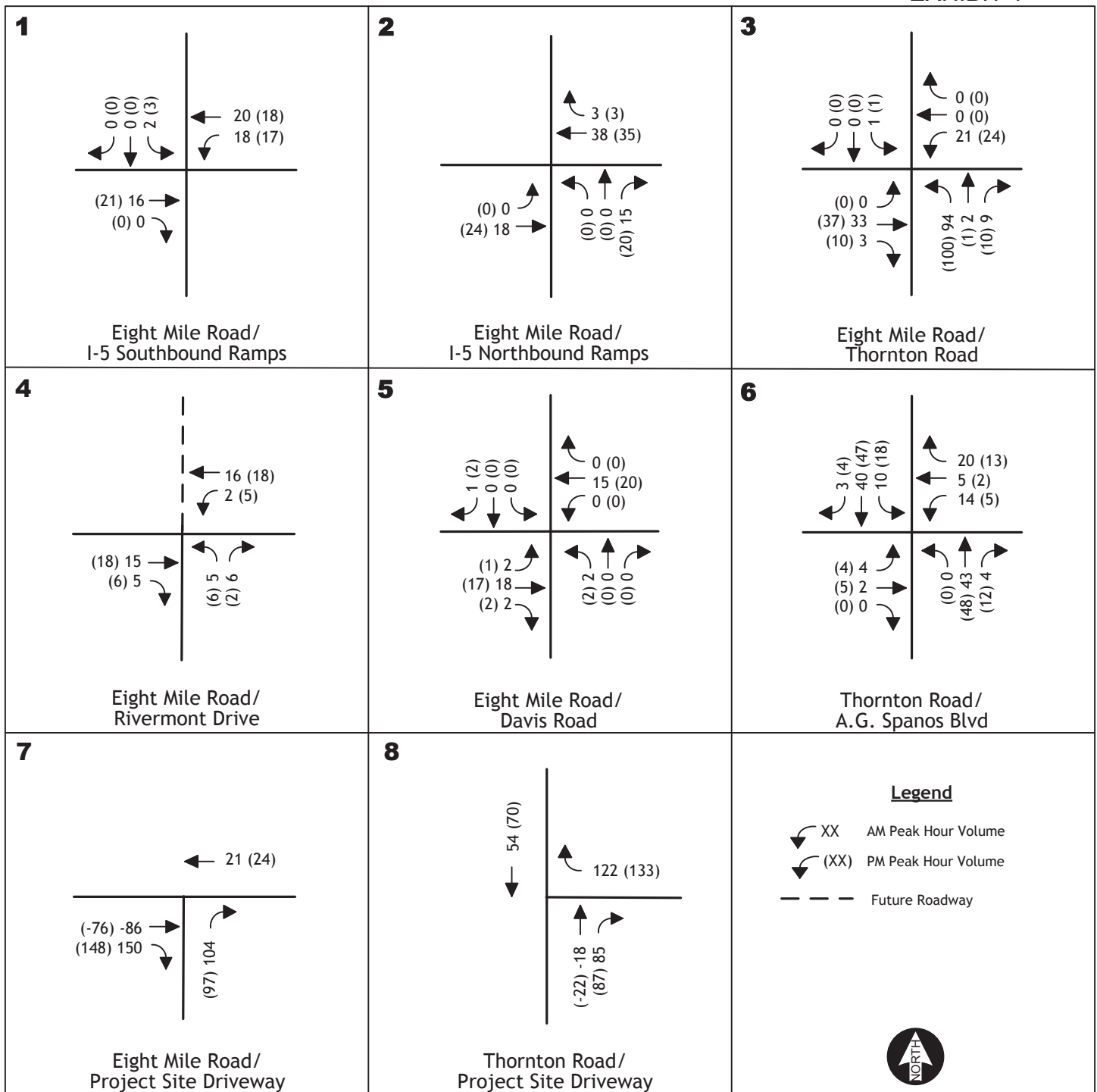
KD Anderson & Associates, Inc.
Transportation Engineers

5525-001 RA 3/14/2019

CONVENIENCE CENTER SITE PLAN

Eight Mile Road & Thornton Road Convenience Center Traffic Impact Study

figure 4



PROJECT RELATED TRIPS

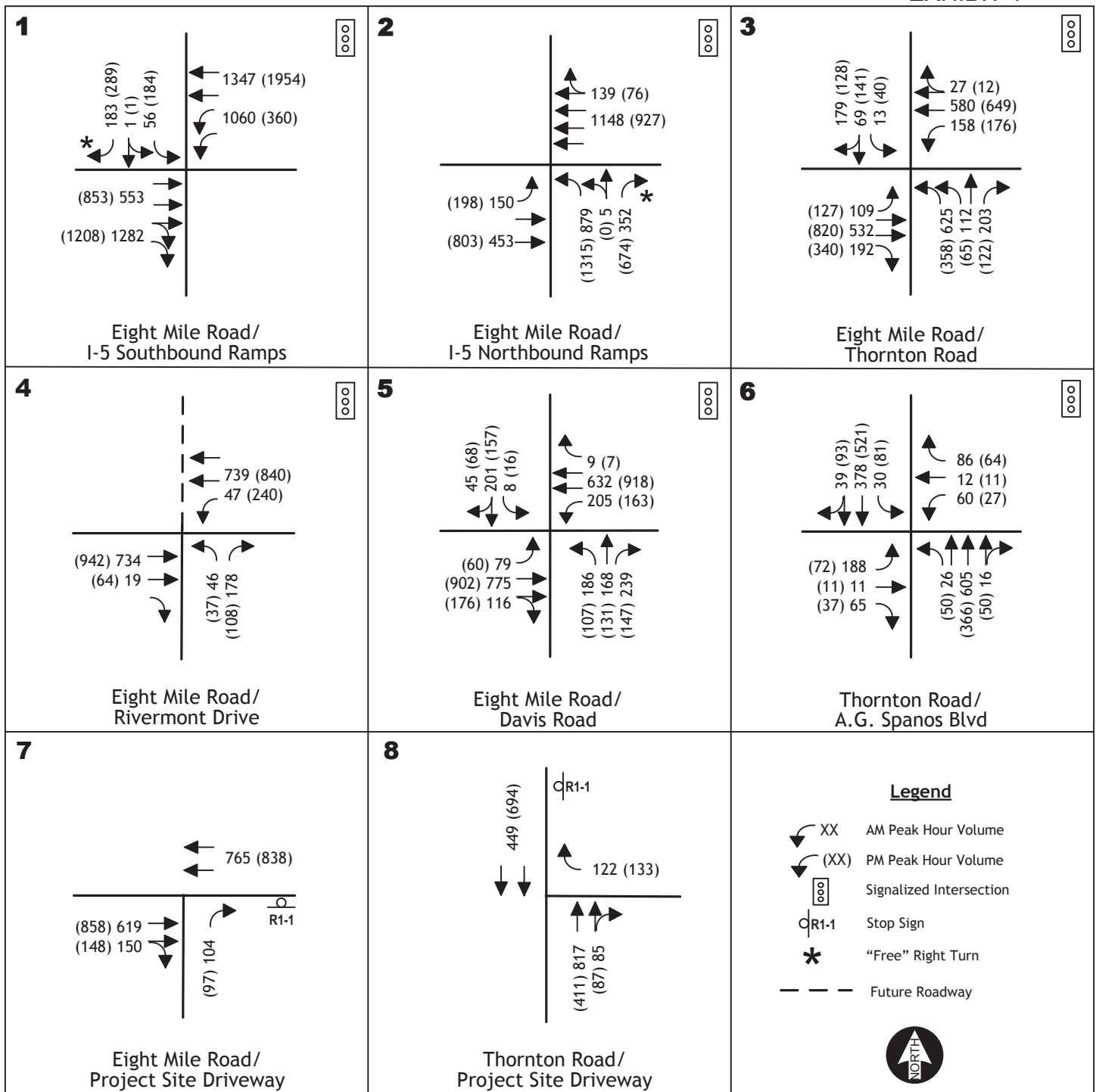
EXISTING PLUS APPROVED PROJECTS BACKGROUND

