City of SACRAMENTO
Community Development

ADDENDUM TO AN ADOPTED MITIGATED NEGATIVE DECLARATION

The City of Sacramento, California, a municipal corporation, does hereby prepare, make declare, and publish the Addendum to a certified Negative Declaration for the following described project:

Project Name and Number: Dutch Bros. at Florin and Freeport Project (P21-045)

Original Project: CVS at Florin and Freeport Initial Study/Mitigated Negative Declaration (P10-044). The proposed project is located on a 1.13-acre site and would include the development of 1,162 square foot (sf) drive-through coffee shop with one walk-up ordering/pick-up window, one ordering/pick-up window serving drive-through customers, two queuing lanes, eight surface parking spaces, and a patio area.

The City of Sacramento, Community Development Department, has reviewed the proposed project and on the basis of the whole record before it, has determined that there is no substantial evidence that the project, as identified in the attached Addendum, would have a significant effect on the environmental beyond that which was evaluated in the attached Mitigated Negative Declaration (MND). A Subsequent MND is not required pursuant to the California Environmental Quality Act (CEQA) of 1970 (Sections 21000, et. Seq., Public Resources Code of the State of California).

This Addendum to an adopted Mitigated Negative Declaration has been prepared pursuant to Title 14, Section 15164 of the California Code of Regulations; the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento.

A copy of this document and all supportive documentation may be reviewed or obtained at the City of Sacramento, Community Development Department, Planning Division, 300 Richards Boulevard, Sacramento, California 95811 and is available online at: http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports

Environmental Services Manager, City of Sacramento, California, a municipal corporation

By: Scott Johnson

Date: June 17, 2022

Dutch Bros. at Florin and Freeport Project (P21-045)
Addendum to the 2011 CVS at Florin and Freeport (P10-044) Mitigated Negative Declaration (MND)

File Number/Project Name: P21-045/Dutch Bros. at Florin and Freeport Project

Project Location and Surrounding Land Uses: The Dutch Bros. at Florin and Freeport Project (proposed project) is located on an approximately 1.13-acre site southeast of the intersection of Florin Road and Freeport Boulevard in the City of Sacramento, California. The project site is surrounded by Freeport Boulevard to the west and single-family residences, across Freeport Boulevard; commercial uses to the north; single-family residences to the east; and undeveloped land and single-family residences to the south (see Figure 1 and Figure 2). The project site consists of one parcel Assessor's Parcel Number (APN) 047-0290-009 and the eastern portion of the parcel is located within the Sacramento Executive Airport Zone boundary.

Existing Plan Designations and Zoning: The City of Sacramento 2035 General Plan (Sacramento General Plan) designates the project site as Suburban Corridor and the site is zoned Limited Commercial Review Executive Airport EA-2 and EA-4 Overlay (C-1-R-EA-2 and C-1-R-EA-4) and Limited Commercial Review with Condition Executive Airport EA-2 and EA-4 overlay (C-1-R[WC]-EA-2) and (C-1-R[WC]-EA-4). The proposed project would be consistent with the General Plan land use designation. The project is requesting approval of rezone from C-1-R(WC)-EA-2 and C-1-R(WC)-EA-4 to General Commercial Review with Condition Executive Airport EA-2 and EA-4 overlay (C-2-R[WC]-EA-2) and (C-2-R[WC]-EA-4).

Project Background: The 2011 CVS at Florin and Freeport Project included the subdivision of two parcels (APNs 047-0021-018- 0000 and 047-0091-015) into five separate parcels (APNs 047-0290-001, -002, -003, -004, and -005). APN 047-0290-001 would be developed with a 16,500 square foot (sf) pharmacy retail store with a drive-through facility for prescription pharmaceuticals drop-off and pick-up. Future proposed development on the remaining four parcels were also evaluated in the IS/MND and would include the following: a 3,067-sf drive-through fast-food restaurant on APN 047-0290-002; one 8,400-sf retail space on APN 047-0290-003; one 6,750-sf retail space on APN 047-0290-004; and three medical office buildings totaling 20,500 sf and a 5,880-sf restaurant on APN 047-0290-005. The project also included landscaping, roadways, and utility infrastructure.

In 2013, the Florin Plaza (P13-030) Addendum to the 2011 CVS at Florin and Freeport Project IS/MND was approved. The 2013 Florin Plaza Project proposed to modify the previously approved project and develop a 27,870-sf Smart and Final on APN 047-0290-005, a 5,400-sf retail space on APN 047-0290-003, and a 4,000-sf bank on APN 047-0290-004. The majority of the 2011 CVS at Florin and Freeport Project and the 2013 Florin Plaza Project have been constructed, except for APN 047-0290-002, which is intended for retail use and APN 047-0290-004, which is intended for a bank.

The proposed project is located on APN 047-0290-004, which is currently undeveloped (see Figure 2). The currently proposed project is consistent with previously approved use designations within the larger planning area. The City of Sacramento determined that the 2011 CVS at Florin and Freeport Project, with implementation of mitigation measures, would not have a significant environmental effect. The City of Sacramento prepared an Initial Study/Mitigated Negative Declaration (IS/MND) for the 2011 CVS at Florin and Freeport Project. The 2011 CVS at Florin and Freeport Project IS/MND was approved and the associated Mitigated Negative Declaration was adopted by City Council on March 15, 2011, Resolution No. 2011-153. The 2013 Florin Plaza Addendum to the 2011 CVS at Florin at Freeport Project IS/MND was approved and the associated Addendum was adopted by City Council on October 15, 2013, Resolution No. 2013-0335.

Figure 1
Regional Project Location

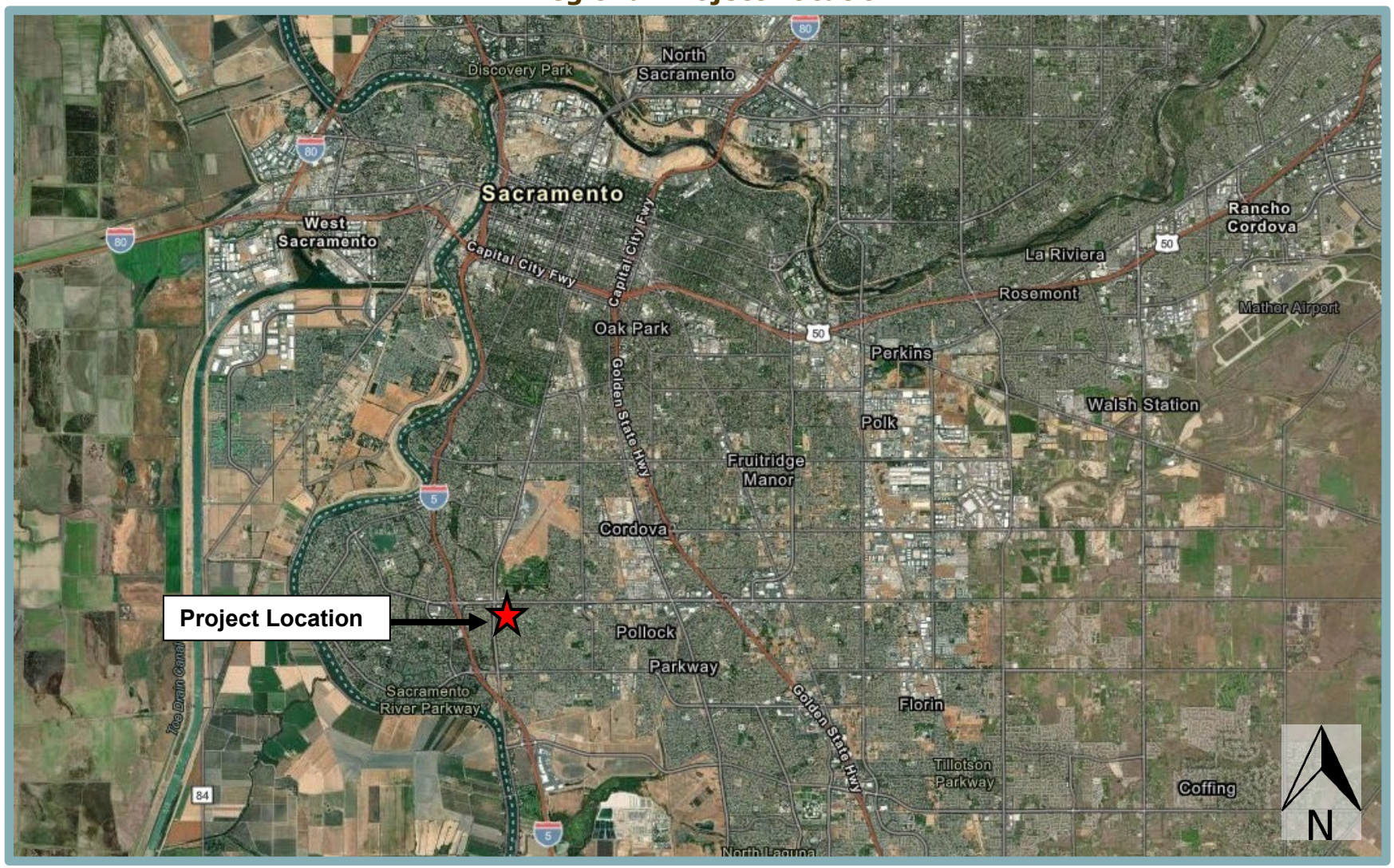


Figure 2
Project Boundaries Map

The 2011 CVS at Florin and Freeport IS/MND and the 2013 Florin Plaza Addendum City Council Resolutions can be viewed through the City's website at https://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.

Due to the current Covid-19 public counter closures, the documents are not available for review in printed form. If you need assistance in reviewing the documents please contact Ron Bess, Associate Planner at (916) 808-8272 or Rbess@cityofsacramento.org. Further details regarding the 2011 CVS at Florin and Freeport Project IS/MND, 2013 Florin Plaza Addendum, as well as the components for the proposed project, are provided below.

Project Description: The proposed project is located on a 1.13-acre site and would include the development of a 1,162-sf Dutch Bros. drive-through coffee shop (see Figure 3). One walk-up ordering/pick-up window would be installed on the western side of the coffee shop building and one ordering/pick-up window serving drive-through customers would be installed on the eastern side of the building. Two drive-through queuing lanes are proposed, which would merge into a single lane as vehicles approach the ordering/pick-up window; a concrete median island with two double-sided menu boards would separate the two queuing lanes. The overall vehicle queue capacity of the drive-through is 19 vehicles. The drive-through entrance would be located at the southeast corner of the project site and an exit would be located at the northeast corner of the project site. A bypass lane is also proposed to allow vehicles to maneuver around vehicles stopped at the ordering/pick-up window.

A patio area with tables would be located north of the coffee shop building and would have a capacity of approximately 16 people. Eight parking stalls would be provided east of the queuing lanes, including one ADA parking stall and one clean air vehicle parking stall. A crosswalk would be provided across the drive-through aisles to connect the parking stalls to the coffee shop building. Primary vehicle access to the project site would be provided by two existing right-in/right-out driveways along Freeport Boulevard. An existing crosswalk near the northeast corner of the project site would provide a pedestrian connection between the proposed coffee shop and the existing shopping center to the north. The project would include site improvements, including landscaping and associated parking, bike parking, utilities, and lighting improvements.

Rationale for Preparation of the Addendum: In determining whether an addendum is the appropriate document to analyze the modifications to the project and its approval, State CEQA Guidelines Section 15164 (Addendum to an EIR or Negative Declaration) states:

(a) The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.

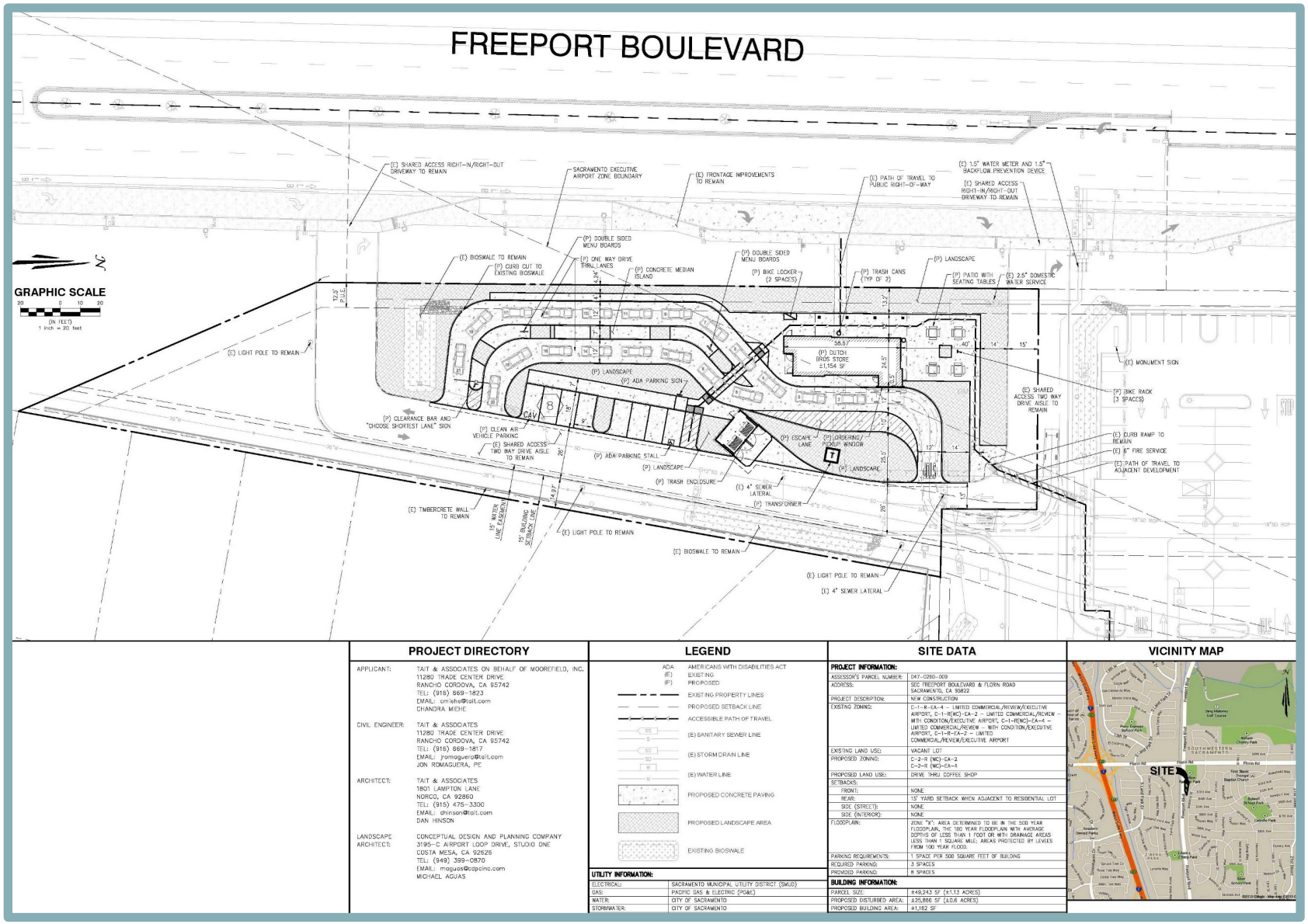
(b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.

(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.

Figure 3
Site Plan



New significant effects or other grounds require preparation of a subsequent Mitigated Negative Declaration in support of further agency action on a project pursuant to Public Resources Code Section 21166 and State CEQA Guidelines Sections 15162 and 15163. Under the guidelines, a subsequent or supplemental EIR or Mitigated Negative Declaration shall be prepared if any of the following criteria are met:

(a) When an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, 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; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete 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 not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

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

Use of a Prior Environmental Document:

The California Supreme Court has held that a lead agency has the responsibility of initially deciding whether an original environmental document retains “some relevance” to the ongoing decision-making process. If it does, the lead agency moves on to determine whether the original document is adequate for CEQA purposes. The City of Sacramento has determined that the 2011 CVS at Florin and Freeport IS/MND adopted for the CVS Project as well as the 2013 Addendum to the IS/MND are relevant and has prepared an additional addendum to evaluate the proposed project. The project site is contained within the original 7.55-acre site considered for the CVS at Florin and Freeport Project, and includes land uses consistent with those anticipated for the proposed project site in the CVS Project. The project discussed in this Addendum would result in similar impacts as identified in the 2011 CVS at Florin and Freeport IS/MND and 2013 Addendum to the IS/MND.

Based on the above, in accordance with Sections 15162 through 15164 of the CEQA Guidelines, the proposed neighborhood would not require major revisions of the previous 2011 CVS at Florin and Freeport IS/MND due to the involvement of new significant environmental effects or a substantial increase in the

severity of previously identified significant effects. The analysis that follows concludes that none of the conditions identified in CEQA Guidelines Sections 15162 and 15163 apply to the proposed project. Thus, preparation of an addendum would provide the appropriate level of environmental review.

Discussion:

The following sections provide discussions of any potential impacts associated with the proposed project beyond those previously identified in the 2011 CVS at Florin and Freeport IS/MND and the 2013 Addendum to the IS/MND.

Air Quality:

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for control of stationary and indirect-source emissions, air monitoring, and preparation of air quality attainment plans in the Sacramento County portion of the Sacramento Valley Air Basin (SVAB). Federal and State air quality standards have been established for six common air pollutants, known as criteria pollutants, because the criteria air pollutants could be detrimental to human health and the environment. The criteria pollutants include particulate matter, ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. At the federal level, Sacramento County is designated as severe nonattainment for the 8-hour ozone standard, nonattainment for the 24-hour $PM_{2.5}$ standard, and attainment or unclassified for all other criteria pollutants.