KD Anderson & Associates, Inc.
Transportation Engineers

5525-001 RA 3/14/2019

Eight Mile Road & Thornton Road Convenience Center Traffic Impact Study

figure 9



EXISTING PLUS APPROVED PROJECTS PLUS PROPOSED PROJECT

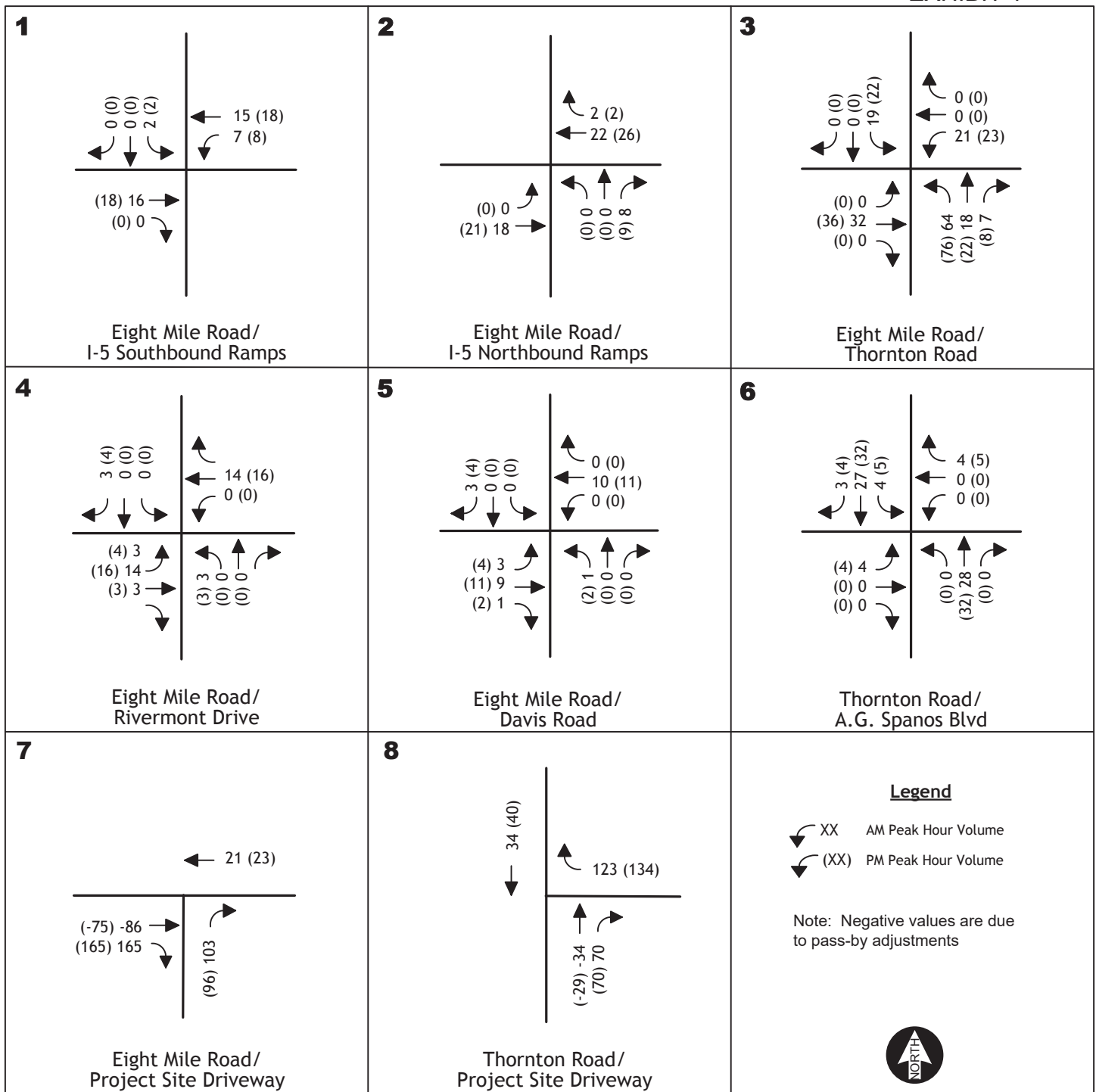
Intersection Traffic Volumes and Lane Configurations

KD Anderson & Associates, Inc.
Transportation Engineers

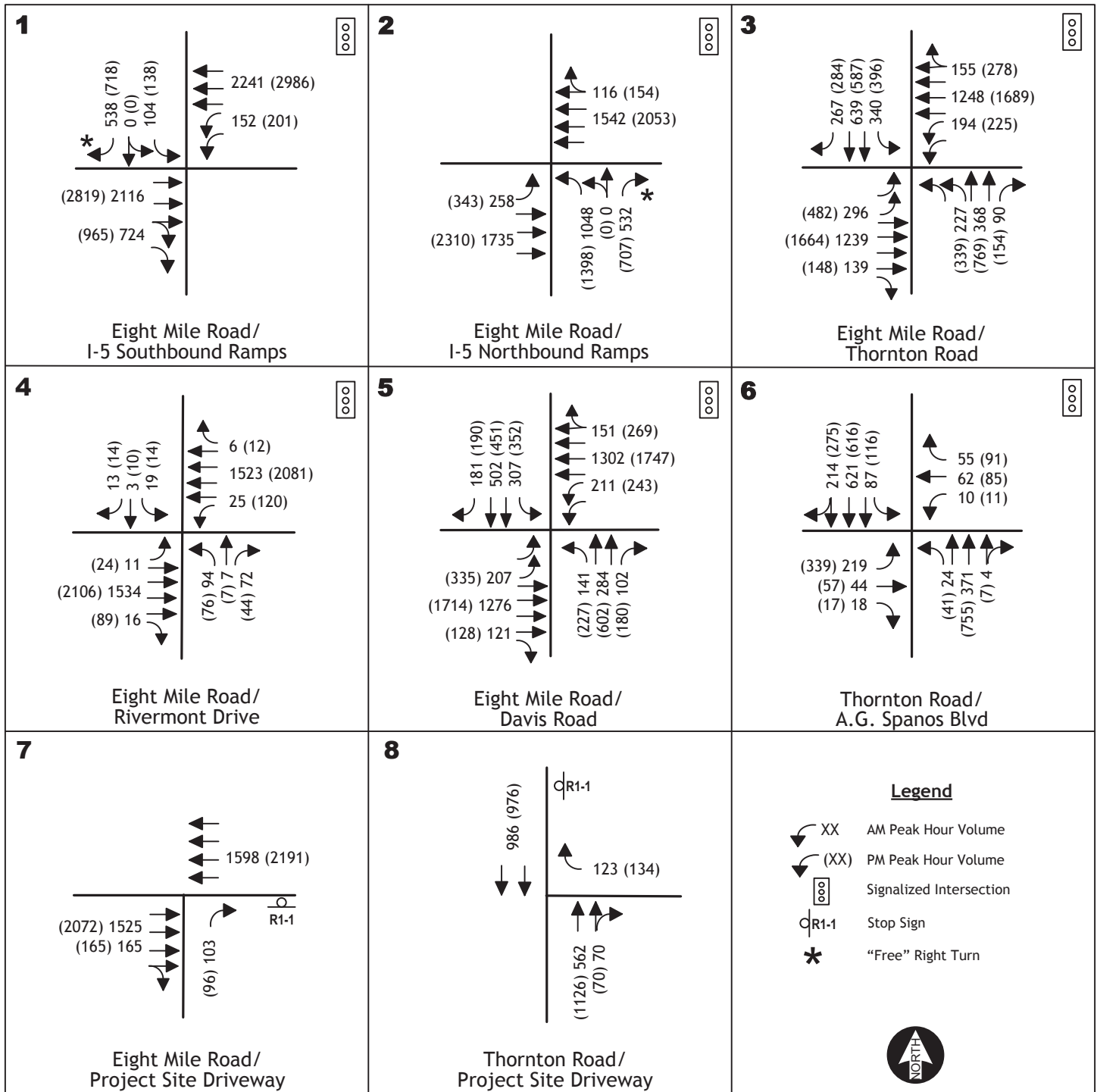
5525-001 RA 3/14/2019

Eight Mile Road & Thornton Road Convenience Center Traffic Impact Study

figure 10



PROJECT RELATED TRIPS CUMULATIVE BACKGROUND



CUMULATIVE PLUS PROJECT

KD Anderson & Associates, Inc.
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Intersection Traffic Volumes and Lane Configurations

5525-001 3/14/2019

Eight Mile Road & Thornton Road Convenience Center Traffic Impact Study

figure 13

Table 7. Trip Generation Rates for Eight Mile Road & Thornton Road Convenience Center Project

Land Use Category and ITE Land Use Code	Independent Variable	Vehicle Trip Rates						
		Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Tunnel Car Wash (ITE 845 - Automated Car Wash)	Tunnel	503	20	14	34	38.75	38.75	77.50
Quick Service Restaurant (ITE 934 - Fast-Food Restaurant with Drive-Through Window)	1,000 Sq. Ft.	470.95	20.50	19.69	40.19	16.99	15.68	32.67
High-Density Residential (ITE 221 - Multifamily Housing (Mid-Rise)	Dwelling Unit	5.44	0.09	0.27	0.36	0.27	0.17	0.44
am/pm Convenience Store (ITE 960 - Super Convenience Market / Gas Station	Vehicle Fueling Positions and 1,000 Sq. Ft.	230.52	N/A	N/A	N/A	N/A	N/A	N/A
Notes: Totals may not equal the sum of the components due to rounding. N/A = not applicable. Peak hour trip generation for ITE 960 - Super Convenience Market/Gas Station based on multi-variable regression analysis. Source: Institute of Transportation Engineers 2017. Trip generation count data collected for ITE 845 - Automated Car Wash daily and a.m. peak hour rates.								

Table 8. Trip Generation Estimates for Eight Mile Road & Thornton Road Convenience Center Project

Land Use Category and ITE Land Use Code		Amount of Land Use	Vehicle Trips						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Tunnel Car Wash (ITE 845 - Automated Car Wash)	1 Tunnel	503	20	14	34	39	39	78	
Quick Service Restaurant (ITE 934 - Fast-Food Restaurant with Drive-Through Window)	3.462 1,000 Sq. Ft.	1,630	71	68	139	59	54	113	
High-Density Residential (ITE 221 - Multifamily Housing (Mid-Rise)	223 Dwelling Unit	1,213	20	60	80	60	38	98	
am/pm Convenience Store (ITE 960 - Super Convenience Market / Gas Station	16 Vehicle Fueling Positions and 3.8 1,000 Sq. Ft.	3,688	144	144	288	137	137	273	
Unadjusted Subtotal		7,034	255	286	541	295	268	562	
Pass-By & Mixed Land Use Internal Trip Reductions									
Tunnel Car Wash (Pass-By) (ITE 845 - Automated Car Wash)		-75	-3	-2	-5	-6	-6	-12	
Quick Service Restaurant (Pass-By) (ITE 934 - Fast-Food Restaurant with Drive-Through Window)		-799	-35	-33	-68	-30	-27	-57	
am/pm Convenience Store (Pass-By) (ITE 960 - Super Convenience Market / Gas Station		-2,065	-89	-89	-179	-77	-77	-153	
Mixed Land Use Internal Trip Reduction (For calculation, see the technical appendix)		-431	-7	-12	-19	-19	-20	-39	
Adjusted Total		3,664	121	150	270	163	138	301	

Notes: Totals may not equal the sum of the components due to rounding.