Nearly all development projects in the Sacramento region have the potential to generate air pollutants that may increase the difficultly of attaining federal and State AAQS. Therefore, for most projects, evaluation of air quality impacts is required to comply with CEQA. In order to help public agencies evaluate air quality impacts, the SMAQMD has developed the *Guide to Air Quality Assessment in Sacramento County*.[1] The SMAQMD's guide includes recommended thresholds of significance, including mass emission thresholds for construction-related and operational ozone precursors, as the area is under nonattainment for the federal and State ozone AAQS. The SMAQMD's guide also includes screening criteria for localized carbon monoxide (CO) emissions and thresholds for new stationary sources of toxic air contaminants (TACs).

The 2011 CVS at Florin and Freeport IS/MND assessed air quality impacts of the CVS at Florin and Freeport Project as compared to SMAQMD's thresholds of significance. As noted in the 2011 CVS at Florin and Freeport IS/MND, construction activities of the entire 7.55-acre site would generate approximately 62.48 pounds per day (lbs/day) of NO_X, which is below SMAQMD's thresholds of significance for construction emissions. SMAQMD. Estimated ROG and NO_X emission for full development site were calculated to be approximately 37.05 lbs/day and 62.76 lbs/day, respectively, which is below the 65 lbs/day SMAQMD threshold for operation emissions. Therefore, impacts related to criteria pollutant emissions during construction and operations were determined to be less than significant.

The analysis included within the 2011 CVS at Florin and Freeport IS/MND and 2013 Addendum included an analysis of buildout on the project site. In order to determine whether the proposed project would result in any new or more severe impacts, the proposed project's construction-related and operational emissions have been estimated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0 software. The model applies inherent default values for various land uses, including construction data, trip generation rates, vehicle mix, trip length, average speed, compliance with the California Building Standards Code (CBSC), etc. The emissions intensity factor for electricity consumed at the project site was updated to reflect Sacramento Municipal Utility District's (SMUD's) progress towards achieving the State's Renewable Portfolio Standards (RPS). Where Project-specific data was available, such data was input into

[1] Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment in Sacramento County*. April 2020.

the model (e.g., construction phases and timing, inherent site or project design features, compliance with applicable regulations, etc.).

The estimated NO_x, ROG, PM_{10}, and $PM_{2.5}$ emissions during both construction and operation of the proposed project as compared to the current SMAQMD air quality criteria pollutant emissions thresholds, are listed in Table 1.

Table 1
Maximum Unmitigated Project Emissions (lbs/day)

Pollutant	Project Construction Emissions	Construction Thresholds	Project Operational Emissions	Operational Thresholds
NO_X	14.49	85	0.94	65
ROG	1.77	-	1.38	65
PM_{10}	7.76	80	0.81	80
$PM_{2.5}$	4.00	82	0.22	82

Source: CalEEMod, May 2022 (see Appendix A).

As shown in the table above, construction and operations of the proposed project would generate criteria pollutant emissions at a rate that falls below the SMAQMD's applicable thresholds of significance.

In addition, all projects under the jurisdiction of SMAQMD are required to comply with all applicable SMAQMD rules and regulations. Relevant rules include, but are not limited to, Rule 403 (Fugitive Dust), Rule 404 (Particulate Matter), and Rule 442 (Architectural Coatings). Furthermore, all projects are required to implement the SMAQMD Basic Construction Emission Control Practices (BCECP), as follows:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to five minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Compliance with SMAQMD rules and regulations and BCECP would help to further minimize construction emissions to below the levels presented in Table 1.

Based on the information presented above, the proposed project would not violate any applicable air quality thresholds established by SMAQMD and, thus, would not result in substantially more severe impacts relative to what was analyzed in the 2011 CVS at Florin and Freeport IS/MND.

Greenhouse Gas Emissions and Energy:

Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact.

GHG emissions were not addressed in the 2011 CVS at Florin and Freeport IS/MND. However, potential impacts related to GHG emissions do not constitute "new information" as defined by CEQA, as GHG emissions were known as potential environmental issues before 1994.[2] Since the time the 2001 Parkview IS/MND was approved, the City has taken numerous actions towards promoting sustainability within the City, including efforts aimed at reducing GHG emissions. On February 14, 2012, the City adopted the City of Sacramento Climate Action Plan (CAP), which identified how the City and the broader community could reduce Sacramento's GHG emissions and included reduction targets, strategies, and specific actions.

In 2015, the City adopted the 2035 General Plan Update. The update incorporated measures and actions from the CAP into Appendix B, General Plan CAP Policies and Programs, of the General Plan Update. Appendix B includes all City-wide policies and programs that are supportive of reducing GHG emissions. The General Plan CAP Policies and Programs per the General Plan Update supersede the City's CAP. Rather than compliance and consistency with the CAP, all projects, including the currently proposed project, must now be compliant and consistent with the General Plan CAP Policies and Programs outlined in Appendix B of the General Plan Update.

In addition to the City's General Plan CAP Policies and Programs outlined in Appendix B of the General Plan Update, a number of regulations have been enacted since the 2011 CVS at Florin and Freeport IS/MND was approved for the purpose of, or with an underlying goal for, reducing GHG emissions, such as the California Green Building Standards Code (CALGreen Code) and the California Building Energy Efficiency Standards Code. According to the California Energy Commission, the 2019 Building Energy Efficiency Standards are anticipated to result in 30 percent less energy consumption for non-residential buildings relative to the 2016 energy standards. Therefore, the project would achieve a 30 percent increase in energy efficiency compared to the 2016 California Building Code (CBC) standards, and the project would meet the City's CAP requirements regarding energy efficiency. In addition, the buildings associated with the project would be subject to Titles 20 and 24 of the California Code of Regulations, which reduce demand for electrical energy by implementing energy-efficient standards for residential and non-residential buildings. The Sacramento General Plan includes goals (Energy Resources Goal U 6.1.1) and related policies to encourage energy-efficient technology by offering rebates and other incentives to commercial and residential developers, coordination with local utility providers, and recruitment of businesses that research and promote energy conservation and efficiency. Furthermore, Policy ER 6.1.2 directs the City to review proposed development and incorporate feasible measures that reduce construction emissions for ROG, NO_X, and other pollutants. As discussed above, emissions related to construction of the proposed project would be in compliance with SMAQMD's applicable rules and thresholds of significance and Policy ER 6.1.2. The proposed project would be required to comply with all applicable regulations associated with GHG emissions, including the CALGreen Code and California Building Energy Efficiency Standards Code.

The primary GHG emission sources that would be expected to result from the proposed project would be mobile sources from vehicle emissions, followed by energy consumption, solid waste disposal, water conveyance and treatment, and area sources, such as landscape maintenance equipment exhaust. New

[2] As explained in a series of cases, most recently in *Concerned Dublin Citizens v. City of Dublin (2013) 214 Cal. App. 4th 1301*. Also see, *Citizens of Responsible Equitable Development v. City of San Diego (2011) 196 Cal.App.4th 515*.

land use or zoning designations are not proposed as part of the project, and the overall area of disturbance anticipated for buildout of the project site would not be modified. Therefore, GHG emissions associated with the proposed project are expected to be similar to what could have resulted from the 2011 CVS at Florin and Freeport Project.

Construction-related and operational GHG emissions associated with the proposed project were modeled using the same assumptions used in the Air Quality section of this Addendum. As modeled, the proposed project would be anticipated to emit a maximum of 151.78 metric tons of carbon dioxide equivalent units ($MTCO_2e$) per year during construction, and 168.46 $MTCO_2e$ per year during operation. However, the City of Sacramento does not assess potential impacts related to GHG emissions based on the basis of total emissions of GHGs. Rather, the City of Sacramento has integrated a CAP into the City's General Plan, and thus, potential impacts related to climate change from development within the City are assessed based on the project's compliance with the City's adopted General Plan CAP Policies and Programs set forth in Appendix B of the General Plan Update.

Goal LU 2.5, Policy LU 2.5.1, and Policy LU 2.7.6 require that new urban developments should be well-connected, minimize barriers between uses, and create pedestrian-scaled, walkable areas. Policy LU 2.6.1 and LU 2.6.2 were designed to promote the efficient use of land in order to reduce pollution and automobile dependence and facilitate walking, bicycling, and public transit use. Due to the nature of the proposed project, the aforementioned goals and policies related to pedestrian and bicycle infrastructure may not directly apply to the proposed project type. Nonetheless, the project site is located in the vicinity of existing bicycle and pedestrian infrastructure, paved sidewalks and marked bike lanes along Freeport Boulevard and Florin Road.

The 2035 General Plan EIR concluded that implementation of State regulations, coordination with energy providers, and implementation of General Plan policies would reduce the potential impacts from construction of new energy production or transmission facilities to a less-than-significant level. Since the preparation of the Sacramento General Plan and 2035 General Plan EIR, State building codes have become increasingly more stringent, with commercial structures built under the 2019 California Building Energy Efficiency Standards achieving 30 percent greater energy efficiency as compared to structures built under the 2016 codes. Consequently, the energy demand from development of the project site would likely be less than the demand that was anticipated from development of the site in the 2011 CVS at Florin and Freeport IS/MND. The project would be consistent with the type and intensity of development anticipated for this site in the General Plan, and would be conditioned to comply with the energy efficiency standards required by Title 24. SMUD would provide electricity to the site.

The General Plan EIR concluded that buildout of the City's General Plan would not result in a conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. The project would be consistent with the City's General Plan land use designation for the site as well as the policies discussed above that are intended to reduce GHG emissions from buildout of the City's General Plan. Thus, GHG emissions from operation of the project were previously addressed as part of the analysis in the Master EIR. Considering the project's consistency with the City's General Plan and the general consistency with the City's General Plan policies intended to reduce GHG emissions, the foregoing annual emissions related to operations of the project have been previously addressed, and the project would not conflict with the City's CAP.

Because the proposed project would be consistent with the City's General Plan and would comply with all applicable standards and regulations related to GHG and energy, including the City's General Plan CAP Policies and Programs, CALGreen Code, and California Building Energy Efficiency Standards Code, the proposed project would not result in any new or increased impacts related to GHG emissions, global climate change, and energy consumption than what was previously anticipated for the project site. In addition, as stated above, potential impacts related to GHG emissions do not constitute new information as defined by

CEQA. Thus, the proposed project would not result in any changes, new circumstances, or new information that would involve new significant impacts or substantially more severe impacts related to GHG emissions and energy consumption from what could have resulted for the project site in the 2011 CVS at Florin and Freeport IS/MND.

Noise:

The 2011 CVS at Florin and Freeport IS/MND assessed noise impacts to sensitive receptors as a result of construction and operation of the currently proposed project. According to the 2011 CVS at Florin and Freeport IS/MND, all impacts related to noise would be reduced to less-than-significant with implementation of Mitigation Measures N-1 through N-3. The proposed project is currently considered an allowable use and is consistent with the type of use anticipated for the project site in the 2011 CVS at Florin and Freeport Project. Thus, the analysis included within the 2011 CVS at Florin and Freeport IS/MND included an analysis of buildout on the project site. To quantify specific noise impacts from the proposed project, a noise assessment was conducted by Bollard Acoustical Consultants.[3] The following discussion includes an analysis of noise impacts during operation and construction of the proposed project based on the noise assessment; and presents the existing noise receptors, regulatory context, thresholds, estimated noise levels (operation and construction), and estimated vibration.

Existing Noise Receptors

Some land uses are considered more sensitive to noise than others. Land uses often associated with sensitive receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. In the vicinity of the project site, sensitive land uses include existing single-family residential uses east, south, and west of the project site.

Regulatory Context

The Noise Element of the City's General Plan identifies noise and land use compatibility standards for various land uses. For residential development including low density single-family, duplex, and mobile homes, the highest level of noise exposure that is regarded as normally acceptable is 60 dBA. The highest level of noise exposure for multi-family residential homes in the City is 65 dBA. As noted above, the existing sensitive receptors in the project vicinity include single-family homes. The City of Sacramento Municipal Code, Section 8.68.060 establishes an allowable exterior noise level limit of 55 dBA L_{50} and 75 dBA L_{max} during daytime (7:00 AM to 10:00 PM) hours and 50 dBA L_{50} and 70 dBA L_{max} during nighttime (10:00 PM to 7:00 AM) for sources of noise which occur for more than 30 minutes per hour (L_{50}). If the existing ambient noise level exceeds the 50/55 dBA L_{50} standard the allowable limit is increased in five dBA increments to encompass the ambient noise level. If the existing ambient noise level exceeds the 70/75 dBA L_{max} noise standard, the limit becomes the measured L_{max} existing ambient noise level. For example, if measured existing ambient daytime noise levels are 57 dBA L_{50} and 77 dBA L_{max}, the noise ordinance limits would be 60 dBA L_{50} and 77 dBA L_{max}.

Operation and Construction Threshold

The City of Sacramento General Plan specifies criteria for determination of significant noise impacts during operations in Table EC 2, which is reproduced in Table 2 below. Based on Table 2, an increase in the traffic noise level of 1 dB or more would be significant where the pre-project noise levels are less than 75 dB L_{dn}, or 2 dB or more where existing noise levels are less than 65 dB L_{dn}. Extending the concept to lower noise levels, an increase in the traffic noise level of 3 dB or more may be significant where the pre-project traffic

[3] Bollard Acoustical Consultants. *Environmental Noise Dutch Bros. Coffee Drive-Through – Sacramento, California.* April 18, 2022.

noise level is less than 60 dB L_{dn}. The rationale for the Table 2 criteria is that as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause annoyance.

Table 2
Exterior Incremental Noise Impact Standards for Noise-Sensitive Uses (dBA)

Residences and buildings where people normally sleep[1]		Institutional land uses with primarily daytime and evening uses[2]	
Existing L_{dn}	Allowable Noise Increment	Existing Peak Hour L_{eq}	Allowable Noise Increment
45	8	45	12
50	5	50	9
55	3	55	6
60	2	60	5
65	1	65	3
50	1	70	3
75	0	75	1
80	0	80	0

Source: Federal Transit Administration, Transit Noise Impact and Vibration Assessment, May 2006
Notes:
1 This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.
2 This category includes schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material.

With respect to construction noise, the City of Sacramento's Noise Ordinance of the Municipal Code exempts construction activities from noise standards, provided that construction takes place between the hours of 7:00 AM and 6:00 PM Monday through Saturday and 9:00 AM and 6:00 PM Sundays and holidays.

Construction Noise

During the construction phase of the proposed project, noise from construction activities would add to the noise environment in the immediate project vicinity. As indicated in Table 3, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max} at a distance of 50 feet.

Table 3
Construction Equipment Noise

Type of Equipment	Maximum Level, dB at 50 feet
Auger Drill Rig	84
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

Source: Federal Highway Administration, Roadway Construction Noise Model User's Guide, January 2006.

Most of the building construction would occur at distances of 50 feet or greater from the nearest residences. Construction noise associated with streets would be similar to noise that would be associated with public works projects, such as a roadway widening or paving projects. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours. Although the construction activities could result in infrequent periods of high noise, the construction noise would not be sustained and

would only occur only during the City's permitted construction noise hours. In addition, construction noise was previously addressed in the 2011 CVS at Florin and Freeport IS/MND and noise construction impacts were considered less-than-significant with adherence to Sacramento City Code (SCC) Title 8.68 Noise Control. The proposed project would continue to be subject to SCC. In addition, the type and intensity of development on the project site is consistent with what was anticipated in the 2011 CVS at Florin and Freeport IS/MND. Therefore, the proposed project would not result in any impacts related to construction noise beyond that included in the 2011 CVS at Florin and Freeport IS/MND.

Operational Noise

Operational noise sources from the proposed project include noise associated with drive-through vehicles, parking lot circulation, outdoor seating area patrons, and patron car stereos. During a continuous noise level survey, Bollard Acoustical Consultants recorded median noise levels of 60 dBA L_{50} during daytime hours and 51 through 53 dBA L_{50} during nighttime hours in the project vicinity. Bollard Acoustical Consultants recorded maximum noise levels up to 79 dBA L_{max} during daytime hours and 71 dBA L_{max} during nighttime hours. The Day-Night Average Level for the existing noise environment within the immediate project vicinity ranges from 63 to 64 dBA L_{dn}. According to the noise assessment, the proposed project would result in operational noise levels ranging from 19 dBA L_{50} to 65 dBA L_{max}.

As noted in Table EC 2 (see Table 2 above) of the City of Sacramento General Plan, in situations where the existing noise level exceeds the noise levels indicated in Table EC 2, any new noise source must include mitigation, if necessary, that reduces the noise level of the noise source to the existing level plus 3 dB. As an existing Day-Night Average Level of 63 to 64 dBA L_{dn} was measured at the project site, adjacent to existing single-family residences, along the eastern boundary of the project site, operational noise levels are predicted to be in the range, or less than, existing ambient noise levels at the existing residential uses, with a predicted noise level increase of 1 dB. Thus, the proposed project would not exceed the allowable increase of 3 dB for areas currently experiencing elevated ambient noise levels. The Environmental Noise Assessment determined that noise levels associated with proposed on-site operations at the drive-through coffee shop would comply with the Sacramento City Code daytime and nighttime noise level criteria at the nearest noise-sensitive uses (residential). Therefore, impacts resulting from operational noise would be considered less-than-significant.

Traffic Noise

The existing ambient noise environment within the immediate project vicinity is defined primarily by traffic on Florin Road and Freeport Boulevard, and to a lesser extent by adjacent commercial activities. As previously noted, the Day-Night Average Level for the existing noise environment within the immediate project vicinity ranges from 63 dBA L_{dn} to 64 dBA L_{dn}. According to the Environmental Noise Assessment, the proposed project would result in traffic noise levels ranging from 40 L_{50} to 50 dBA L_{max}. As the anticipated traffic noise levels for the proposed project would be less than the existing ambient noise levels and the proposed project would comply with City noise level standards without any additional noise control measures, impacts resulting from increased traffic noise would be considered less-than-significant.