Peak hour trip generation for ITE 960 - Super Convenience Market/Gas Station based on multi-variable regression analysis.

Mixed land use internal trip calculation based on Institute of Transportation Engineers 2012.

Pass-by percentages based on Institute of Transportation Engineers 2012, and Caltrans 2002.

**Table 10. Roadway Segment Level of Service -
EPAP Plus Project Conditions**

Roadway Segment	Number of Lanes	Daily Capacity	Daily Volume	V/C Ratio	Level of Service
1 Eight Mile Road – Interstate 5 to Thornton Road	4	47,900	26,385	0.55	C
2 Eight Mile Road – Thornton Road to Davis Road	2	20,600	19,404	0.94	E
3 Thornton Road - Eight Mile Road to Bear Creek	4	38,200	9,779	0.26	A
4 AG Spanos Boulevard - Thornton Road to Ocean Mist Way	2	13,200	2,577	0.20	A
5 Ocean Mist Way / Breaker Way - A.G. Spanos Boulevard to Lands End	2	13,200	1,241	0.09	A
Notes: "V/C Ratio" = volume-to-capacity ratio.					

Table 11. Intersection Level of Service - EPAP Plus Project Conditions

Study Intersections	Inters. Control	Signal Warrant Met?	AM Peak		PM Peak	
			LOS	Delay	LOS	Delay
1 Eight Mile Road & I-5 Southbound Ramps	Signal		D	39.7	B	19.9
2 Eight Mile Road & I-5 Northbound Ramps	Signal		C	29.7	C	31.5
3 Eight Mile Road & Thornton Road	Signal		D	35.6	C	33.4
4 Eight Mile Road & Rivermont Drive	Signal		B	14.4	C	20.8
5 Eight Mile Road & Davis Road	Signal		D	46.7	D	41.6
6 Thornton Road & A.G. Spanos Boulevard	Signal		C	26.8	C	21.5
7 Eight Mile Road & Project Site Driveway	Unsig	No	A	0.8	A	0.7
8 Thornton Road & Project Site Driveway	Unsig	No	A	1.2	A	1.2

Notes: I-5 = Interstate 5. LOS = Level of Service. "Inters. Control" = Type of intersection control. "Signal" = Signalized light control. "Unsig" = Unsignalized stop-sign control. Dashes (- -) indicate the intersection would not be present under this scenario. Delay is measured in seconds per vehicle. Per City of Stockton guidelines, intersection average delay is reported for all intersections, including unsignalized intersections.

**Table 14. Roadway Segment Level of Service -
Cumulative Plus Project Conditions**

Roadway Segment	Number of Lanes	Daily Capacity	Daily Volume	V/C Ratio	Level of Service
1 Eight Mile Road – Interstate 5 to Thornton Road	8	84,700	55,206	0.65	C
2 Eight Mile Road – Thornton Road to Davis Road	8	84,700	54,070	0.64	C
3 Thornton Road - Eight Mile Road to Bear Creek	6	59,300	17,748	0.30	A
4 AG Spanos Boulevard - Thornton Road to Ocean Mist Way	2	13,200	2,922	0.22	A
5 Ocean Mist Way / Breaker Way - A.G. Spanos Boulevard to Lands End	2	13,200	1,334	0.10	A
Notes: "V/C Ratio" = volume-to-capacity ratio.					

Table 15. Intersection Level of Service - Cumulative Plus Project Conditions

Study Intersections	Inters. Control	Signal Warrant Met?	AM Peak		PM Peak	
			LOS	Delay	LOS	Delay
1 Eight Mile Road & I-5 Southbound Ramps	Signal		B	17.9	D	48.6
2 Eight Mile Road & I-5 Northbound Ramps	Signal		C	23.5	E	64.0
3 Eight Mile Road & Thornton Road	Signal		C	33.1	D	54.3
4 Eight Mile Road & Rivermont Drive	Signal		A	9.8	B	10.5
5 Eight Mile Road & Davis Road	Signal		C	31.7	D	40.0
6 Thornton Road & A.G. Spanos Boulevard	Signal		C	25.5	C	30.4
7 Eight Mile Road & Project Site Driveway	Unsig	No	A	0.4	A	0.4
8 Thornton Road & Project Site Driveway	Unsig	Yes	A	0.9	A	1.1

Notes: I-5 = Interstate 5. LOS = Level of Service. "Inters. Control" = Type of intersection control.
"Signal" = Signalized light control. "Unsig" = Unsignalized stop-sign control.
Dashes (- -) indicate the intersection would not be present under this scenario.
Delay is measured in seconds per vehicle.
Per City of Stockton guidelines, intersection average delay is reported for all intersections, including unsignalized intersections.

March 15, 2019

Ms. Surina Mann
OEM Petroleum, LLC
2190 Meridian Park Boulevard, Suite G
Concord, CA 94520

Subject: *Eight Mile Road & Thornton Road Convenience Center Project Revision – Eight Mile Road Precise Roadway Plan Amendment Traffic Analysis*

Dear Ms. Mann -

On behalf of KD Anderson & Associates (KDA), I am pleased to submit this letter report presenting our focused traffic analysis of a proposed amendment to the Eight Mile Road Precise Roadway Plan associated with the Eight Mile Road & Thornton Road Convenience Center project. As described in more detail below, this analysis focuses on a proposed revision to the project. The following is:

- an executive summary of the analysis,
- background information and an introduction to this letter report,
- our understanding of the project revision,
- a description of the methods used in the analysis, and
- the results of the analysis.

Enclosed in a separate electronic file is a technical appendix presenting level of service (LOS) calculation worksheets.