Groundborne Vibration

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural. Table 4 indicates that construction vibration levels anticipated for the project are less than the 0.2 in/sec threshold at distances of 26 feet. Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located approximately 55 feet, or further, from typical construction activities. At a distance of 55 feet, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities

would be temporary in nature and would likely occur during normal daytime working hours. Thus, a less-than-significant impact would occur related to groundborne vibration and no mitigation is required.

Table 4
Vibration Levels for Various Construction Equipment

Type of equipment	Peak Particle Velocity at 25 feet (inches/second)	Peak Particle Velocity of 50 feet (inches/second)
Large Bulldozer	0.089	0.031
Loaded Trucks	0.076	0.027
Small Bulldozer	0.003	0.001
Auger/Drill Rigs	0.089	0.031
Jackhammer	0.035	0.012
Vibratory Hammer	0.070	0.025
Vibratory Compactor/Roller	0.210 (less than 0.20 at 26 feet)	0.074

Source: Transit Noise and Vibration Impact Assessment Guidelines. Federal Transit Administration. May 2006.

Conclusion

Based on the information above, because the proposed project would not result in any changes, new circumstances, or new information that would involve new significant impacts or substantially more severe impacts, the proposed project would not result in impacts beyond what was analyzed in the 2011 CVS at Florin and Freeport IS/MND and 2013 Addendum to the IS/MND.

Transportation:

The 2011 CVS at Florin and Freeport IS/MND and 2013 Addendum were approved before July 1, 2020, when transportation impact significance pursuant to CEQA shifted from Level of Service (LOS) to Vehicle Miles Travelled (VMT). According to the CEQA Guidelines, the VMT requirement only applies to projects for which draft EIRs (or negative declarations) had not yet been issued. The 2011 CVS at Florin and Freeport IS/MND was adopted in 2011, prior to 2020; therefore, the VMT requirement would not retroactively apply to the 2011 CVS at Florin and Freeport IS/MND. Pursuant to CEQA Section 15164(d), an Addendum is considered together with an adopted Negative Declaration. Thus, an Addendum represents a very late stage in the CEQA process that follows long after the adopted Negative Declaration. The new VMT requirement, then, does not apply to an Addendum. As the 2011 CVS at Florin and Freeport IS/MND was adopted nine years before the VMT requirement took effect and an Addendum is considered together with a Negative Declaration, the CEQA Addendum for the Dutch Bros. at Florin and Freeport Project would not be required to evaluate VMT.

It should be noted that although LOS no longer serves as the basis for determining the significance of transportation impacts under CEQA, the 2011 CVS at Florin and Freeport IS/MND included mitigation to address potentially significant impacts to the LOS of various intersections and street segments. As such, Mitigation Measures Tran-1 through Tran-4 would still apply to the proposed project. The 2011 CVS at Florin and Freeport IS/MND concluded that all impacts related to transportation and circulation would be reduced to less-than-significant with implementation of Mitigation Measures Tran-1 through Tran-4.

The analysis included within the 2011 CVS at Florin and Freeport IS/MND and 2013 Addendum to the IS/MND included an analysis of buildout on the project site. However, rather than developing a bank at the project site, as was analyzed in the 2013 Florin Plaza Addendum, the proposed project would include development of a drive-through coffee shop, which would include a drive-through queue. Therefore, in order to address whether the proposed project could result in impacts not otherwise contemplated in the prior approvals, a Traffic Study was prepared for the proposed project to analyze the vehicle queues at the

existing commercial center driveways, drive-through vehicle queues at the proposed coffee shop, and on-site circulation.

The Traffic Study determined that the coffee shop would generate its peak amount of trip generation during the mid-morning (7:30 AM to 8:45 AM) and afternoon (2:00 PM to 3:00 PM) based on trip generation collected at six operating Dutch Bros. coffee shops in the City of Sacramento region. Based on the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition), the proposed project is estimated to generate 124 AM peak hour trips and 117 PM peak hour trips. The 2011 CVS at Florin and Freeport IS/MND estimated the buildout of the project site would generate 143 AM peak hour trips and 242 PM peak hour trips. Therefore, the peak hour trip generation for the proposed project is within the acceptable peak hour trip generation range established in the 2011 IS/MND. Furthermore, according to the Sacramento County Transportation Analysis Guidelines, a local transportation analysis is required for projects that generate 100 or more new AM or PM peak hour vehicle trips to the roadway system.[4] As the proposed project would generate fewer trips than the 100 peak hour trip threshold, a local transportation analysis is not required for the proposed project, and the proposed project would not conflict with any General Plan Standards related to roadway operations. The Traffic Study for the proposed project determined that the 95th percentile drive-through queue would be 16 vehicles. The proposed drive-through coffee shop has a capacity for approximately 19 vehicles, which is equivalent to the 99th percentile drive-through queue; therefore, the proposed drive-through would have sufficient capacity to store the typical maximum drive-through queue.

In addition, the currently proposed project would not modify or impede any existing or planned transit facilities/routes or impact existing or planned pedestrian/bicycle facilities. Sidewalks currently exist along the project frontage of Freeport Boulevard and marked crosswalks exists at the intersection of Freeport Boulevard and Florin Road. Therefore, the proposed project would not adversely affect public transit operations, pedestrian facilities, and bicycle facilities.

Based on the information above, because the proposed project would not result in any changes to conclusions, new circumstances, or new information that would involve new significant impacts or substantially more severe impacts, the proposed project would not result in impacts beyond what was analyzed in the 2011 CVS at Florin and Freeport IS/MND or 2013 Addendum to the IS/MND.

Remaining Environmental Resource Areas:

The proposed project's effects related to the remaining CEQA issue areas are addressed in the following sections:

Biological Resources:

The 2011 CVS at Florin and Freeport IS/MND analyzed potential impacts to biological resources and reduced impacts to a less-than-significant level. Special-status species identified within the 2011 CVS at Florin and Freeport IS/MND included the Sanford's arrowhead, vernal pool tadpole shrimp, California linderiella, Sacramento splittail, Sacramento perch, burrowing owl, and Swainson's hawk. The Sanford's arrowhead, vernal pool tadpole shrimp, California linderiella, Sacramento splittail, and Sacramento perch are not present on-site. Furthermore, the Swainson's hawk and burrowing owl are not expected to use the project site because suitable nesting habitat or foraging habitat and suitable borrows are not present on-site. Therefore, impacts to special-status species were not expected to occur on-site and were reduced to less-than-significant.

[4] Sacramento County. *Transportation Analysis Guidelines.* Adopted October 6, 2020.

Because the proposed project would not change the area of disturbance beyond what was analyzed previously in the 2011 CVS at Florin and Freeport IS/MND, the project would not result in any changes, new circumstances, or new information that would involve new significant impacts or substantially more severe impacts to riparian habitat, State and federally protected wetlands, and conformance with local policies or ordinances from what was previously analyzed in the IS/MND. Therefore, the conclusions of the IS/MND pertaining to the aforementioned issue areas remain applicable. However, the possibility remains that new special-status species have been recorded in the project area since the approval of the IS/MND. To address the possibility, a new search of the California Natural Diversity Database (CNDDB) for special-status plant and wildlife species was completed for this Addendum. The CNDDB search did not return additional special-status plant and wildlife species. The nearest record of Swainson's hawk in the CNDDB search area is approximately 0.71-mile northeast of the project site in William Chorley Park and the remaining species previously identified in the 2011 CVS at Florin and Freeport were not found to occur within two miles of the project site.

Because the proposed project would not result in impacts to the species analyzed within the 2011 CVS at Florin and Freeport IS/MND, the proposed project would not involve new significant impacts or substantially more severe impacts to biological resources beyond what was previously analyzed in the 2011 CVS at Florin and Freeport IS/MND.

Aesthetics, Geology and Soils, Minerals, Hazards and Hazardous Materials, Hydrology and Water Quality, Agriculture and Forestry Resources, and Cultural/Tribal Cultural Resources:

The 2011 CVS at Florin and Freeport IS/MND concluded that impacts related to aesthetics were would be reduced to less-than-significant with implementation of Mitigation Measures LG-1 and LG-2. Policy ER 7.1.3 states that the City shall minimize obtrusive light by limiting outdoor light that is misdirected, excessive, or unnecessary, and requiring light for development to be directed downward to minimize spill-over onto adjacent properties and reduce vertical glare. Because the City is mostly built-out with a level of ambient light that is typical of and consistent with the urban character of a large city and new development allowed under the City's General Plan would be subject to the General Plan policies, building codes, and (for larger projects) design review, the introduction of substantially greater intensity or dispersal of light would not occur.

Within the 2011 CVS at Florin and Freeport IS/MND, impacts related to geology and soils and minerals were reduced to less-than-significant with adherence to policies presented within the IS/MND and the Sacramento General Plan, as well as implementation of existing State of California or City of Sacramento regulations related to the design-controllable aspects of building foundation support, protection from seismic ground motion, and soil or slope instability.

Additionally, the 2011 CVS at Florin and Freeport IS/MND concluded impacts related to hazards and hazardous materials were determined to be less than significant with implementation of Mitigation Measure Haz-1. Mitigation Measure Haz-1 requires the applicant to submit written identification and confirmation of all reports required relating to potentially hazardous materials on the project site. In addition, compliance with existing federal, State, and local regulations which regulate the transport, use, and disposal of hazardous materials would ensure a less-than-significant impact related to exposing people to hazardous materials would not occur. The hazards section of the 2011 CVS at Florin and Freeport IS/MND did not discuss risks related to wildfires. The project site is not within a Fire Hazard Severity Zone in a State Responsibility Area[5]; therefore, the proposed project would not result in new impacts related to wildfires.

The 2011 CVS at Florin and Freeport IS/MND analyzed potential impacts involving hydrology and water quality and concluded all impacts would occur at a less-than-significant level. As the proposed project is

[5] Office of the State Fire Marshal. *Fire Hazard Severity Zones Map.* Available at: https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/. Accessed May 2022.

consistent with the land use and zoning designations previously considered in the IS/MND for the project site and would not result in any changes, new circumstances, or new information that would involve new significant impacts or substantially more severe impacts, the proposed project would remain consistent with the conclusions of the IS/MND.

The 2011 CVS at Florin and Freeport IS/MND addressed impacts to agricultural resources/operations in the IS/MND. Appendix G of CEQA has updated since 2011 and now includes a more thorough analysis of agricultural impacts. However, the 2011 CVS at Florin and Freeport IS/MND concluded that the project would not result in impacts to agricultural resources or operations. The project site is not designated or zoned for agricultural or timberland use and the proposed project would be would be consistent with surrounding land uses. The project site is located in an urbanized portion of the community, completely surrounded by urban residential and commercial development, including a shopping center to the north (a component of the 2011 CVS at Florin and Freeport Project), the Sacramento River to the west, undeveloped land to the north and east, and undeveloped land and Morrison Creek to the south. Additionally, the project site is not under a Williamson Act contract.

A search of the California Historical Resources Information System (CHRIS) was conducted for the project as part of the 2011 CVS at Florin and Freeport IS/MND. The CHRIS search included review of the cultural resource files at the North Central Information Center (NCIC) at California State University, Sacramento. According to the CHRIS record, the project site is not in a culturally sensitive area and historic, paleontological, or archaeological resources have not been recorded at the project site. In the event that human remains or historic, paleontological, or archaeological resources were inadvertently discovered during construction, the proposed project would be required to comply with Mitigation Measures CR-1 through CR-3 included in the 2011 CVS at Florin and Freeport IS/MND.

The currently proposed project would be implemented within the same area of disturbance previously analyzed within the 2011 CVS at Florin and Freeport IS/MND. Thus, the conclusions of the 2011 CVS at Florin and Freeport IS/MND related to the development of the project site remain applicable to the currently proposed project. In addition, the project would be subject to all applicable State, federal, and local regulations related to aesthetics, geology and soils, minerals, hazards and hazardous materials, hydrology and water quality, agriculture and forestry resources, and cultural resources. Therefore, the project would not be expected to result in any changes, new circumstances, or new information that would involve new significant impacts or substantially more severe impacts from what was anticipated for the project area in the previous 2011 CVS at Florin and Freeport IS/MND.

Land Use and Planning, Public Services, Recreation, Population and Housing, and Utilities and Service Systems:

Within the 2011 CVS at Florin and Freeport IS/MND, impacts to land use and planning were reduced to less-than-significant with adherence to polices and goals presented within the General Plan. The currently proposed project would not include residential development that would increase population within the City. Furthermore, the proposed project is consistent with the current General Plan land use designation and zoning designation.

With respect to public services, recreation, and population and housing, the currently proposed project would not include residential development that would increase population within the City. As noted within the 2011 CVS at Florin and Freeport IS/MND, the proposed project would not significantly alter the density or intensity of development designated in the General Plan.

The 2011 CVS at Florin and Freeport IS/MND concluded that potential impacts regarding utilities and service systems were reduced to less-than-significant due to compliance with policies and goals within the General Plan. The project site is located in an urbanized portion of the community and is readily served by water and

sewer services. In addition, the anticipated demand for utility services at the project site were evaluated in the Sacramento General Plan Master EIR. Therefore, cumulative effects of demand associated with development under the 2030 General Plan were considered in the Master EIR and the project would not result in any additional significant environmental effects related to utilities that were not considered in the Master EIR.

The currently proposed project is consistent with the type and intensity of uses anticipated for the project site in the 2011 CVS at Florin and Freeport IS/MND. Thus, the conclusions of the 2011 CVS at Florin and Freeport IS/MND related to the development of the project site remain applicable to the currently proposed project. In addition, the project would be subject to all applicable State, federal, and local regulations related to land use and planning, public services, recreation, population and housing, and utilities and service systems. Therefore, the project would not be expected to result in any changes, new circumstances, or new information that would involve new significant impacts or substantially more severe impacts from what was anticipated for the project area in the previous CEQA documents.

Conclusion:

As established in the discussions above regarding the potential effects of the project, substantial changes are not proposed to the project nor have any substantial changes occurred that would require major revisions to the 2011 CVS at Florin and Freeport IS/MND as amended. Impacts beyond those identified and analyzed in the 2011 CVS at Florin and Freeport IS/MND would not be expected to occur as a result of the project, given that the currently proposed project would be consistent with the type and intensity of use for the project site and would be implemented within the same area of disturbance previously analyzed within the 2011 CVS at Florin and Freeport IS/MND. Therefore, the Community Development Department concludes that the analyses conducted and the conclusions reached in the 2011 CVS at Florin and Freeport IS/MND adopted on March 15, 2011, remain valid. As such, the project would not result in any conditions identified in CEQA Guidelines Section 15162, and subsequent environmental review is not required for the project modifications. Again, it should be noted that the project would be subject to all applicable previously required mitigation measures from the 2011 CVS at Florin and Freeport IS/MND.

Based on the above analysis, this Addendum to the previously-adopted IS/MND for the project has been prepared.

Attachments:

A) CalEEMod Modeling Results
B) 2011 CVS at Florin and Freeport Initial Study Mitigated Negative Declaration
C) Traffic Study
D) Environmental Noise Assessment

Attachment A

CalEEMod Modeling Results

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dutch Bros Addendum

Sacramento Metropolitan AQMD Air District, 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	1.15	1000sqft	1.13	1,154.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2024
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	357.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjusted to match site plan.

Construction Phase - Architectural coating adjusted to occur simultaneously with building construction.

Vehicle Trips - Trip generation rate updated based on project-specific traffic report from F&P.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	PhaseEndDate	5/9/2024	4/11/2024
tblConstructionPhase	PhaseEndDate	4/11/2024	3/28/2024
tblConstructionPhase	PhaseEndDate	7/6/2023	6/8/2023
tblConstructionPhase	PhaseEndDate	4/25/2024	6/22/2023
tblConstructionPhase	PhaseEndDate	6/30/2023	6/2/2023

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tblConstructionPhase	PhaseStartDate	4/26/2024	7/7/2023
tblConstructionPhase	PhaseStartDate	7/7/2023	6/23/2023
tblConstructionPhase	PhaseStartDate	7/1/2023	6/3/2023
tblConstructionPhase	PhaseStartDate	4/12/2024	6/9/2023
tblConstructionPhase	PhaseStartDate	6/29/2023	6/1/2023
tblLandUse	LotAcreage	0.03	1.13
tblVehicleTrips	ST_TR	616.12	476.60
tblVehicleTrips	SU_TR	472.58	476.60
tblVehicleTrips	WD_TR	470.95	476.60

2.0 Emissions Summary

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2023	0.1263	0.9511	1.0419	1.8200e-003	0.0211	0.0427	0.0638	0.0100	0.0413	0.0513	0.0000	151.1393	151.1393	0.0255	2.0000e-005	151.7808
2024	0.0541	0.3991	0.4675	8.2000e-004	0.0000	0.0167	0.0167	0.0000	0.0162	0.0162	0.0000	67.5626	67.5626	0.0102	0.0000	67.8179
Maximum	**0.1263**	**0.9511**	**1.0419**	**1.8200e-003**	**0.0211**	**0.0427**	**0.0638**	**0.0100**	**0.0413**	**0.0513**	**0.0000**	**151.1393**	**151.1393**	**0.0255**	**2.0000e-005**	**151.7808**

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					
2023	0.1263	0.9511	1.0419	1.8200e-003	0.0211	0.0427	0.0638	0.0100	0.0413	0.0513	0.0000	151.1391	151.1391	0.0255	2.0000e-005	151.7806
2024	0.0541	0.3991	0.4675	8.2000e-004	0.0000	0.0167	0.0167	0.0000	0.0162	0.0162	0.0000	67.5626	67.5626	0.0102	0.0000	67.8178
Maximum	**0.1263**	**0.9511**	**1.0419**	**1.8200e-003**	**0.0211**	**0.0427**	**0.0638**	**0.0100**	**0.0413**	**0.0513**	**0.0000**	**151.1391**	**151.1391**	**0.0255**	**2.0000e-005**	**151.7806**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-1-2023**	**8-31-2023**	0.4402	0.4402
2	**9-1-2023**	**11-30-2023**	0.4804	0.4804
3	**12-1-2023**	**2-29-2024**	0.4623	0.4623
4	**3-1-2024**	**5-31-2024**	0.1466	0.1466
		Highest	0.4804	0.4804

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	5.0400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Energy	1.1000e-003	0.0100	8.4200e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	18.5464	18.5464	9.1000e-004	2.9000e-004	18.6542
Mobile	0.1836	0.1508	1.0779	1.4800e-003	0.1408	1.4000e-003	0.1422	0.0377	1.3000e-003	0.0390	0.0000	139.0673	139.0673	0.0175	0.0105	142.6313
Waste						0.0000	0.0000		0.0000	0.0000	2.6896	0.0000	2.6896	0.1590	0.0000	6.6635
Water						0.0000	0.0000		0.0000	0.0000	0.1235	0.2951	0.4186	4.5000e-004	2.7000e-004	0.5109
Total	**0.1897**	**0.1608**	**1.0863**	**1.5400e-003**	**0.1408**	**2.1600e-003**	**0.1430**	**0.0377**	**2.0600e-003**	**0.0397**	**2.8131**	**157.9088**	**160.7219**	**0.1778**	**0.0111**	**168.4599**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.0400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Energy	1.1000e-003	0.0100	8.4200e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	18.5464	18.5464	9.1000e-004	2.9000e-004	18.6542
Mobile	0.1836	0.1508	1.0779	1.4800e-003	0.1408	1.4000e-003	0.1422	0.0377	1.3000e-003	0.0390	0.0000	139.0673	139.0673	0.0175	0.0105	142.6313
Waste						0.0000	0.0000		0.0000	0.0000	2.6896	0.0000	2.6896	0.1590	0.0000	6.6635
Water						0.0000	0.0000		0.0000	0.0000	0.1235	0.2951	0.4186	4.5000e-004	2.7000e-004	0.5109
Total	**0.1897**	**0.1608**	**1.0863**	**1.5400e-003**	**0.1408**	**2.1600e-003**	**0.1430**	**0.0377**	**2.0600e-003**	**0.0397**	**2.8131**	**157.9088**	**160.7219**	**0.1778**	**0.0111**	**168.4599**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2023	6/2/2023	5	2	
2	Grading	Grading	6/3/2023	6/8/2023	5	4	
3	Building Construction	Building Construction	6/23/2023	3/28/2024	5	200	

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4	Paving	Paving	6/9/2023	6/22/2023	5	10	
5	Architectural Coating	Architectural Coating	7/7/2023	4/11/2024	5	200	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,731; Non-Residential Outdoor: 577; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	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
Building Construction	Welders	3	8.00	46	0.45

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	3.0000e-003	0.0000	3.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1300e-003	0.0124	6.6400e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236
Total	**1.1300e-003**	**0.0124**	**6.6400e-003**	**2.0000e-005**	**6.2700e-003**	**5.1000e-004**	**6.7800e-003**	**3.0000e-003**	**4.7000e-004**	**3.4700e-003**	**0.0000**	**1.5114**	**1.5114**	**4.9000e-004**	**0.0000**	**1.5236**

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3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0471	0.0471	0.0000	0.0000	0.0476
Total	**2.0000e-005**	**1.0000e-005**	**1.9000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0471**	**0.0471**	**0.0000**	**0.0000**	**0.0476**

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					6.2700e-003	0.0000	6.2700e-003	3.0000e-003	0.0000	3.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1300e-003	0.0124	6.6400e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236
Total	**1.1300e-003**	**0.0124**	**6.6400e-003**	**2.0000e-005**	**6.2700e-003**	**5.1000e-004**	**6.7800e-003**	**3.0000e-003**	**4.7000e-004**	**3.4700e-003**	**0.0000**	**1.5114**	**1.5114**	**4.9000e-004**	**0.0000**	**1.5236**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0471	0.0471	0.0000	0.0000	0.0476
Total	**2.0000e-005**	**1.0000e-005**	**1.9000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0471**	**0.0471**	**0.0000**	**0.0000**	**0.0476**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0142	0.0000	0.0142	6.8500e-003	0.0000	6.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6700e-003	0.0289	0.0174	4.0000e-005		1.2100e-003	1.2100e-003		1.1100e-003	1.1100e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501
Total	**2.6700e-003**	**0.0289**	**0.0174**	**4.0000e-005**	**0.0142**	**1.2100e-003**	**0.0154**	**6.8500e-003**	**1.1100e-003**	**7.9600e-003**	**0.0000**	**3.6208**	**3.6208**	**1.1700e-003**	**0.0000**	**3.6501**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.7000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1178	0.1178	0.0000	0.0000	0.1189
Total	**6.0000e-005**	**4.0000e-005**	**4.7000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1178**	**0.1178**	**0.0000**	**0.0000**	**0.1189**

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					0.0142	0.0000	0.0142	6.8500e-003	0.0000	6.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6700e-003	0.0289	0.0174	4.0000e-005		1.2100e-003	1.2100e-003		1.1100e-003	1.1100e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501
Total	**2.6700e-003**	**0.0289**	**0.0174**	**4.0000e-005**	**0.0142**	**1.2100e-003**	**0.0154**	**6.8500e-003**	**1.1100e-003**	**7.9600e-003**	**0.0000**	**3.6208**	**3.6208**	**1.1700e-003**	**0.0000**	**3.6501**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.7000e-004	0.0000	1.5000e-004	0.0000	1.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1178	0.1178	0.0000	0.0000	0.1189
Total	**6.0000e-005**	**4.0000e-005**	**4.7000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1178**	**0.1178**	**0.0000**	**0.0000**	**0.1189**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1036	0.7963	0.8576	1.5000e-003		0.0350	0.0350		0.0338	0.0338	0.0000	123.4874	123.4874	0.0210	0.0000	124.0116
Total	**0.1036**	**0.7963**	**0.8576**	**1.5000e-003**		**0.0350**	**0.0350**		**0.0338**	**0.0338**	**0.0000**	**123.4874**	**123.4874**	**0.0210**	**0.0000**	**124.0116**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	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**

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	0.1036	0.7963	0.8576	1.5000e-003		0.0350	0.0350		0.0338	0.0338	0.0000	123.4873	123.4873	0.0210	0.0000	124.0115
Total	**0.1036**	**0.7963**	**0.8576**	**1.5000e-003**		**0.0350**	**0.0350**		**0.0338**	**0.0338**	**0.0000**	**123.4873**	**123.4873**	**0.0210**	**0.0000**	**124.0115**

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3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	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**

3.4 Building Construction - 2024

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	0.0454	0.3540	0.4006	7.1000e-004		0.0144	0.0144		0.0139	0.0139	0.0000	58.1156	58.1156	9.6800e-003	0.0000	58.3576
Total	**0.0454**	**0.3540**	**0.4006**	**7.1000e-004**		**0.0144**	**0.0144**		**0.0139**	**0.0139**	**0.0000**	**58.1156**	**58.1156**	**9.6800e-003**	**0.0000**	**58.3576**

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3.4 Building Construction - 2024

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	0.0000	0.0000	0.0000	0.0000	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**

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	0.0454	0.3540	0.4006	7.1000e-004		0.0144	0.0144		0.0139	0.0139	0.0000	58.1155	58.1155	9.6800e-003	0.0000	58.3575
Total	**0.0454**	**0.3540**	**0.4006**	**7.1000e-004**		**0.0144**	**0.0144**		**0.0139**	**0.0139**	**0.0000**	**58.1155**	**58.1155**	**9.6800e-003**	**0.0000**	**58.3575**

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3.4 Building Construction - 2024

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**

3.5 Paving - 2023

Unmitigated Construction On-Site

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.2000e-004	1.5200e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3830	0.3830	1.0000e-005	1.0000e-005	0.3865
Total	**1.9000e-004**	**1.2000e-004**	**1.5200e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3830**	**0.3830**	**1.0000e-005**	**1.0000e-005**	**0.3865**

Mitigated Construction On-Site

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.2000e-004	1.5200e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3830	0.3830	1.0000e-005	1.0000e-005	0.3865
Total	**1.9000e-004**	**1.2000e-004**	**1.5200e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3830**	**0.3830**	**1.0000e-005**	**1.0000e-005**	**0.3865**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.3700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.0821	0.1141	1.9000e-004		4.4600e-003	4.4600e-003		4.4600e-003	4.4600e-003	0.0000	16.0855	16.0855	9.6000e-004	0.0000	16.1096
Total	**0.0154**	**0.0821**	**0.1141**	**1.9000e-004**		**4.4600e-003**	**4.4600e-003**		**4.4600e-003**	**4.4600e-003**	**0.0000**	**16.0855**	**16.0855**	**9.6000e-004**	**0.0000**	**16.1096**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	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**

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	3.3700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.0821	0.1141	1.9000e-004		4.4600e-003	4.4600e-003		4.4600e-003	4.4600e-003	0.0000	16.0855	16.0855	9.6000e-004	0.0000	16.1095
Total	**0.0154**	**0.0821**	**0.1141**	**1.9000e-004**		**4.4600e-003**	**4.4600e-003**		**4.4600e-003**	**4.4600e-003**	**0.0000**	**16.0855**	**16.0855**	**9.6000e-004**	**0.0000**	**16.1095**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	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**

3.6 Architectural Coating - 2024

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	1.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6900e-003	0.0451	0.0670	1.1000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	9.4470	9.4470	5.3000e-004	0.0000	9.4603
Total	**8.6700e-003**	**0.0451**	**0.0670**	**1.1000e-004**		**2.2500e-003**	**2.2500e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**9.4470**	**9.4470**	**5.3000e-004**	**0.0000**	**9.4603**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

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	0.0000	0.0000	0.0000	0.0000	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**

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	1.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6900e-003	0.0451	0.0670	1.1000e-004		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	9.4470	9.4470	5.3000e-004	0.0000	9.4603
Total	**8.6700e-003**	**0.0451**	**0.0670**	**1.1000e-004**		**2.2500e-003**	**2.2500e-003**		**2.2500e-003**	**2.2500e-003**	**0.0000**	**9.4470**	**9.4470**	**5.3000e-004**	**0.0000**	**9.4603**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

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**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1836	0.1508	1.0779	1.4800e-003	0.1408	1.4000e-003	0.1422	0.0377	1.3000e-003	0.0390	0.0000	139.0673	139.0673	0.0175	0.0105	142.6313
Unmitigated	0.1836	0.1508	1.0779	1.4800e-003	0.1408	1.4000e-003	0.1422	0.0377	1.3000e-003	0.0390	0.0000	139.0673	139.0673	0.0175	0.0105	142.6313

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	550.00	550.00	550.00	379,935	379,935
Total	550.00	550.00	550.00	379,935	379,935

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	10.00	5.00	6.50	2.20	78.80	19.00	29	21	50

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.542485	0.056811	0.183752	0.130945	0.025591	0.005989	0.013266	0.009393	0.000917	0.000565	0.025954	0.000983	0.003351

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	7.6396	7.6396	7.0000e-004	9.0000e-005	7.6827
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.6396	7.6396	7.0000e-004	9.0000e-005	7.6827
NaturalGas Mitigated	1.1000e-003	0.0100	8.4200e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	10.9068	10.9068	2.1000e-004	2.0000e-004	10.9716
NaturalGas Unmitigated	1.1000e-003	0.0100	8.4200e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	10.9068	10.9068	2.1000e-004	2.0000e-004	10.9716

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	204385	1.1000e-003	0.0100	8.4200e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	10.9068	10.9068	2.1000e-004	2.0000e-004	10.9716
Total		**1.1000e-003**	**0.0100**	**8.4200e-003**	**6.0000e-005**		**7.6000e-004**	**7.6000e-004**		**7.6000e-004**	**7.6000e-004**	**0.0000**	**10.9068**	**10.9068**	**2.1000e-004**	**2.0000e-004**	**10.9716**

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					
Fast Food Restaurant with Drive Thru	204385	1.1000e-003	0.0100	8.4200e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	10.9068	10.9068	2.1000e-004	2.0000e-004	10.9716
Total		**1.1000e-003**	**0.0100**	**8.4200e-003**	**6.0000e-005**		**7.6000e-004**	**7.6000e-004**		**7.6000e-004**	**7.6000e-004**	**0.0000**	**10.9068**	**10.9068**	**2.1000e-004**	**2.0000e-004**	**10.9716**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	47048.6	7.6396	7.0000e-004	9.0000e-005	7.6827
Total		**7.6396**	**7.0000e-004**	**9.0000e-005**	**7.6827**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	47048.6	7.6396	7.0000e-004	9.0000e-005	7.6827
Total		**7.6396**	**7.0000e-004**	**9.0000e-005**	**7.6827**

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.0400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	5.0400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005

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	5.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.5100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Total	**5.0400e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0000**	**3.0000e-005**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.5100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Total	**5.0400e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0000**	**3.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.4186	4.5000e-004	2.7000e-004	0.5109
Unmitigated	0.4186	4.5000e-004	2.7000e-004	0.5109

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0.349064 / 0.0222807	0.4186	4.5000e-004	2.7000e-004	0.5109
Total		**0.4186**	**4.5000e-004**	**2.7000e-004**	**0.5109**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0.349064 / 0.0222807	0.4186	4.5000e-004	2.7000e-004	0.5109
Total		**0.4186**	**4.5000e-004**	**2.7000e-004**	**0.5109**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.6896	0.1590	0.0000	6.6635
Unmitigated	2.6896	0.1590	0.0000	6.6635

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	13.25	2.6896	0.1590	0.0000	6.6635
Total		**2.6896**	**0.1590**	**0.0000**	**6.6635**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	13.25	2.6896	0.1590	0.0000	6.6635
Total		**2.6896**	**0.1590**	**0.0000**	**6.6635**

9.0 Operational Offroad

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

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dutch Bros Addendum

Sacramento Metropolitan AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	1.15	1000sqft	1.13	1,154.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2024
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	357.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjusted to match site plan.

Construction Phase - Architectural coating adjusted to occur simultaneously with building construction.

Vehicle Trips - Trip generation rate updated based on project-specific traffic report from F&P.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	PhaseEndDate	5/9/2024	4/11/2024
tblConstructionPhase	PhaseEndDate	4/11/2024	3/28/2024
tblConstructionPhase	PhaseEndDate	7/6/2023	6/8/2023
tblConstructionPhase	PhaseEndDate	4/25/2024	6/22/2023
tblConstructionPhase	PhaseEndDate	6/30/2023	6/2/2023

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	PhaseStartDate	4/26/2024	7/7/2023
tblConstructionPhase	PhaseStartDate	7/7/2023	6/23/2023
tblConstructionPhase	PhaseStartDate	7/1/2023	6/3/2023
tblConstructionPhase	PhaseStartDate	4/12/2024	6/9/2023
tblConstructionPhase	PhaseStartDate	6/29/2023	6/1/2023
tblLandUse	LotAcreage	0.03	1.13
tblVehicleTrips	ST_TR	616.12	476.60
tblVehicleTrips	SU_TR	472.58	476.60
tblVehicleTrips	WD_TR	470.95	476.60