EXECUTIVE SUMMARY

Based on analysis approaches and significance thresholds specified by the City of Stockton, proposed amendments to the Eight Mile Road Precise Roadway Plan would have a less-than-significant impact on traffic. Level of service would be poor at one of the study intersections. However, LOS would be poor both with and without proposed amendments to the precise roadway plan, resulting in a less-than-significant impact.

Ms. Surina Mann
OEM Petroleum, LLC
March 15, 2019
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BACKGROUND AND INTRODUCTION

The July 20, 2017 letter report *Subject: Eight Mile Road Precise Roadway Plan Amendment* (KD Anderson & Associates 2017a) presented traffic analysis of a proposed amendment to the Eight Mile Road Precise Roadway Plan. The letter report *Subject: Eight Mile Road Precise Roadway Plan Amendment* (2017 letter report) presented a full description of the precise roadway plan amendment traffic analysis.

The 2017 letter report was associated with a July 19, 2017 *Traffic Impact Study for the Eight Mile Road & Thornton Road Convenience Center Project* (KD Anderson & Associates 2017b), The *Traffic Impact Study for the Eight Mile Road & Thornton Road Convenience Center Project* (2017 TIS) presented a full traffic analysis of the Eight Mile Road & Thornton Road Convenience Center project as it was then proposed.

The composition of land uses in the proposed Eight Mile Road & Thornton Road Convenience Center project has recently changed. The March 15, 2019 letter report *Subject: Eight Mile Road & Thornton Road Convenience Center Project Revision - Traffic Analysis* (2019 letter report) presented traffic analysis of the recently-revised Eight Mile Road & Thornton Road Convenience Center project (KD Anderson & Associates 2019).

The recently-proposed changes to land uses in the Eight Mile Road & Thornton Road Convenience Center project would change the results of the traffic analysis presented in the 2017 letter report. This current letter report presents a focused traffic analysis of the proposed amendment to the Eight Mile Road Precise Roadway Plan using proposed revisions to land uses included in the Eight Mile Road & Thornton Road Convenience Center project.

As described in more detail below, this letter report is not intended to be a full standalone report. This letter report focuses on changes to project-related land uses, and changes to the methodology applied in the 2017 TIS. For full documentation of the traffic analysis, the reader is referred to the 2017 TIS, 2017 letter report, and 2019 letter report.

Enclosed with this letter report are those figures and tables from the 2017 letter report which have been revised. Figures and tables which have not been revised are not included in this letter report, and may be found in the 2017 letter report (KD Anderson & Associates 2017a). This approach has been applied to focus the content of this letter report on the changes that result from the revised analysis.

PROJECT UNDERSTANDING

The Eight Mile Road & Thornton Road Convenience Center project site is located on the southeast corner of the intersection of Eight Mile Road & Thornton Road. At the time the 2017 TIS and 2017 letter report were prepared, the project included the following:

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OEM Petroleum, LLC
March 15, 2019
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- a 4,000 building square feet retail commercial structure,
- a 3,462 building square feet quick service restaurant,
- an am/pm convenience store with a 16-position vehicle fueling area and a car wash, and
- 234 multiple family dwelling units.

The land use composition and quantities of the Eight Mile Road & Thornton Road Convenience Center project have recently changed and now include the following (Simpson pers. comm.):

- a standalone automated car wash,
- a 3,462 building square feet quick service restaurant,
- an am/pm convenience store with a 16-position vehicle fueling area, and
- 223 multiple family dwelling units.

A site plan showing the revised commercial portion of the Eight Mile Road & Thornton Road Convenience Center project as currently proposed is presented in the enclosed **Figure 2** (Farmer pers. comm.).

The Eight Mile Road Precise Roadway Plan specifies lane configurations and roadway access along the Eight Mile Road corridor. The plan also specifies lane configurations and access on roadways that intersect with Eight Mile Road, including Thornton Road. Implementation of the Eight Mile Road & Thornton Road Convenience Center project, as proposed, would require amendment of the Eight Mile Road Precise Roadway Plan.

As shown in **Figure 2**, the project includes a driveway connection to Eight Mile Road, and a driveway connection to Thornton Road. Neither driveway connection is included in the current Eight Mile Road Precise Roadway Plan. The Eight Mile Road & Thornton Road Convenience Center project proposes to amend the Eight Mile Road Precise Roadway Plan to include these two driveway connections.

ANALYSIS METHODS

The traffic analysis presented in this letter report will be used by the City of Stockton in a California Environmental Quality Act (CEQA) addendum to the 2017 Initial Study/ Mitigated Negative Declaration (2017 IS/MND) prepared for proposed amendments to the Eight Mile Road Precise Roadway Plan. The 2017 IS/MND included traffic analysis presented in the 2017 letter report. As a result, the technical approaches and assumptions applied in the analysis for this current letter report are, to the extent appropriate, consistent with those applied in the 2017 letter report. The following aspects of the 2017 TIS, 2017 letter report, and 2019 letter report are applied in this current letter report, are described in detail in those documents, are not repeated in this letter report, and are incorporated by reference into this current letter report:

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- long-term future Cumulative background traffic volumes,
- project-related trip generation,
- project-related trip distribution,
- long-term future Cumulative lane geometrics,
- intersection LOS analysis software and methods, and
- significance thresholds.

The following describes aspects of the analysis presented in this letter report which are different from the 2017 TIS, 2017 letter report, and 2019 letter report.

Land Use Quantities

Both the types of land uses and the land use quantities included in the proposed Eight Mile Road & Thornton Road Convenience Center project have changed. As noted earlier in the *Project Understanding* section of this letter report, at the time the 2017 TIS and 2017 letter report were prepared, the project included the following:

- a 4,000 building square feet retail commercial structure,
- a 3,462 building square feet quick service restaurant,
- an am/pm convenience store with a 16-position vehicle fueling area and a car wash, and
- 234 multiple family dwelling units.

Proposed land uses in the Eight Mile Road & Thornton Road Convenience Center project now include the following:

- a standalone automated car wash,
- a 3,462 building square feet quick service restaurant,
- an am/pm convenience store with a 16-position vehicle fueling area, and
- 223 multiple family dwelling units.

In summary, the changes to the proposed project are:

- the 4,000 building square feet retail commercial structure is no longer proposed,
- the car wash previously associated with the am/pm convenience store is now proposed as a standalone automated car wash, and
- the number of proposed multiple family dwelling units has decreased from 234 to 223.