2.0 Emissions Summary

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.7684	14.4838	14.4222	0.0250	7.1587	0.6047	7.7634	3.4449	0.5676	4.0013	0.0000	2,283.2357	2,283.2357	0.6474	2.2700e-003	2,292.1548
2024	1.6542	12.2827	14.3273	0.0250	0.0000	0.5115	0.5115	0.0000	0.4957	0.4957	0.0000	2,283.3695	2,283.3695	0.3492	0.0000	2,292.1005
Maximum	**1.7684**	**14.4838**	**14.4222**	**0.0250**	**7.1587**	**0.6047**	**7.7634**	**3.4449**	**0.5676**	**4.0013**	**0.0000**	**2,283.3695**	**2,283.3695**	**0.6474**	**2.2700e-003**	**2,292.1548**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.7684	14.4838	14.4222	0.0250	7.1587	0.6047	7.7634	3.4449	0.5676	4.0013	0.0000	2,283.2357	2,283.2357	0.6474	2.2700e-003	2,292.1548
2024	1.6542	12.2827	14.3273	0.0250	0.0000	0.5115	0.5115	0.0000	0.4957	0.4957	0.0000	2,283.3695	2,283.3695	0.3492	0.0000	2,292.1005
Maximum	**1.7684**	**14.4838**	**14.4222**	**0.0250**	**7.1587**	**0.6047**	**7.7634**	**3.4449**	**0.5676**	**4.0013**	**0.0000**	**2,283.3695**	**2,283.3695**	**0.6474**	**2.2700e-003**	**2,292.1548**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0276	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.5000e-004	2.5000e-004	0.0000		2.7000e-004
Energy	6.0400e-003	0.0549	0.0461	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003		65.8775	65.8775	1.2600e-003	1.2100e-003	66.2690
Mobile	1.3466	0.7726	5.8409	8.6800e-003	0.8012	7.6600e-003	0.8088	0.2136	7.1400e-003	0.2207		899.4950	899.4950	0.0951	0.0610	920.0402
Total	**1.3803**	**0.8275**	**5.8871**	**9.0100e-003**	**0.8012**	**0.0118**	**0.8130**	**0.2136**	**0.0113**	**0.2249**		**965.3728**	**965.3728**	**0.0964**	**0.0622**	**986.3094**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0276	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.5000e-004	2.5000e-004	0.0000		2.7000e-004
Energy	6.0400e-003	0.0549	0.0461	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003		65.8775	65.8775	1.2600e-003	1.2100e-003	66.2690
Mobile	1.3466	0.7726	5.8409	8.6800e-003	0.8012	7.6600e-003	0.8088	0.2136	7.1400e-003	0.2207		899.4950	899.4950	0.0951	0.0610	920.0402
Total	**1.3803**	**0.8275**	**5.8871**	**9.0100e-003**	**0.8012**	**0.0118**	**0.8130**	**0.2136**	**0.0113**	**0.2249**		**965.3728**	**965.3728**	**0.0964**	**0.0622**	**986.3094**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2023	6/2/2023	5	2	
2	Grading	Grading	6/3/2023	6/8/2023	5	4	
3	Building Construction	Building Construction	6/23/2023	3/28/2024	5	200	
4	Paving	Paving	6/9/2023	6/22/2023	5	10	
5	Architectural Coating	Architectural Coating	7/7/2023	4/11/2024	5	200	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,731; Non-Residential Outdoor: 577; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	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
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**1.1339**	**12.4250**	**6.6420**	**0.0172**	**6.2662**	**0.5074**	**6.7736**	**3.0041**	**0.4668**	**3.4709**		**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0270	0.0130	0.2180	5.6000e-004	0.0609	3.1000e-004	0.0612	0.0161	2.9000e-004	0.0164		56.9359	56.9359	1.5600e-003	1.4000e-003	57.3916
Total	**0.0270**	**0.0130**	**0.2180**	**5.6000e-004**	**0.0609**	**3.1000e-004**	**0.0612**	**0.0161**	**2.9000e-004**	**0.0164**		**56.9359**	**56.9359**	**1.5600e-003**	**1.4000e-003**	**57.3916**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**1.1339**	**12.4250**	**6.6420**	**0.0172**	**6.2662**	**0.5074**	**6.7736**	**3.0041**	**0.4668**	**3.4709**	**0.0000**	**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0270	0.0130	0.2180	5.6000e-004	0.0609	3.1000e-004	0.0612	0.0161	2.9000e-004	0.0164		56.9359	56.9359	1.5600e-003	1.4000e-003	57.3916
Total	**0.0270**	**0.0130**	**0.2180**	**5.6000e-004**	**0.0609**	**3.1000e-004**	**0.0612**	**0.0161**	**2.9000e-004**	**0.0164**		**56.9359**	**56.9359**	**1.5600e-003**	**1.4000e-003**	**57.3916**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0826**	**0.6044**	**7.6869**	**3.4247**	**0.5560**	**3.9807**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0337	0.0162	0.2725	7.0000e-004	0.0761	3.9000e-004	0.0765	0.0202	3.6000e-004	0.0205		71.1699	71.1699	1.9500e-003	1.7500e-003	71.7396
Total	**0.0337**	**0.0162**	**0.2725**	**7.0000e-004**	**0.0761**	**3.9000e-004**	**0.0765**	**0.0202**	**3.6000e-004**	**0.0205**		**71.1699**	**71.1699**	**1.9500e-003**	**1.7500e-003**	**71.7396**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0826**	**0.6044**	**7.6869**	**3.4247**	**0.5560**	**3.9807**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0337	0.0162	0.2725	7.0000e-004	0.0761	3.9000e-004	0.0765	0.0202	3.6000e-004	0.0205		71.1699	71.1699	1.9500e-003	1.7500e-003	71.7396
Total	**0.0337**	**0.0162**	**0.2725**	**7.0000e-004**	**0.0761**	**3.9000e-004**	**0.0765**	**0.0202**	**3.6000e-004**	**0.0205**		**71.1699**	**71.1699**	**1.9500e-003**	**1.7500e-003**	**71.7396**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**		**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**	**0.0000**	**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**		**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**	**0.0000**	**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6446**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**		**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0438	0.0211	0.3543	9.0000e-004	0.0989	5.1000e-004	0.0994	0.0262	4.7000e-004	0.0267		92.5209	92.5209	2.5400e-003	2.2700e-003	93.2614
Total	**0.0438**	**0.0211**	**0.3543**	**9.0000e-004**	**0.0989**	**5.1000e-004**	**0.0994**	**0.0262**	**4.7000e-004**	**0.0267**		**92.5209**	**92.5209**	**2.5400e-003**	**2.2700e-003**	**93.2614**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6446**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**	**0.0000**	**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0438	0.0211	0.3543	9.0000e-004	0.0989	5.1000e-004	0.0994	0.0262	4.7000e-004	0.0267		92.5209	92.5209	2.5400e-003	2.2700e-003	93.2614
Total	**0.0438**	**0.0211**	**0.3543**	**9.0000e-004**	**0.0989**	**5.1000e-004**	**0.0994**	**0.0262**	**4.7000e-004**	**0.0267**		**92.5209**	**92.5209**	**2.5400e-003**	**2.2700e-003**	**93.2614**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0535					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**0.2452**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0535					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**0.2452**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0535					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**0.2343**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0535					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**0.2343**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3466	0.7726	5.8409	8.6800e-003	0.8012	7.6600e-003	0.8088	0.2136	7.1400e-003	0.2207		899.4950	899.4950	0.0951	0.0610	920.0402
Unmitigated	1.3466	0.7726	5.8409	8.6800e-003	0.8012	7.6600e-003	0.8088	0.2136	7.1400e-003	0.2207		899.4950	899.4950	0.0951	0.0610	920.0402

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	550.00	550.00	550.00	379,935	379,935
Total	550.00	550.00	550.00	379,935	379,935

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	10.00	5.00	6.50	2.20	78.80	19.00	29	21	50

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.542485	0.056811	0.183752	0.130945	0.025591	0.005989	0.013266	0.009393	0.000917	0.000565	0.025954	0.000983	0.003351

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.0400e-003	0.0549	0.0461	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003		65.8775	65.8775	1.2600e-003	1.2100e-003	66.2690
NaturalGas Unmitigated	6.0400e-003	0.0549	0.0461	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003		65.8775	65.8775	1.2600e-003	1.2100e-003	66.2690

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	559.959	6.0400e-003	0.0549	0.0461	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003		65.8775	65.8775	1.2600e-003	1.2100e-003	66.2690
Total		**6.0400e-003**	**0.0549**	**0.0461**	**3.3000e-004**		**4.1700e-003**	**4.1700e-003**		**4.1700e-003**	**4.1700e-003**		**65.8775**	**65.8775**	**1.2600e-003**	**1.2100e-003**	**66.2690**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	0.559959	6.0400e-003	0.0549	0.0461	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003		65.8775	65.8775	1.2600e-003	1.2100e-003	66.2690
Total		**6.0400e-003**	**0.0549**	**0.0461**	**3.3000e-004**		**4.1700e-003**	**4.1700e-003**		**4.1700e-003**	**4.1700e-003**		**65.8775**	**65.8775**	**1.2600e-003**	**1.2100e-003**	**66.2690**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0276	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.5000e-004	2.5000e-004	0.0000		2.7000e-004
Unmitigated	0.0276	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.5000e-004	2.5000e-004	0.0000		2.7000e-004

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.9300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0247					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.5000e-004	2.5000e-004	0.0000		2.7000e-004
Total	**0.0276**	**0.0000**	**1.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.5000e-004**	**2.5000e-004**	**0.0000**		**2.7000e-004**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.9300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0247					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.5000e-004	2.5000e-004	0.0000		2.7000e-004
Total	**0.0276**	**0.0000**	**1.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.5000e-004**	**2.5000e-004**	**0.0000**		**2.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Dutch Bros Addendum

Sacramento Metropolitan AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	1.15	1000sqft	1.13	1,154.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2024
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	357.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage adjusted to match site plan.

Construction Phase - Architectural coating adjusted to occur simultaneously with building construction.

Vehicle Trips - Trip generation rate updated based on project-specific traffic report from F&P.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblConstructionPhase	PhaseEndDate	5/9/2024	4/11/2024
tblConstructionPhase	PhaseEndDate	4/11/2024	3/28/2024
tblConstructionPhase	PhaseEndDate	7/6/2023	6/8/2023
tblConstructionPhase	PhaseEndDate	4/25/2024	6/22/2023
tblConstructionPhase	PhaseEndDate	6/30/2023	6/2/2023

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	PhaseStartDate	4/26/2024	7/7/2023
tblConstructionPhase	PhaseStartDate	7/7/2023	6/23/2023
tblConstructionPhase	PhaseStartDate	7/1/2023	6/3/2023
tblConstructionPhase	PhaseStartDate	4/12/2024	6/9/2023
tblConstructionPhase	PhaseStartDate	6/29/2023	6/1/2023
tblLandUse	LotAcreage	0.03	1.13
tblVehicleTrips	ST_TR	616.12	476.60
tblVehicleTrips	SU_TR	472.58	476.60
tblVehicleTrips	WD_TR	470.95	476.60

2.0 Emissions Summary

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.7684	14.4875	14.4222	0.0250	7.1587	0.6047	7.7634	3.4449	0.5676	4.0013	0.0000	2,283.2357	2,283.2357	0.6477	2.6100e-003	2,292.1548
2024	1.6542	12.2827	14.3273	0.0250	0.0000	0.5115	0.5115	0.0000	0.4957	0.4957	0.0000	2,283.3695	2,283.3695	0.3492	0.0000	2,292.1005
Maximum	**1.7684**	**14.4875**	**14.4222**	**0.0250**	**7.1587**	**0.6047**	**7.7634**	**3.4449**	**0.5676**	**4.0013**	**0.0000**	**2,283.3695**	**2,283.3695**	**0.6477**	**2.6100e-003**	**2,292.1548**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	1.7684	14.4875	14.4222	0.0250	7.1587	0.6047	7.7634	3.4449	0.5676	4.0013	0.0000	2,283.2357	2,283.2357	0.6477	2.6100e-003	2,292.1548
2024	1.6542	12.2827	14.3273	0.0250	0.0000	0.5115	0.5115	0.0000	0.4957	0.4957	0.0000	2,283.3695	2,283.3695	0.3492	0.0000	2,292.1005
Maximum	**1.7684**	**14.4875**	**14.4222**	**0.0250**	**7.1587**	**0.6047**	**7.7634**	**3.4449**	**0.5676**	**4.0013**	**0.0000**	**2,283.3695**	**2,283.3695**	**0.6477**	**2.6100e-003**	**2,292.1548**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0276	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.5000e-004	2.5000e-004	0.0000		2.7000e-004
Energy	6.0400e-003	0.0549	0.0461	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003		65.8775	65.8775	1.2600e-003	1.2100e-003	66.2690
Mobile	0.9396	0.8890	6.7136	8.0000e-003	0.8012	7.7000e-003	0.8089	0.2136	7.1700e-003	0.2208		829.7426	829.7426	0.1197	0.0674	852.8245
Total	**0.9733**	**0.9439**	**6.7598**	**8.3300e-003**	**0.8012**	**0.0119**	**0.8130**	**0.2136**	**0.0113**	**0.2249**		**895.6204**	**895.6204**	**0.1210**	**0.0686**	**919.0938**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0276	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.5000e-004	2.5000e-004	0.0000		2.7000e-004
Energy	6.0400e-003	0.0549	0.0461	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003		65.8775	65.8775	1.2600e-003	1.2100e-003	66.2690
Mobile	0.9396	0.8890	6.7136	8.0000e-003	0.8012	7.7000e-003	0.8089	0.2136	7.1700e-003	0.2208		829.7426	829.7426	0.1197	0.0674	852.8245
Total	**0.9733**	**0.9439**	**6.7598**	**8.3300e-003**	**0.8012**	**0.0119**	**0.8130**	**0.2136**	**0.0113**	**0.2249**		**895.6204**	**895.6204**	**0.1210**	**0.0686**	**919.0938**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2023	6/2/2023	5	2	
2	Grading	Grading	6/3/2023	6/8/2023	5	4	
3	Building Construction	Building Construction	6/23/2023	3/28/2024	5	200	
4	Paving	Paving	6/9/2023	6/22/2023	5	10	
5	Architectural Coating	Architectural Coating	7/7/2023	4/11/2024	5	200	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,731; Non-Residential Outdoor: 577; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	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
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**1.1339**	**12.4250**	**6.6420**	**0.0172**	**6.2662**	**0.5074**	**6.7736**	**3.0041**	**0.4668**	**3.4709**		**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0239	0.0159	0.1899	4.9000e-004	0.0609	3.1000e-004	0.0612	0.0161	2.9000e-004	0.0164		50.6463	50.6463	1.8000e-003	1.6000e-003	51.1691
Total	**0.0239**	**0.0159**	**0.1899**	**4.9000e-004**	**0.0609**	**3.1000e-004**	**0.0612**	**0.0161**	**2.9000e-004**	**0.0164**		**50.6463**	**50.6463**	**1.8000e-003**	**1.6000e-003**	**51.1691**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282
Total	**1.1339**	**12.4250**	**6.6420**	**0.0172**	**6.2662**	**0.5074**	**6.7736**	**3.0041**	**0.4668**	**3.4709**	**0.0000**	**1,666.0573**	**1,666.0573**	**0.5388**		**1,679.5282**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0239	0.0159	0.1899	4.9000e-004	0.0609	3.1000e-004	0.0612	0.0161	2.9000e-004	0.0164		50.6463	50.6463	1.8000e-003	1.6000e-003	51.1691
Total	**0.0239**	**0.0159**	**0.1899**	**4.9000e-004**	**0.0609**	**3.1000e-004**	**0.0612**	**0.0161**	**2.9000e-004**	**0.0164**		**50.6463**	**50.6463**	**1.8000e-003**	**1.6000e-003**	**51.1691**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0826**	**0.6044**	**7.6869**	**3.4247**	**0.5560**	**3.9807**		**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0298	0.0199	0.2374	6.2000e-004	0.0761	3.9000e-004	0.0765	0.0202	3.6000e-004	0.0205		63.3078	63.3078	2.2500e-003	2.0000e-003	63.9614
Total	**0.0298**	**0.0199**	**0.2374**	**6.2000e-004**	**0.0761**	**3.9000e-004**	**0.0765**	**0.0202**	**3.6000e-004**	**0.0205**		**63.3078**	**63.3078**	**2.2500e-003**	**2.0000e-003**	**63.9614**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	**1.3330**	**14.4676**	**8.7038**	**0.0206**	**7.0826**	**0.6044**	**7.6869**	**3.4247**	**0.5560**	**3.9807**	**0.0000**	**1,995.6147**	**1,995.6147**	**0.6454**		**2,011.7503**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0298	0.0199	0.2374	6.2000e-004	0.0761	3.9000e-004	0.0765	0.0202	3.6000e-004	0.0205		63.3078	63.3078	2.2500e-003	2.0000e-003	63.9614
Total	**0.0298**	**0.0199**	**0.2374**	**6.2000e-004**	**0.0761**	**3.9000e-004**	**0.0765**	**0.0202**	**3.6000e-004**	**0.0205**		**63.3078**	**63.3078**	**2.2500e-003**	**2.0000e-003**	**63.9614**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**		**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**	**0.0000**	**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**		**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563
Total	**1.4200**	**11.0639**	**12.5172**	**0.0221**		**0.4506**	**0.4506**		**0.4348**	**0.4348**	**0.0000**	**2,001.9214**	**2,001.9214**	**0.3334**		**2,010.2563**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6446**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**		**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0388	0.0258	0.3086	8.0000e-004	0.0989	5.1000e-004	0.0994	0.0262	4.7000e-004	0.0267		82.3002	82.3002	2.9200e-003	2.6100e-003	83.1498
Total	**0.0388**	**0.0258**	**0.3086**	**8.0000e-004**	**0.0989**	**5.1000e-004**	**0.0994**	**0.0262**	**4.7000e-004**	**0.0267**		**82.3002**	**82.3002**	**2.9200e-003**	**2.6100e-003**	**83.1498**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6446**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**	**0.0000**	**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0388	0.0258	0.3086	8.0000e-004	0.0989	5.1000e-004	0.0994	0.0262	4.7000e-004	0.0267		82.3002	82.3002	2.9200e-003	2.6100e-003	83.1498
Total	**0.0388**	**0.0258**	**0.3086**	**8.0000e-004**	**0.0989**	**5.1000e-004**	**0.0994**	**0.0262**	**4.7000e-004**	**0.0267**		**82.3002**	**82.3002**	**2.9200e-003**	**2.6100e-003**	**83.1498**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0535					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**0.2452**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0535					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**0.2452**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0535					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**0.2343**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0535					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**0.2343**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	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**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9396	0.8890	6.7136	8.0000e-003	0.8012	7.7000e-003	0.8089	0.2136	7.1700e-003	0.2208		829.7426	829.7426	0.1197	0.0674	852.8245
Unmitigated	0.9396	0.8890	6.7136	8.0000e-003	0.8012	7.7000e-003	0.8089	0.2136	7.1700e-003	0.2208		829.7426	829.7426	0.1197	0.0674	852.8245

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	550.00	550.00	550.00	379,935	379,935
Total	550.00	550.00	550.00	379,935	379,935

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	10.00	5.00	6.50	2.20	78.80	19.00	29	21	50

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.542485	0.056811	0.183752	0.130945	0.025591	0.005989	0.013266	0.009393	0.000917	0.000565	0.025954	0.000983	0.003351

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.0400e-003	0.0549	0.0461	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003		65.8775	65.8775	1.2600e-003	1.2100e-003	66.2690
NaturalGas Unmitigated	6.0400e-003	0.0549	0.0461	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003		65.8775	65.8775	1.2600e-003	1.2100e-003	66.2690

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	559.959	6.0400e-003	0.0549	0.0461	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003		65.8775	65.8775	1.2600e-003	1.2100e-003	66.2690
Total		**6.0400e-003**	**0.0549**	**0.0461**	**3.3000e-004**		**4.1700e-003**	**4.1700e-003**		**4.1700e-003**	**4.1700e-003**		**65.8775**	**65.8775**	**1.2600e-003**	**1.2100e-003**	**66.2690**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	0.559959	6.0400e-003	0.0549	0.0461	3.3000e-004		4.1700e-003	4.1700e-003		4.1700e-003	4.1700e-003		65.8775	65.8775	1.2600e-003	1.2100e-003	66.2690
Total		**6.0400e-003**	**0.0549**	**0.0461**	**3.3000e-004**		**4.1700e-003**	**4.1700e-003**		**4.1700e-003**	**4.1700e-003**		**65.8775**	**65.8775**	**1.2600e-003**	**1.2100e-003**	**66.2690**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0276	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.5000e-004	2.5000e-004	0.0000		2.7000e-004
Unmitigated	0.0276	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.5000e-004	2.5000e-004	0.0000		2.7000e-004

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.9300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0247					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.5000e-004	2.5000e-004	0.0000		2.7000e-004
Total	**0.0276**	**0.0000**	**1.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.5000e-004**	**2.5000e-004**	**0.0000**		**2.7000e-004**

Dutch Bros Addendum - Sacramento Metropolitan AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.9300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0247					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.5000e-004	2.5000e-004	0.0000		2.7000e-004
Total	**0.0276**	**0.0000**	**1.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.5000e-004**	**2.5000e-004**	**0.0000**		**2.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Dutch Bros Addendum

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Sacramento Metropolitan AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Dutch Bros Addendum

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	2	No Change	0.00
Pavers	Diesel	No Change	0	1	No Change	0.00
Rollers	Diesel	No Change	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	5	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	1	No Change	0.00
Welders	Diesel	No Change	0	3	No Change	0.00

Dutch Bros Addendum

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	1.87600E-002	1.27180E-001	1.81070E-001	3.00000E-004	6.72000E-003	6.72000E-003	0.00000E+000	2.55325E+001	2.55325E+001	1.49000E-003	0.00000E+000	2.55699E+001
Cement and Mortar Mixers	2.20000E-004	1.38000E-003	1.16000E-003	0.00000E+000	5.00000E-005	5.00000E-005	0.00000E+000	1.71850E-001	1.71850E-001	2.00000E-005	0.00000E+000	1.72300E-001
Cranes	2.58800E-002	2.78690E-001	1.36150E-001	4.30000E-004	1.16300E-002	1.07000E-002	0.00000E+000	3.80212E+001	3.80212E+001	1.23000E-002	0.00000E+000	3.83286E+001
Forklifts	7.49000E-003	7.01500E-002	8.57300E-002	1.10000E-004	4.25000E-003	3.91000E-003	0.00000E+000	1.00719E+001	1.00719E+001	3.26000E-003	0.00000E+000	1.01533E+001
Generator Sets	2.99200E-002	2.66080E-001	3.66760E-001	6.60000E-004	1.22700E-002	1.22700E-002	0.00000E+000	5.65208E+001	5.65208E+001	2.42000E-003	0.00000E+000	5.65813E+001
Graders	1.15000E-003	1.39600E-002	5.08000E-003	2.00000E-005	4.50000E-004	4.20000E-004	0.00000E+000	1.74412E+000	1.74412E+000	5.60000E-004	0.00000E+000	1.75822E+000
Pavers	7.20000E-004	7.06000E-003	1.08100E-002	2.00000E-005	3.30000E-004	3.10000E-004	0.00000E+000	1.54862E+000	1.54862E+000	5.00000E-004	0.00000E+000	1.56114E+000
Paving Equipment	8.50000E-004	8.01000E-003	1.27800E-002	2.00000E-005	3.90000E-004	3.60000E-004	0.00000E+000	1.78927E+000	1.78927E+000	5.80000E-004	0.00000E+000	1.80374E+000
Rollers	6.70000E-004	7.04000E-003	8.10000E-003	1.00000E-005	3.90000E-004	3.60000E-004	0.00000E+000	1.00854E+000	1.00854E+000	3.30000E-004	0.00000E+000	1.01669E+000
Rubber Tired Dozers	1.97000E-003	2.04900E-002	8.93000E-003	2.00000E-005	9.20000E-004	8.50000E-004	0.00000E+000	2.15695E+000	2.15695E+000	7.00000E-004	0.00000E+000	2.17439E+000
Tractors/Loaders/ Backhoes	1.26100E-002	1.27670E-001	1.88650E-001	2.60000E-004	6.18000E-003	5.69000E-003	0.00000E+000	2.31221E+001	2.31221E+001	7.48000E-003	0.00000E+000	2.33091E+001
Welders	7.45500E-002	4.22340E-001	5.02010E-001	7.70000E-004	1.58000E-002	1.58000E-002	0.00000E+000	5.64662E+001	5.64662E+001	6.03000E-003	0.00000E+000	5.66170E+001

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	1.87600E-002	1.27180E-001	1.81070E-001	3.00000E-004	6.72000E-003	6.72000E-003	0.00000E+000	2.55325E+001	2.55325E+001	1.49000E-003	0.00000E+000	2.55699E+001
Cement and Mortar Mixers	2.20000E-004	1.38000E-003	1.16000E-003	0.00000E+000	5.00000E-005	5.00000E-005	0.00000E+000	1.71850E-001	1.71850E-001	2.00000E-005	0.00000E+000	1.72300E-001
Cranes	2.58800E-002	2.78690E-001	1.36150E-001	4.30000E-004	1.16300E-002	1.07000E-002	0.00000E+000	3.80211E+001	3.80211E+001	1.23000E-002	0.00000E+000	3.83285E+001
Forklifts	7.49000E-003	7.01500E-002	8.57300E-002	1.10000E-004	4.25000E-003	3.91000E-003	0.00000E+000	1.00718E+001	1.00718E+001	3.26000E-003	0.00000E+000	1.01533E+001
Generator Sets	2.99200E-002	2.66080E-001	3.66760E-001	6.60000E-004	1.22700E-002	1.22700E-002	0.00000E+000	5.65207E+001	5.65207E+001	2.42000E-003	0.00000E+000	5.65813E+001
Graders	1.15000E-003	1.39600E-002	5.08000E-003	2.00000E-005	4.50000E-004	4.20000E-004	0.00000E+000	1.74412E+000	1.74412E+000	5.60000E-004	0.00000E+000	1.75822E+000
Pavers	7.20000E-004	7.06000E-003	1.08100E-002	2.00000E-005	3.30000E-004	3.10000E-004	0.00000E+000	1.54862E+000	1.54862E+000	5.00000E-004	0.00000E+000	1.56114E+000
Paving Equipment	8.50000E-004	8.01000E-003	1.27800E-002	2.00000E-005	3.90000E-004	3.60000E-004	0.00000E+000	1.78927E+000	1.78927E+000	5.80000E-004	0.00000E+000	1.80374E+000
Rollers	6.70000E-004	7.04000E-003	8.10000E-003	1.00000E-005	3.90000E-004	3.60000E-004	0.00000E+000	1.00854E+000	1.00854E+000	3.30000E-004	0.00000E+000	1.01669E+000
Rubber Tired Dozers	1.97000E-003	2.04900E-002	8.93000E-003	2.00000E-005	9.20000E-004	8.50000E-004	0.00000E+000	2.15694E+000	2.15694E+000	7.00000E-004	0.00000E+000	2.17438E+000
Tractors/Loaders/Backhoes	1.26100E-002	1.27670E-001	1.88650E-001	2.60000E-004	6.18000E-003	5.69000E-003	0.00000E+000	2.31221E+001	2.31221E+001	7.48000E-003	0.00000E+000	2.33091E+001
Welders	7.45500E-002	4.22340E-001	5.02010E-001	7.70000E-004	1.58000E-002	1.58000E-002	0.00000E+000	5.64661E+001	5.64661E+001	6.03000E-003	0.00000E+000	5.66170E+001

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Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17497E-006	1.17497E-006	0.00000E+000	0.00000E+000	1.56434E-006
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.05205E-006	1.05205E-006	0.00000E+000	0.00000E+000	1.04361E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.92866E-007	9.92866E-007	0.00000E+000	0.00000E+000	9.84903E-007
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23848E-006	1.23848E-006	0.00000E+000	0.00000E+000	1.06042E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	4.63618E-006	4.63618E-006	0.00000E+000	0.00000E+000	4.59899E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.64973E-007	8.64973E-007	0.00000E+000	0.00000E+000	1.28705E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23968E-006	1.23968E-006	0.00000E+000	0.00000E+000	1.23638E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			

Dutch Bros Addendum

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.01	0.01	0.01	0.01	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.01	0.00	0.01	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Dutch Bros Addendum

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

Dutch Bros Addendum

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	

Dutch Bros Addendum

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		

Dutch Bros Addendum

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Dutch Bros Addendum

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Attachment B

2011 CVS at Florin and Freeport
Initial Study Mitigated Negative Declaration

COMMUNITY DEVELOPMENT
DEPARTMENT

ENVIRONMENTAL PLANNING
SERVICES

CITY OF SACRAMENTO
CALIFORNIA

300 Richards Boulevard
Third Floor
Sacramento, CA 95811

FINAL MITIGATED NEGATIVE DECLARATION

The City of Sacramento, California, a municipal corporation, does hereby prepare, declare, and publish this Mitigated Negative Declaration for the following described project:

CVS at Florin and Freeport (P10-044) - The proposed project includes a request for approval of a tentative map to subdivide two parcels located at the southeast corner of Freeport Boulevard and Florin Road (APN 047-0021-018-0000 and 047-0091-015) into five separate parcels, and to rezone one parcel totaling 1.68 acres to C-2-EA-2 to allow a drive-through facility. The project seeks entitlements required for the construction of pharmacy retail store at the corner of Freeport Boulevard and Florin Road. The requested map would create a parcel of approximately 1.7 acres to serve as the site for the pharmacy. The proposed store would be approximately 16,500 square feet in floor area providing health and beauty aids, personal care items, gift items, beer, wine, distilled spirits, common household goods, vitamins and retail pharmaceutical products available over-the-counter or by prescription from the in-store pharmacy. The store would provide photo processing. The project proposes a drive-through facility for prescription pharmaceuticals drop-off and pick-up only. The operation of a drive-through facility requires a special permit, and the project design results in a stacking area for cars that does not meet minimum design requirements and, therefore, requires approval of a variance.

The Lead Agency is the City of Sacramento. The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that there is no substantial evidence that the project, with mitigation measures as identified in the attached Initial Study, will have a significant effect on the environment. This Mitigated Negative Declaration reflects the lead agency's independent judgment and analysis. An Environmental Impact Report is not required pursuant to the Environmental Quality Act of 1970 (Sections 21000, et seq., Public Resources Code of the State of California).

This Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 et seq.), CEQA Guidelines (Title 14, Sections 15000 et seq. of the California Code of Regulations), the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento, and the Sacramento City Code.

A copy of this document and all supportive documentation may be reviewed or obtained during normal business hours at the City of Sacramento, Community Development Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA 95811.

Environmental Services Manager, City of Sacramento,
California, a municipal corporation

By: _____

Date: 1/28/2011

CVS AT FLORIN AND FREEPORT [P10-044]

REVISED INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

FOR ANTICIPATED SUBSEQUENT PROJECTS UNDER THE 2030 GENERAL PLAN MASTER EIR

This Initial Study has been prepared by the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 *et seq.*), CEQA Guidelines (Title 14, Section 15000 *et seq.* of the California Code of Regulations) and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento.

The proposed project was revised following circulation of the initial study and Mitigated Negative Declaration for public review. The revision added a requested entitlement to rezone Parcel 1, the northwest 1.68 acres of the site, from Limited Commercial (C-1-EA-2) to General Commercial (C-2-EA-2). The rezone is required because drive-through facilities, as proposed for the retail pharmacy, are not allowed in the C-1 zone. Changes to the initial study are shown in ~~strikethrough~~ for deletions and underline for additional text.

ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into the following sections:

SECTION I - BACKGROUND: Provides summary background information about the project name, location, sponsor, and the date this Initial Study was completed.

SECTION II - PROJECT DESCRIPTION: Includes a detailed description of the proposed project.

SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION: Reviews proposed project and states whether the project would have additional significant environmental effects (project-specific effects) that were not evaluated in the Master EIR for the 2030 General Plan.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: Identifies which environmental factors were determined to have additional significant environmental effects.

SECTION V - DETERMINATION: States whether environmental effects associated with development of the proposed project are significant, and what, if any, added environmental documentation may be required.

REFERENCES CITED: Identifies source materials that have been consulted in the preparation of the Initial Study.

SECTION I - BACKGROUND

Project Name and File Number:	CVS at Florin and Freeport (P10-044)
Project Location:	Southeast corner of Freeport Boulevard and Florin Road, City of Sacramento, Sacramento, California (APN 047-0021-018-0000; 047-0091-015-0000)
Project Applicant:	Josh Eisenhut, Armstrong Development 1375 Exposition Boulevard, Suite 101 Sacramento, CA 95815 Telephone: (916) 643-9610
Project Planner:	Evan Compton, Associate Planner Community Development Department 300 Richards Boulevard, Third Floor Sacramento, CA 95814 Telephone: (916) 808-5260 Email: ecompton@cityofsacramento.org
Environmental Planner:	Dana Allen, Associate Planner Community Development Department 300 Richards Boulevard, Third Floor Sacramento, CA 95814 Telephone: (916) 808-2762 Email: dallen@cityofsacramento.org
Date Initial Study Completed:	January 7, 2011

This Initial Study was prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 1500 *et seq.*). The Lead Agency is the City of Sacramento.

The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that the proposed project is an anticipated subsequent project identified and described in the 2030 General Plan Master EIR and is consistent with the land use designation and the permissible densities and intensities of use for the project site as set forth in the 2030 General Plan. See CEQA Guidelines Section 15176 (b) and (d).

The City has prepared the attached Initial Study to (a) review the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the 2030 General Plan Master EIR to determine their adequacy for the project (see CEQA Guidelines Section

15178(b),(c)) and (b) identify any potential new or additional project-specific significant environmental effects that were not analyzed in the Master EIR and any mitigation measures or alternatives that may avoid or mitigate the identified effects to a level of insignificance, if any.

As part of the Master EIR process, the City is required to incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the Master EIR (CEQA Guidelines Section 15177(d)). The Master EIR mitigation measures that are identified as appropriate are set forth in the applicable technical sections below.

This analysis incorporates by reference the general discussion portions of the 2030 General Plan Master EIR. (CEQA Guidelines Section 15150(a)). The 2030 General Plan and Master EIR are available for public review at the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, and on the City's web site at:
www.sacgp.org.

The City is soliciting views of interested persons and agencies on the content of the environmental information presented in this document. Due to the time limits mandated by state law, your response must be sent at the earliest possible date, but no later than the 20-day review period ending February 1, 2010.

Please send written responses to:

Dana Allen, Associate Planner
Community Development Department
City of Sacramento
300 Richards Blvd, 3rd Floor
Sacramento, CA 95811
Direct Line: (916) 808-2762
dallen@cityofsacramento.org

SECTION II—PROJECT DESCRIPTION

The proposed project includes a request for approval of a tentative map to subdivide two parcels located at the southeast corner of Freeport Boulevard and Florin Road (APN 047-0021-018-0000 and 047-0091-015)) into five separate parcels. See Attachment 1, Vicinity Map.

The project site is approximately 7.5 acres in size. The 2030 General Plan land use designation for the site is Suburban Corridor. The portion of the site at the corner of Freeport Boulevard and Florin Road is Limited Commercial, Executive Airport Overlay Zone. Consistency with land use designations is discussed below under Land Use.

The project seeks entitlements required for the construction of pharmacy retail store at the corner of Freeport Boulevard and Florin Road. The requested map would create a parcel of approximately 1.7 acres to serve as the site for the pharmacy. See Attachment 2, Tentative Map. The proposed store would be approximately 16,500 square feet in floor area providing health and beauty aids, personal care items, gift items, beer, wine, distilled spirits, common household goods, vitamins and retail pharmaceutical products available over-the-counter or by prescription from the in-store pharmacy. The store would provide photo processing.

The project proposes a drive-through facility for prescription pharmaceuticals drop-off and pick-up only. The operation of a drive-through facility requires a special permit, and the project design results in a stacking area for cars that does not meet minimum design requirements and, therefore, requires approval of a variance.

The retail pharmacy store would be operated 24-hours per day, seven days per week. Approximately 25-30 persons would be employed.

The store would receive regular weekly deliveries of merchandise for sale, typically by a tractor-trailer with 42-foot trailer. Up to three deliveries by such trucks are common for the operation of similar stores.

The retail pharmacy store is the only development proposed on the site as part of the project, and would occupy Parcel 1. Future development on the site is not proposed, and timing of any future development is uncertain. As part of the planning process to determine whether the use requirements applicable under the Zoning Code would be satisfied, and to identify potential impacts from eventual build-out, the applicant was required to provide an estimate of the type and density of development that could occur on the project site. See Attachment 3, Site Plan. The future proposed development that was identified, and which forms the basis for impact review, would include the construction of a mixture of retail, restaurant and office uses, as follows:

Parcel 2 (0.761 acres)	Drive-through fast-food restaurant (3,067 square feet)
Parcel 3 (0.810 acres)	Retail (8,400 square feet)
Parcel 4 (0.843 acres)	Retail (6,750 square feet)

Parcel 5 (3.072 acres) Medical Office (3 separate buildings totaling 20,500 square feet, and restaurant with 5,880 square feet)

The project includes typical subdivision improvements along Freeport Boulevard and Florin Road frontages, including sidewalk, landscaping, curb and gutter. The discussion below under Transportation identifies additional improvements that would be required within existing streets to respond to potential impacts for traffic.