Trip Generation

The 2017 TIS and 2017 letter report were prepared using vehicle trip generation rates from the then-most recent ITE *Trip Generation Manual 9th Edition* (Institute of Transportation Engineers

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2012). After the 2017 TIS and 2017 letter report were prepared, a new edition of this document was published. In consultation with City of Stockton staff (McDowell pers. comm.), the traffic analysis presented in this current letter report used vehicle trip generation rates from the current-most recent ITE *Trip Generation Manual 10th Edition* (Institute of Transportation Engineers 2017).

Trip generation rates from *Trip Generation Manual 10th Edition* were applied to the land uses described above in the *Land Use Quantities* section of this current letter report. This would result in the project generating an adjusted total of:

- 3,664 trips per day,
- 270 trips during the a.m. peak hour, and
- 301 trips during the p.m. peak hour.

A detailed description of the methods used to estimate these values is presented in the 2019 letter report. The current trip generation estimates are greater than the estimates presented in the 2017 TIS and 2017 letter report.

ANALYSIS RESULTS

Changes to the Eight Mile Road & Thornton Road Convenience Center project land uses and changes to vehicle trip generation rates would result in changes to the analysis results for the two scenarios evaluated in the 2017 letter report:

- Cumulative Plus Eight Mile Road & Thornton Road Convenience Center Project
No Eight Mile Road Precise Roadway Plan Amendment, and
- Cumulative Plus Eight Mile Road & Thornton Road Convenience Center Project
Plus Eight Mile Road Precise Roadway Plan Amendment.

Traffic Volumes

Enclosed are figures presenting the volumes and lane geometrics for the scenarios listed above. **Figure 4** is for the scenario without amendments to the Eight Mile Road Precise Roadway Plan. **Figure 5** is for the scenario with the amendments.

Level of Service

The following is a description of the results of the LOS analysis of the Eight Mile Road Precise Roadway Plan amendment. The results of the LOS analyses for the two scenarios listed above are presented in the enclosed **Table 1**. Level of service and signal warrant calculation worksheets for these two scenarios are presented in the technical appendix.

KDA

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OEM Petroleum, LLC
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With implementation of the Eight Mile Road Precise Roadway Plan amendments, seven of the eight study intersections would operate at acceptable LOS D or better during both the a.m. peak hour and the p.m. peak hour. Therefore, the impacts at these intersections are considered less-than-significant. No mitigation measures are required.

With implementation of the Eight Mile Road Precise Roadway Plan amendments, the intersection of Eight Mile Road & I-5 Northbound Ramps would operate at LOS C with 23.5 seconds of delay during the a.m. peak hour, and LOS E with 64.0 seconds of delay during the p.m. peak hour. LOS E is considered unacceptable. However, proposed amendments to the Eight Mile Road Precise Roadway Plan Amendment would not increase delay by more than five seconds, compared to conditions without the amendment. Therefore, based on criteria presented in the *Significance Thresholds* section of the 2017 letter report, this impact is considered less than significant and no mitigation measures are required.

CLOSING

Thank you for this opportunity to provide traffic analysis services on Eight Mile Road & Thornton Road Convenience Center project and the Eight Mile Road Precise Roadway Plan amendment. If you have any questions about this report, please contact me via E-mail message at wshijo@kdanderson.com or call me at 916/660-1555.

Sincerely,

KD Anderson & Associates, Inc.



Wayne Shijo
Project Manager

enclosures

KDA

REFERENCES

Publications Cited

Institute of Transportation Engineers. 2012. Trip Generation Manual, 9th Edition. Washington, D.C.

Institute of Transportation Engineers. 2017. Trip Generation Manual, 10th Edition. Washington, D.C.

KD Anderson & Associates 2017a. Letter Report for the Eight Mile Road & Thornton Road Convenience Center Project – Eight Mile Road Precise Roadway Plan Amendment. Loomis, CA.

KD Anderson & Associates 2017b. Traffic Impact Study for the Eight Mile Road & Thornton Road Convenience Center Project. Loomis, CA.

KD Anderson & Associates 2019. Letter Report Subject: Eight Mile Road & Thornton Road Convenience Center Project Revisions – Traffic Analysis. Loomis, CA.

Stockton, City of. 2017. Public Review Draft - Initial Study/ Mitigated Negative Declaration for the Thornton Road/Eight Mile Road Arco Station Project - 2910 Eight Mile Road, Stockton, CA - City of Stockton Project File No. P16-0667. Stockton, CA.