The project includes the following site improvements: entrance and exits to Freeport Boulevard and Florin Road, 85 paved parking spaces, 4 handicap parking spaces, landscaping for the parking lot for aesthetics purposes and to achieve the required shading (i.e., 50% of parking area shaded within fifteen years).

The project includes the following entitlements:

- Rezone of Parcel 1 (1.68 acres on the northwest corner of the site) from Limited Commercial (C-1-EA-2) to General Commercial (C-2-EA-2);
- Tentative map to subdivide two parcels totaling approximately 7.35 acres into five parcels;
- Special Permit to allow the operation of a drive-through within the Limited Commercial (C-~~1~~-2-R-EA-2) zone;
- Variance to reduce the required stacking depth for the drive-through lane; and
- Development Plan Review for the site.

The proposed project requires hearing and review by the Planning Commission.

Attachments

Attachment 1 Vicinity Map

Attachment 2 Tentative Map

Attachment 3 Site Plan

Attachment 4 Land Use and Zoning

Attachment 5 Sacramento Area Council of Governments letter re: EA Zone

Attachment 6 Air Quality Data

Attachment 7 Historical Resources Evaluation

Attachment 8 Traffic Impact Study, City of Sacramento, December 2010

SECTION III – ENVIRONMENTAL CHECKLIST AND DISCUSSION
LAND USE, POPULATION AND HOUSING, AGRICULTURAL RESOURCES AND ENERGY

Introduction

The California Environmental Quality Act (CEQA) requires the Lead Agency to examine the effects of a project on the physical conditions that exist within the area that would be affected by the project. CEQA also requires a discussion of any inconsistency between the proposed project and applicable general plans and regional plans.

An inconsistency between the proposed project and an adopted plan for land use development in a community would not constitute a physical change in the environment. When a project diverges from an adopted plan, however, it may affect planning in the community regarding infrastructure and services, and the new demands generated by the project may result in later physical changes in response to the project.

In the same manner, the fact that a project brings new people or demand for housing to a community does not, by itself, change the physical conditions. An increase in population may, however, generate changes in retail demand or demand for governmental services, and the demand for housing may generate new activity in residential development. Physical environmental impacts that could result from implementing the proposed project are discussed in the appropriate technical sections.

This section of the initial study identifies the applicable land use designations, plans and policies, and permissible densities and intensities of use, and discusses any inconsistencies between these plans and the proposed project. This section also discusses agricultural resources and the effect of the project on these resources, as well as energy.

Discussion

Land Use and Population

The 2030 General Plan land use designation for the site is Suburban Corridor. See Attachment 4, Land Use and Zoning. This designation is applied to parcels along major roadways and is envisioned as suitable for development with auto-oriented, moderate-density retail, office and residential uses that support surrounding suburban neighborhoods. Typical development characteristics include moderate lot coverage and setbacks, one- to four-story buildings, buildings with a high degree of pedestrian-oriented uses located at street level, and attractive streetscapes with sidewalks. The planning process, via the site plan review, provides the City with authority to ensure that the proposed development at the project is consistent with the general plan provisions. The project would be consistent with the 2030 general Plan land use designation. The 2030 General Plan may be reviewed at www.sacpg.org.

The portion of the site at the corner of Freeport Boulevard and Florin Road is Limited Commercial, Executive Airport Overlay Zone (C-1-R-EA-2). This zoning designation includes the following components:

~~*C-1:* This is a limited commercial zone which allows certain office, retail stores, and commercial service establishments which are compatible with residential developments. This zone is intended to be applied to small parcels which are surrounded by a residential neighborhood.~~

C-2: This is a general commercial zone which provides for the sale of commodities, or performance of services, including repair facilities, offices, small wholesale stores or distributors, and limited processing and packaging.

R: A plan review is required for any proposed development. A plan review allows for the review of a proposed development plan to ensure, among other things, that the proposed development is consistent with the general plan; that the utilities and infrastructure are sufficient to support the proposed development and are compatible with city standards; and that the proposed development is compatible with surrounding development.

EA: The EA designates a zone overlay that applies to areas affected the operations at the Sacramento Executive Airport. Development in this zone is subject to three standards: height (building must be less than 50 feet in height), noise (buildings must be located outside the 65 dB contour) and safety (development located within the Approach Departure 1 Safety Zone is restricted by use and density). In the case of safety, the land use category of "grocery store and drug store" is allowed, as long as the development does not result in concentrations of people greater than 50 persons per acre at any time.

Review of development and densities in the EA zone is within the purview of the Airport Land Use Commission. Staff at the Sacramento Area Council of Governments serve as staff for the Commission, and reviewed the proposal. Staff concluded that the maximum allowed density for the project site (84 persons based on 1.68 acres) had not been exceeded at a similar store across the street, and would not be exceeded in this case. SACOG staff noted that any development proposal for the remaining parcels would be evaluated each on their own as specific developments were proposed. See Attachment 5.

The EA designation is be applied to four safety areas: the clear zone; the approach-departure zone 1; the approach-departure zone 2; and the overflight zone. The clear zone (EA-1) is near the end of the runway and is the most restrictive. The approach-departure zones (EA-2, EA-3) are located under the takeoff and landing slopes and are less restrictive. The overflight zone (EA-4) is the area under the traffic pattern and is even less restrictive. The zone applicable to the site on which the retail pharmacy store would be located (Parcel 1) is EA-2. As indicated in the SACOG review, the proposed use is allowed in this zone district.

The uses proposed as part of the project are consistent with the general plan and zoning designations for the project site. The project does not include housing, and would not result in additional population. The project site is vacant, and no housing would be displaced.

The retail uses proposed for the site would be neighborhood-oriented, and would not tend to attract other retail uses or substantial population to the vicinity. The project site is located in an urbanized area of the community that is served by utilities and urban services. As a result the proposed project would not induce substantial growth to the area, nor would the proposed project displace any housing.

The project includes a rezone to C-2 because drive-through facilities are not allowed in the C-1 zone district. (City Code section 17.24.050, note 44) The rezone request does not alter the development proposal for the affected portion of the site affected by the rezone. The environmental analysis for that portion of site as set forth in this initial study remains unchanged.

Agricultural Resources

The project site is located in an urbanized portion of the community, completely surrounded by urban residential and commercial development. A portion of the site was used as a baseball field for many years, and has been vacant and unused for several years. The site does not support agricultural operations of any kind. Development of the site with urban uses would have no effect on agricultural resources.

Energy

All structures on the project site would be developed in a manner consistent with the City's building code. As of January 1, 2011, the building code will include provisions that require building standards to ensure that sustainable building practices and efficient energy standards are followed. Review of building plans will ensure that the project does not result in wasteful energy practices.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
1. AESTHETICS, LIGHT AND GLARE Would the proposal: A) Create a source of glare that would cause a public hazard or annoyance?		X	
B) Create a new source of light that would be cast onto oncoming traffic or residential uses?		X	

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, aesthetics impacts may be considered significant if the proposed project would result in one or more of the following:

Glare. Glare is considered to be significant if it would be cast in such a way as to cause public hazard or annoyance for a sustained period of time.

Light. Light is considered significant if it would be cast onto oncoming traffic or residential uses.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR described the existing visual conditions in the general plan policy area, and the potential changes to those conditions that could result from development consistent with the 2030 general Plan. See Master EIR, Chapter 6.13, Urban Design and Visual Resources.

The Master EIR identified potential impacts for glare (Impact 6.13-1). Mitigation Measure 6.13-1, set forth below, was identified to reduce the effect to a less-than-significant level.

Light cast onto oncoming traffic or residential uses was identified as a potential impact (Impact 6.13-2). The Master EIR identified Policy LU 6.1.14 (Compatibility with Adjoining Uses) and its requirement that lighting must be shielded and directed downward as reducing the potential effect to a less-than-significant level.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO PROJECT

Master EIR Mitigation Measure 6.13-1: *The City shall amend the Zoning Code to prohibit new development from:*

1) *using reflective glass that exceeds 50 percent of any building surface and on the ground three floors:*
2) *using mirrored glass;*
3) *using black glass that exceeds 25 percent of any surface of a building; and,*
4) *using metal building materials that exceed 50 percent of any street-facing surface of a primarily residential building.*

The Zoning Code has not yet been amended to include the restrictions identified in Mitigation Measure 6.13-1. The restrictions will be applied to the project, if applicable, to ensure that the potential impact identified in the Master EIR is less than significant.

QUESTIONS A AND B

The proposed project would subdivide a vacant 7.6-acre parcel, and construct a retail pharmacy store at the corner of Freeport Boulevard and Florin Road. Additional development on the remaining four parcels is not proposed, but has been projected to include two restaurants, retail areas and three office buildings.

The retail pharmacy and the anticipated future uses are consistent with the general plan and zoning designations for the project site. Urban development on a currently-vacant parcel would result in additional sources of lighting, including lighting for parking and sidewalk areas, and exterior lighting on buildings. Design of buildings, as anticipated in the Master EIR in Mitigation Measure 6.13-1, could result in glare effects on neighboring properties and persons using the site. These new light sources could result in light spill onto neighboring residential parcels unless appropriate designed and installed. This could be a significant effect.

The mitigation measures identified below would ensure that building designs are consistent with the measures identified in the Master EIR for avoidance of glare, and avoid effects on neighboring properties.

With implementation of the identified mitigation, any additional significant environmental effects relating to light and glare would be reduced to a less-than-significant level.

MITIGATION MEASURES

LG-1

Structures proposed on the project site shall be designed to avoid the use of the following features:

(1) reflective glass that exceeds 50 percent of any building surface and on the ground three floors:
(2) mirrored glass;
(3) black glass that exceeds 25 percent of any surface of a building; and,
(4) metal building materials that exceed 50 percent of any street-facing surface of a primarily residential building.

LG-2

Security or exterior lighting on building facades facing residential areas shall be designed to avoid any direct light or glare onto neighboring properties.

FINDINGS

All additional significant environmental effects of the project relating to light and glare can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
2. AIR QUALITY *Would the proposal:* A) Result in construction emissions of NO_x above 85 pounds per day?			X
B) Result in operational emissions of NO_x or ROG above 65 pounds per day?			X
C) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X
D) Result in PM_{10} concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard?		X	
E) Result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm)?			X
F) Result in exposure of sensitive receptors to substantial pollutant concentrations?			X
G) Result in TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources?			X
H) Impede the City or state efforts to meet AB32 standards for the reduction of greenhouse gas emissions?			X

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, air quality impacts may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan

MEIR:

- construction emissions of NO_x above 85 pounds per day;
- operational emissions of NO_x or ROG above 65 pounds per day;
- violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- PM_{10} concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard. However, if project emissions of NO_x and ROG are below the emission thresholds given above, then the project would not result in violations of the PM_{10} ambient air quality standards;
- CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm); or
- exposure of sensitive receptors to substantial pollutant concentrations.

Ambient air quality standards have not been established for toxic air contaminants (TAC). TAC exposure is deemed to be significant if:

- TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR addressed the potential effects of the 2030 General Plan on ambient air quality and the potential for exposure of people, especially sensitive receptors such as children or the elderly, to unhealthful pollutant concentrations. See Master EIR, Chapter 6.1.

Policies in the 2030 General Plan in Environmental Resources were identified as mitigating potential effects of development that could occur under the 2030 General Plan. For example, Policy ER 6.1.1 calls for the City to work with the California Air Resources Board and the Sacramento Metropolitan Air Quality Management District (SMAQMD) to meet state and federal air quality standards; Policy ER 6.1.12 requires the City to review proposed development projects to ensure that the projects incorporate feasible measures that reduce construction and operational emissions; Policy ER 6.1.11 calls for coordination of City efforts with SMAQMD; and Policy ER 6.1.15 requires the City to give preference to contractors using reduced-emission equipment.

The Master EIR identified exposure to sources of toxic air contaminants (TAC) as a potential effect. Policies in the 2030 general Plan would reduce the effect to a less-than-significant level. The policies include ER 6.1.5, requiring consideration of current guidance provided by the Air Resources Board and SMAQMD; requiring development adjacent to stationary or mobile TAC sources to be designed with consideration of such exposure in design, landscaping and filters; as well as Policies ER 6.11.1 and ER 6.11.15, referred to above.

The Master EIR found that greenhouse gas emissions that would be generated by development consistent with the 2030 General Plan would be a significant and unavoidable cumulative impact. The discussion of greenhouse gas emissions and climate change in the 2030 General Plan Master EIR are incorporated by reference in this Initial Study. (CEQA Guidelines Section 15150)

The Master EIR identified numerous policies included in the 2030 General Plan that addressed greenhouse gas emissions and climate change. See Draft MEIR, Chapter 8, and pages 8-49 et seq. The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

Policies identified in the 2030 General Plan include directives relating to sustainable development patterns and practices, and increasing the viability of pedestrian, bicycle and public transit modes. A complete list of policies addressing climate change is included in the Master EIR in Table 8-5, pages 8-50 et seq; the Final MEIR included additional discussion of greenhouse gas emissions and climate change in response to written comments. See changes to Chapter 8 at Final MEIR pages 2-19 et seq. See also Letter 2 and response.

ANSWERS TO CHECKLIST QUESTIONS

Question A

Air emissions during construction would occur due to activities consisting of grading and excavation and the actual construction of the structures and improvements. Construction activities may cause the air quality to temporarily degrade during construction due to emissions from heavy construction equipment and ground disturbing activities. Emissions in the grading and excavation phase of construction are primarily associated with exhaust of heavy equipment and the dust that is generated through grading activities. Estimated construction emissions resulting from development of the entire 7.55 acres including the uses identified on the site plan were calculated using the URBEMIS 2007, Version 9.2.4 program, and following the guidelines of the Sacramento Metropolitan Air Quality Management District (SMAQMD). It is estimated that construction activities of the entire site would generate up to approximately 62.48 pounds of NOx per day (see Air Quality Data, Attachment 6).

Since it is not known whether the uses other than the CVS pharmacy will be developed within the near future, an estimate of emissions resulting from development of the CVS pharmacy by itself was also completed which found that construction activities would generate approximately 57.51 pounds of NOx per day. These emissions fall below the threshold of significance for construction emissions. The SMAQMD Guidelines provide that if a project's NOx emissions from heavy-duty mobile sources are less than significant, as here, then the lead agency may assume that exhaust emissions of other pollutants from operation of equipment and worker commute vehicles are also less than significant.

Based on the analysis of site activities associated with construction of the CVS Pharmacy site at Florin and Freeport, the project would not result in any additional significant environmental effects.

Question B

As described above, the URBEMIS 2007 9.2.4 model was used to calculate estimated emissions for the operation of the proposed project and the development of the entire 7.55 acres. Estimated ROG and NO_x emissions for full development of the 7.55 acres were calculated to be approximately 37.05 lbs/day and 62.76 lbs/day, respectively, which is below the 65 lbs/day threshold (see Attachment 6). Since it is unknown if or when the separate 5.8± acres

will be developed, operational emissions were also estimated for just the CVS Pharmacy store since it is the only proposed development at this time. Operational emissions from the CVS Pharmacy store would be approximately 9.44 lbs/day of ROG and 15.96 lbs/day of NOx. Each of these modeling results, one for full development of the entire 7.55 acres and the other for the CVS Pharmacy store by itself, is below the threshold of 65 lbs/day. Operation of the CVS Pharmacy will not create significant operational emissions.

Question C and D

The proposed project involves the construction of 16,500 square feet CVS Pharmacy on approximately 1.7 acres within a 7.55 acre vacant site. At the time of full development, the subject site could also consist of 20,500 square feet of medical offices, a fast-food restaurant with a drive-thru, 15,150 square feet of retail, and a 5,880 square feet sit-down restaurant. The proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Sacramento County is considered a nonattainment area for fine particle pollution. The SMAQMD has indicated that projects that implement Basic Construction Emissions Control Practices and disturb less than 15 acres per day would not exceed the concentration based threshold of significance for PM_{10} and, therefore $PM_{2.5}$. The subject site is well below the 15 acre criteria; however, the Basic Construction Emission Control Practices are included below as mitigation measures to be implemented during project construction to ensure that PM_{10} and $PM_{2.5}$ emissions would not be significant.

Question E and F

The small amount of traffic generated by construction employees or the 989 net trips generated by the CVS Pharmacy (or with the additional 1,667 net trips at potential buildout of the site) would not result in significant regional air quality impacts or "hot spots" at nearby intersections (**Traffic Impact Study, Attachment 7**). Existing levels of service (LOS) for nearby intersections range from B to D. Upon buildout of the site, the LOS levels of intersections in the area will remain between B to D (the PM trips at the intersection of Florin Road and Southland Park Drive changes LOS from C to D at buildout of the 7.55 acres). No intersection within the area operates at LOS E or F. The existing and future projected LOS levels at buildout of the project site demonstrate that local roadways are not significantly impacted by vehicular traffic. The project will not generate traffic that significantly impacts the air quality at roadway intersections in the area or creates any CO "hot spots."

Question G

Land uses such as schools, hospitals, residences and convalescent homes are considered to be especially sensitive to poor air quality associated with TAC. The most prominent TAC associated with high volumes of traffic on major roadways is diesel PM. The Project Site is adjacent to Florin Road, which is an east-west, four-lane arterial that carries approximately 27,900 vehicles per day (vpd). The project site also fronts along Freeport Boulevard, which is a north-south, four-lane arterial that carries approximately 14,600 vpd (**Traffic Impact Study, Attachment 7**). Both Florin's and Freeport's vpd count is well below the SMAQMD's Protocol of 100,000 vehicles per day on an urban roadway. The Project Site is not located within 500 feet from the edge of travel lane for Highway 99 or I-5 and does not include any sensitive receptors; therefore, impacts related to TACs would not result in any new significant effect.