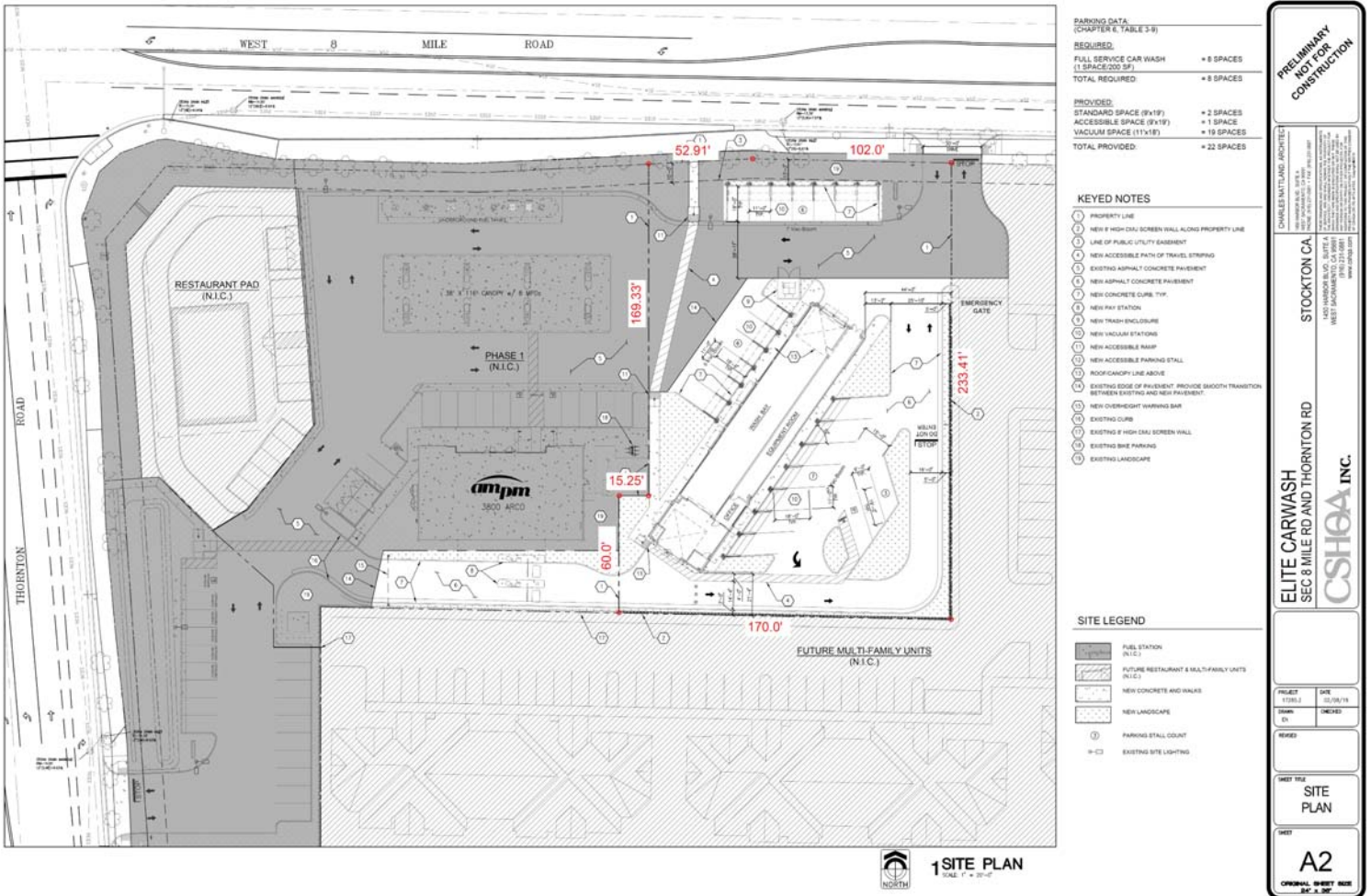
Personal Communications

Farmer, Terry. BaseCamp Environmental, Inc. March 13, 2019 E-mail message to Wayne Shijo, KD Anderson & Associates.

McDowell, Michael. Deputy Director – Planning & Engineering. City of Stockton Community Development Department. February 26, 2019 E-mail message to Wayne Shijo, KD Anderson & Associates.

Simpson, Charlie. BaseCamp Environmental, Inc. March 9, 2019 E-mail message to Wayne Shijo, KD Anderson & Associates.

EXHIBIT 1

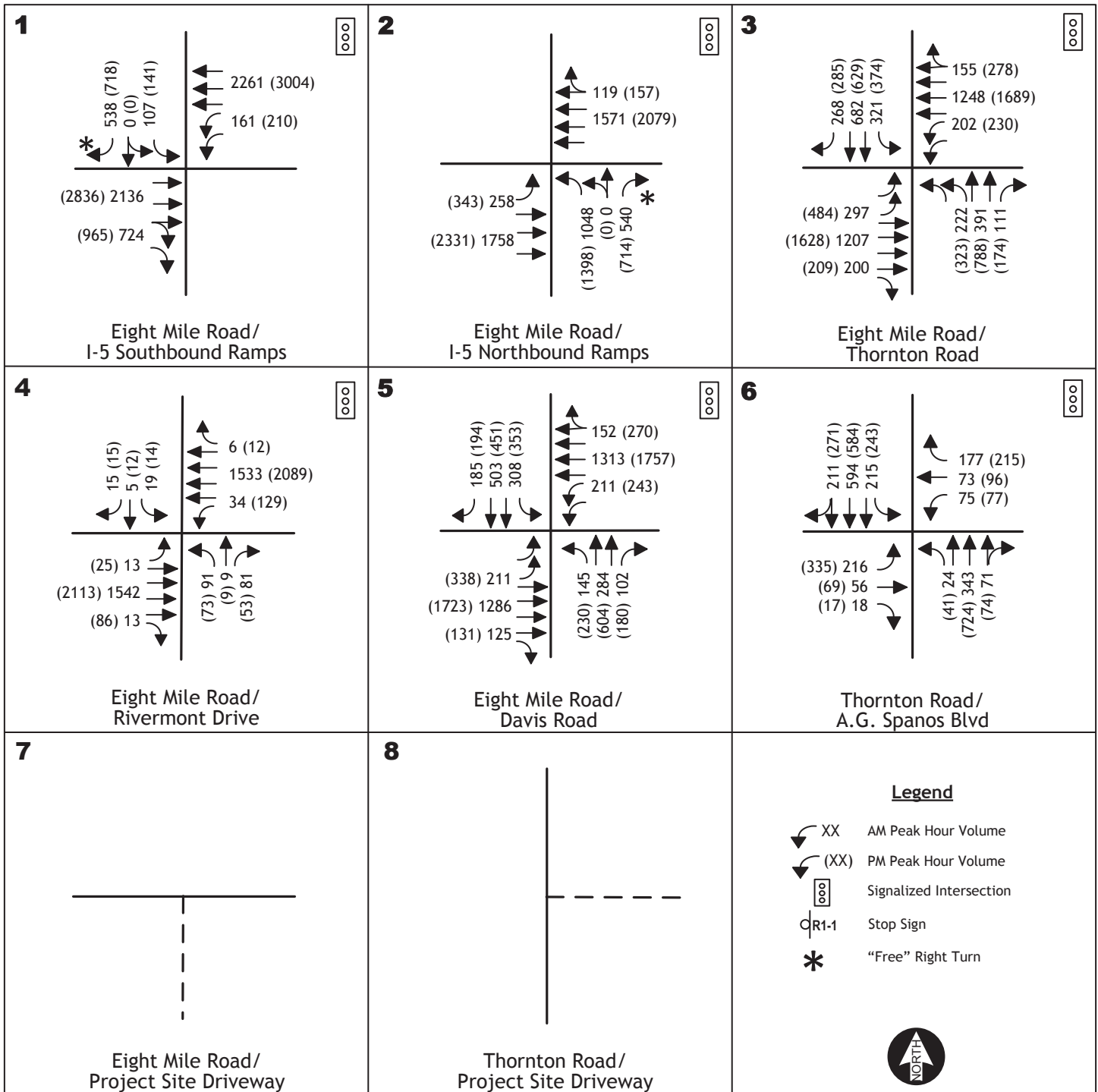


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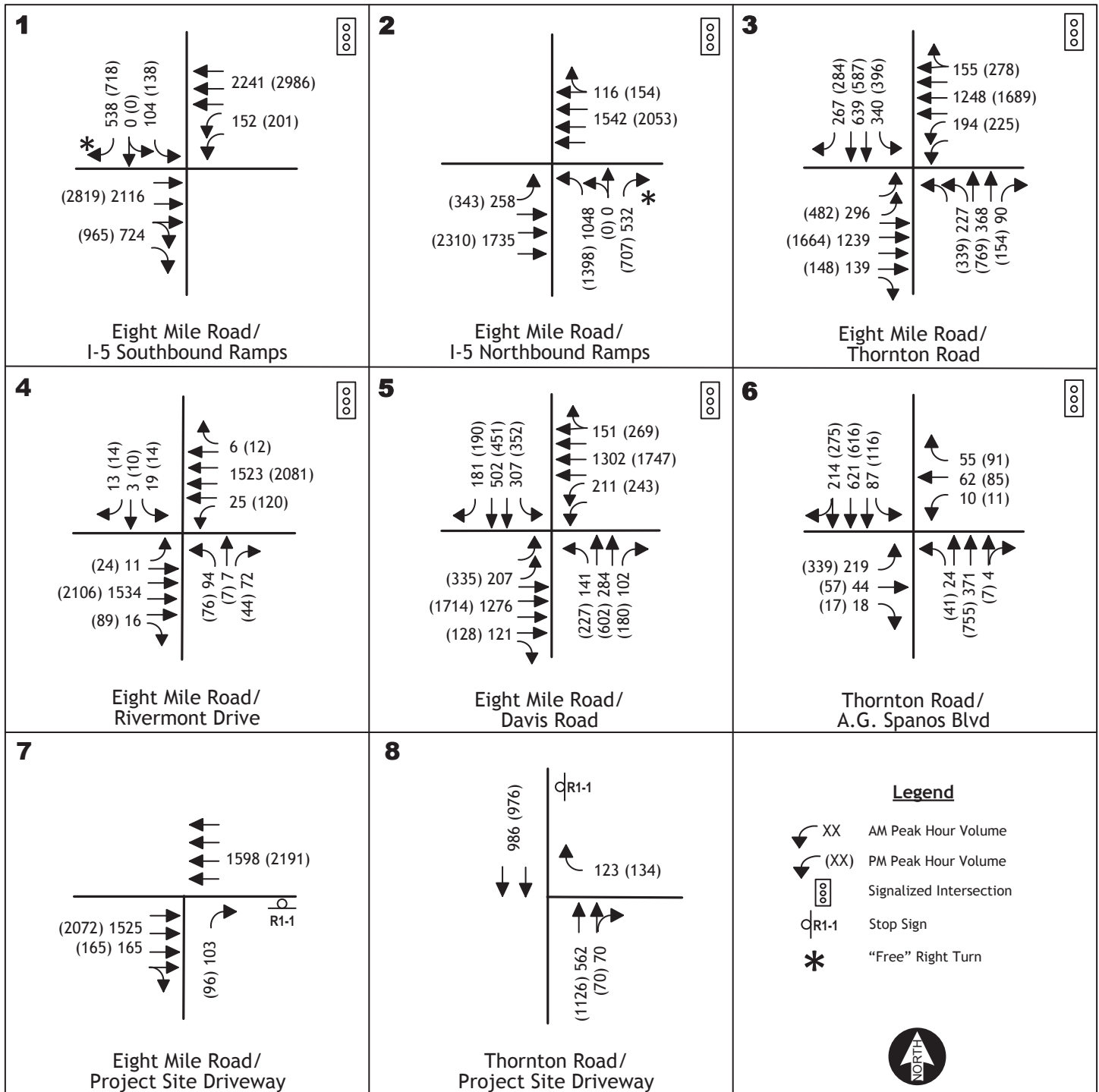
CONVENIENCE CENTER SITE PLAN

Eight Mile Road & Thornton Road Convenience Center

figure 2



**CUMULATIVE PLUS PROJECT
NO PRECISE ROADWAY PLAN AMENDMENT**
Intersection Traffic Volumes and Lane Configurations



CUMULATIVE PLUS PROJECT PLUS EIGHT MILE ROAD PRECISE ROADWAY PLAN AMENDMENT

KD Anderson & Associates, Inc.
Transportation Engineers

Intersection Traffic Volumes and Lane Configurations

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Eight Mile Road & Thornton Road Convenience Center

figure 5

Table 1. Level of Service - Cumulative Plus Eight Mile Road & Thornton Road Convenience Center Project Without and With Amendments to the Eight Mile Road Precise Roadway Plan

Intersection	Without Precise Roadway Plan Amendment						With Precise Roadway Plan Amendment					
	Signal Control	Signal Warrant?	AM Peak Hour		PM Peak Hour		Signal Control	Signal Warrant?	AM Peak Hour		PM Peak Hour	
			LOS	Delay	LOS	Delay			LOS	Delay	LOS	Delay
1. Eight Mile Road & I-5 Southbound Ramps	Signalized	--	B	18.2	D	49.4	Signalized	--	B	17.9	D	48.6
2. Eight Mile Road & I-5 Northbound Ramps	Signalized	--	C	23.8	E	64.9	Signalized	--	C	23.5	E	64.0
3. Eight Mile Road & Thornton Road	Signalized	--	C	33.0	D	52.6	Signalized	--	C	33.1	D	54.3
4. Eight Mile Road & Rivermont Drive	Signalized	--	B	10.3	B	10.6	Signalized	--	A	9.8	B	10.5
5. Eight Mile Road & Davis Road	Signalized	--	C	31.8	D	40.3	Signalized	--	C	31.7	D	40.0
6. Thornton Road & A.G. Spanos Blvd.	Signalized	--	C	31.1	D	36.2	Signalized	--	C	25.5	C	30.4
7. Eight Mile Road & Project Site Driveway	--	--	--	--	--	--	Right-in/Right-out Unsignalized	No	A	0.4	A	0.4
8. Thornton Road & Project Site Driveway	--	--	--	--	--	--	Right-in/Right-out Unsignalized	No	A	0.9	A	1.1
Notes: LOS = Level of Service. All delay values are in measured in seconds per vehicle. Per City of Stockton guidelines, intersection average delay is reported for all intersections, including unsignalized intersections. Dashes (- -) indicate entry is not applicable.												