Question H

As part of its action in approving the 2030 General Plan, the City Council certified the Master Environmental Impact Report (Master EIR) that evaluated the environmental effects of development that is reasonably anticipated under the new general plan. The Master EIR includes extensive discussion of the potential effects of greenhouse gas emissions. The Master EIR discussions regarding climate change are incorporated here by reference. See, for example:

Draft EIR: 6.1 Air Quality (Page 6.1-1)
Final EIR: City Climate Change master Response (Page 4-1)
Errata No. 2: Climate Change (Page 12)

These documents are available at: www.cityofsacramento.org/dsd/planning/environmental-review/eirs/ and at the offices of the Community Development Department at 300 Richards Boulevard, Third Floor, Sacramento, California.

The proposed project is consistent with the land use designation for the project site. The project would result in the generation of greenhouse gases during construction and operation, as discussed below.

Short-term Construction Emissions

During construction of the project greenhouse gas (GHG) emissions would be emitted from the operation of construction equipment and from worker and building supply vendor vehicles. The total CO_2 emissions generated by the construction of the project would be approximately 123.3 metric tons per year for development of the full 7.55 acres (see Attachment 6). These emissions would equate to approximately 0.000026 percent of the estimated GHG emissions for all sources in California (483 million metric tons) (CARB 2009). GHG emissions from development of the CVS Pharmacy alone would result in construction related CO_2 emission of approximately 92.26 metric tons per year, which equates to 0.000019 percent of the estimated GHG emissions for all sources in California.

Long-term Operational Emissions

The largest source of greenhouse gas emissions associated with the proposed project would be on- and off-site motor vehicle use. CO_2 emissions, the primary greenhouse gas emission from mobile sources, are directly related to the quantity of fuel consumed. CO_2 emissions during operation of the project at full build-out of the 7.55 acres would be approximately 7,287 metric tons, which equates to 0.0015 percent of California's total emissions. Since it is unknown if or when the remainder of the 5.8 acres will be developed, operational emissions were calculated for the CVS Pharmacy by itself, which resulted in an estimate of approximately 1.850 metric tons per year (see Attachment 6). These emissions would equate to approximately 0.00038 percent of the estimated GHG emissions for all sources in California (483 million metric tons) (CARB 2009)

Buildings constructed as part of the project would be required to comply with current California building codes that require structures to incorporate energy efficient materials and design.

Ongoing Activities

The 2030 General Plan included direction to staff to prepare a Climate Action Plan for the City. Staff has continued work on this plan since adoption of the 2030 General Plan. The Climate Action Plan will provide additional guidance for the City's ongoing efforts to reduce greenhouse gas emissions. The tentative completion date for the Climate Action Plan is 2011.

Action continues at the state and federal level to combat climate change. In December 2009 the Environmental Protection Agency listed greenhouse gases as harmful emissions under the Clean Air Act. This action could eventually result in regulations that would have as their purpose the reduction of such emissions.

The Master EIR concluded that greenhouse gas emissions that could be emitted by development that is consistent with the 2030 General Plan would be cumulatively considerable and unavoidable (Errata No. 2, Page 12). The Master EIR includes a full analysis of greenhouse gas emissions and climate change, and adequately addresses these issues.

The project is consistent with the City's goals as set forth in the 2030 General Plan and Master EIR relating to reduction of greenhouse gas emissions. The project would not impede the City's efforts to comply with AB32 requirements. The project would not have any significant additional environmental effects relating to greenhouse gas emissions or climate change.

MITIGATION MEASURES

AQ-1. Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.

AQ-2. Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.

AQ-3. Use wet power vacuum street sweepers to remove any visible track out mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.

AQ-4. Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).

AQ-5. All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

AQ-6. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.

AQ-7. Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

FINDINGS

All additional significant environmental effects of the project relating to Air Quality can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
3. BIOLOGICAL RESOURCES Would the proposal: A) Create a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected			X
B) Result in substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal			X
C) Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands)?			X

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact would be significant if any of the following conditions or potential thereof, would result with implementation of the proposed project:

- Creation of a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected;
- Substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal; or
- Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands).

For the purposes of this document, "special-status" has been defined to include those species, which are:

- Listed as endangered or threatened under the federal Endangered Species Act (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under the California Endangered Species Act (or proposed for listing);
- Designated as endangered or rare, pursuant to California Fish and Game Code (Section 1901);
- Designated as fully protected, pursuant to California Fish and Game Code (Section 3511, 4700, or 5050);
- Designated as species of concern by U.S. Fish and Wildlife Service (USFWS), or as species of special concern to California Department of Fish and Game (CDFG);

- Plants or animals that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA).

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.3 of the Master EIR evaluated the effects of the 2030 General Plan on biological resources within the general plan policy area. The Master EIR identified potential impacts in terms of degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status birds, through the loss of both nesting and foraging habitat.

Policies in the 2030 General Plan were identified as mitigating the effects of development that could occur under the provisions of the 2030 General Plan. Policy 2.1.5 calls for the City to preserve the ecological integrity of creek corridors and other riparian resources; Policy ER 2.1.10 requires the City to consider the potential impact on sensitive plants for each project and to require pre-construction surveys when appropriate; and Policy 2.1.11 requires the City to coordinate its actions with those of the California Department Fish and Game, U.S. Fish and Wildlife Service, and other agencies in the protection of resources.

The Master EIR concluded that the cumulative effects of development that could occur under the 2030 General Plan would be significant and unavoidable as they related to effects on special-status plant species (Impact 6.3-2), reduction of habitat for special-status invertebrates (Impact 6.3-3), loss of habitat for special-status birds (Impact 6.3-4), loss of habitat for special-status amphibians and reptiles (Impact 6.3-5), loss of habitat for special-status mammals (Impact 6.5-6), special-status fish (Impact 6.3-7) and, in general, loss of riparian habitat, wetlands and sensitive natural communities such as elderberry savannah (Impacts 6.3-8 through 10).

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Question A

The project includes a request for a tentative map to create five parcels on the approximately 7.5-acre site. A retail pharmacy would be developed on the corner of Florin Road and Freeport Boulevard. The remainder of the site would remain undeveloped, but the applicant has identified proposed future uses that could include medical office buildings, retail stores and restaurants. None of the proposed uses would generate hazardous materials that could affect neighboring properties or surface areas. Disposal of solid waste or other materials from the site would be directed to the City's ongoing solid waste program, and directed to the appropriate disposal facility. There would be no impact on plant or animal communities in the project area.

Questions B, C

A biological constraints evaluation was conducted by AECOM for the proposed project. The evaluation was conducted by a qualified biologist, and examined the approximately 7.5-acre project site located southeast of the intersection of Freeport Boulevard and Florin Road in the City

of Sacramento. The evaluation is focused on sensitive biological resources, including sensitive habitats and special-status species, which could potentially influence project planning, approval, and implementation. An AECOM biologist surveyed the project site on December 15, 2010.

The project site appeared to have been disked within the last 12 months and vegetation on the interior portion of the site is limited to various non-native grasses and other weeds that have emerged following recent rainfall. Evidence of recent disking includes plow furrows in sparsely vegetated portions of what can otherwise be described as a weedy field. Small trees and shrubs are scattered along the perimeter of the site and along a fenceline that crosses the site. Tree and scrub diversity is almost entirely limited to non-native species with the exception of a row of small valley oaks located along a portion of the eastern boundary of the site. The southern portion of the project site was formerly used as a baseball field, which has also been recently disked. The outline of the field is clearly identifiable on recent aerial photographs, and the baseball backstop and storage/snack shack building are still present.

Sensitive Habitats

Sensitive habitats include sensitive natural plant communities and other habitats designated and/or regulated by California Department of Fish and Game (DFG), U.S. Fish and Wildlife Service (USFWS), and U.S. Army Corps of Engineers (USACE). Under Section 404 of the Clean Water Act (CWA), wetlands and other waters of the United States are subject to the jurisdiction of USACE. Aquatic habitats may also receive protection under California statutes including Section 1602 of the California Fish and Game Code and the California Porter-Cologne Water Quality Control Act.
No sensitive natural plant communities or wetlands are present on the project site.

Special-status Species

Special-status species are plants and animals in the following categories:

- Species that are listed under the federal Endangered Species Act (ESA) and/or California Endangered Species Act (CESA) as rare, threatened, or endangered;
- Species considered as candidates and proposed for state or federal listing as threatened or endangered;
- Wildlife designated by the California Department of Fish and Game (DFG) as species of special concern; and
- Plants ranked by DFG as "rare, threatened, or endangered" in California.

The California Natural Diversity Database (CNDDB), maintained by the California Department of Fish and Game (DFG), was used as the primary source of information on sensitive biological resources previously documented in the vicinity of the project site. The CNDDB is considered as the most current and reliable tool for tracking occurrences of special-status species in California. Seven special-status species have been reported to the CNDDB from locations within two miles of the project site (Exhibit 1): Sanford's arrowhead, vernal pool tadpole shrimp, California linderiella, Sacramento splittail, Sacramento perch, burrowing owl, and Swainson's hawk.

No special-status species are expected to occur on the project site. Sanford's arrowhead, vernal pool tadpole shrimp, California linderiella, Sacramento splittail, and Sacramento perch all require seasonal or permanent aquatic habitats that are not present.

The Swainson's hawk is not expected to use the project site because no suitable nesting habitat

or foraging habitat is present. There are three CNDDB occurrences for Swainson's hawk nesting sites within two miles of the project site. All three occurrences are located along the Sacramento River, which is located approximately 1.5 miles west of the project site and west of Interstate 5.

The lack of mature trees and high level of human disturbance associated with surrounding urban development precludes use of the project site for nesting. Swainson's hawks are known to forage in weedy fields, However, other characteristics of suitable Swainson's hawk foraging habitat are absent from the project site. Characteristics of suitable foraging habitat for Swainson's hawks include large parcels of land with low to moderate levels of disturbance and abundant prey. The project site is small and surrounded by development. Florin Road and Freeport Boulevard are both busy roadways with high volumes of traffic, which may further discourage use by Swainson's hawks. Swainson's hawks forage on a variety of prey including small mammals and insects.

The project site is expected to support a few potential prey species (e.g., house mouse) but prey density is expected to be very low due to recent disking and the adverse effects that the surrounding development is likely to have on prey species that are most abundant on large, less disturbed, land parcels. No small mammals or small mammal burrows were observed on the project site during the field survey.

Burrowing owls can be found on small parcels of disturbed land within urbanized environments, and non-native grassland is considered suitable habitat for this species. However, burrowing owls require ground squirrel burrows or other suitable underground burrows for nesting. No suitable burrows were found on the project site during the December field survey. Therefore, it is appropriate to conclude that this species does not currently occupy the project site.

Based on the field survey results, and database and literature review, the project site does not currently support sensitive biological resources, and the project would have a less-than-significant effect on biological resources.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Biological Resources.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
4. CULTURAL RESOURCES Would the project: A) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in § 15064.5?		X	
B) Directly or indirectly destroy a unique paleontological resource?		X	

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, cultural resource impacts may be considered significant if the proposed project would result in one or more of the following:

1. Cause a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5 or

2. Directly or indirectly destroy a unique paleontological resource.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential effects of development under the 2030 General Plan on prehistoric and historic resources. See Chapter 6.4, Cultural Resources. The Master EIR identified significant and unavoidable effects on historic resources and archaeological resources.

General plan policies identified as reducing such effects call for identification of resources on project sites (Policy HCR 2.1.1), implementation of applicable laws and regulations (Policy HCR 2.1.2 and HCR 2.1.15), early consultation with owners and land developers to minimize effects (Policy HCR 2.1.10 and encouragement of adaptive reuse of historic resources (Policy HCR 2.1.13). Demolition of historic resources is deemed a last resort. (Policy HCR 1.1.14)

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

QUESTIONS A AND B

The site would be developed with urban uses, involving installation of utilities, paving, and standard construction of structures. Some excavation would be required, and it is possible that such activities could encounter historic or archaeological resources. This could be a significant

effect. The mitigation measures identified below would ensure that any impacts that resulted from such discoveries would be reduced to a less-than-significant level.

The approximately 7.5-acre site was evaluated for potential historic and cultural resources. A qualified historian from AECOM conducted the evaluation. See Attachment 7, Historical resource Evaluation. Research regarding the property was conducted at the Center for Sacramento History, County of Sacramento Assessor office, Online Archive of California, Sacramento Room of the Central Sacramento Public Library and the Sanborn Maps database of the Los Angeles Public Library online collection. A site visit was conducted during which the entire site was examined on foot with transects of no more than 20 meters. No artifacts or cultural constituents were observed.

A baseball field, backstop and accessory structure, apparently the snack bar building, are located on the project site. The baseball field was created in the early 1960's during the development of the surrounding Oakmont Terrace Subdivision. The property was owned by the State of California and was transferred to the City of Sacramento in 1973. The land was leased to the Willow Rancho Little League, one of several little leagues operating in Sacramento at the time.

Research did not reveal that the property, or any individuals connected to the property, as having important historical associations with the development of Sacramento youth baseball. Architecturally, the property does not exhibit distinguishable characteristics for its type, period or method of construction. The building and structure on the property served a utilitarian requirement for the baseball organization. There is no substantial evidence that the property will yield information important to history. The property has lost integrity of design, materials, feeling and association. This, combined with the absence of significance, makes the building ineligible for listing on the California Register of Historic Places or the Sacramento Register. The demolition of the structure, and development of the site, would have a less-than-significant effect on these resources.

A cultural resources records search was conducted at the North Central Information Center and the results were compiled on January 18, 2011 (SAC-11-06). No previous surveys were conducted within the proposed project boundaries and only two surveys were conducted within 1/8 mile of the proposed project area. An archaeological survey was conducted in 1992 at the southwest corner of the intersection of Freeport and Florin and only identified the historic Walnut Grove Branch Line of the Southern Pacific Railroad (#3861). This resource is located outside of the proposed project area (and is separated from the project area by Freeport Boulevard). A 2010 evaluation of nearby William S. Chorley Park found that property did not appear to meet the criteria for listing on the National Register of Historic Places (#34-4265).

MITIGATION MEASURES

CR-1 In the event that any prehistoric subsurface archeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, animal bone, obsidian and/or mortars are discovered during construction-related earth-moving activities, all work within 50 meters of the resources shall be halted, and the City shall consult with a qualified archeologist to assess the significance of the find. Archeological test excavations shall be conducted by a qualified archeologist to aid in determining the nature and integrity of the find. If the find is determined to be significant by the qualified archeologist, representatives of the City and the qualified archeologist shall coordinate to

determine the appropriate course of action. All significant cultural materials recovered shall be subject to scientific analysis and professional museum curation. In addition, a report shall be prepared by the qualified archeologist according to current professional standards.

CR-2 If a Native American site is discovered, the evaluation process shall include consultation with the appropriate Native American representatives.

If Native American archeological, ethnographic, or spiritual resources are involved, all identification and treatment shall be conducted by qualified archeologists, who are certified by the Society of Professional Archeologists (SOPA) and/or meet the federal standards as stated in the Code of Federal Regulations (36 CFR 61), and Native American representatives, who are approved by the local Native American community as scholars of the cultural traditions.

In the event that no such Native American is available, persons who represent tribal governments and/or organizations in the locale in which resources could be affected shall be consulted. If historic archeological sites are involved, all identified treatment is to be carried out by qualified historical archeologists, who shall meet either Register of Professional Archeologists (RPA), or 36 CFR 61 requirements.

CR-3 If a human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find, and the County Coroner shall be contacted immediately. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, who shall notify the person most likely believed to be a descendant. The most likely descendant shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. No additional work is to take place within the immediate vicinity of the find until the identified appropriate actions have taken place.

FINDINGS

All additional significant environmental effects of the project relating to Cultural Resources can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
5.GEOLOGY AND SOILS Would the project allow a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards?			X

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if it allows a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.5 of the Master EIR evaluated the potential effects related to seismic hazards, underlying soil characteristics, slope stability, erosion, existing mineral resources and paleontological resources in the general plan policy area. Implementation of identified policies in the 2030 General Plan reduced all effects to a less-than-significant level. Policies EC 1.1.1 through 1.1.3 require regular review of the City's seismic and geologic safety standards, geotechnical investigations for project sites and retrofit of critical facilities such as hospitals and schools.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Surface faulting or ground rupture tends to occur along lines of previous faulting. The nearest fault is the Foothill Fault System, located approximately 23 miles east of the project site. Since previously identified fault lines are not within or near the project site, the possibility of fault rupture is negligible within the site, but in the event of an earthquake on a nearby fault, the project site could experience ground shaking. The California Geological Survey (CGS) probabilistic seismic hazards maps shows that the seismic ground-shaking hazard for the city is relatively low, and is among the lowest in the State. Nonetheless, the State of California provides minimum standards for structural design and site development through the California Building Code (CBC – California Code of Regulations (CCR), Title 24, Part 2).

The 2007 CBC, effective January 1, 2008, is based on the current (2006) International Building Code and contains substantial enhancement of the sections dealing with fire safety, equal access for disabled persons, and environmentally friendly construction. The City's enforcement of its Building Code ensures the project would be consistent with the CBC.

State and local regulations require design-level geotechnical investigations for the foundations of any structure for human occupancy proposed at the project site, including specific recommendations to reduce or eliminate post-construction settlement. The design-level geotechnical investigation for the project would be reviewed by the City for compliance with existing building codes and ordinances. Implementation of the recommended site preparation activities would be enforced through inspection by the City.

Before construction of the proposed project, the City Building Code requires a site-specific soils report that identifies any potentially unsuitable soil conditions (such as expansive, liquefiable, or compressive soils) and contains appropriate recommendations for foundation type and design criteria, including provisions to reduce the effects of these soils. The recommendations made in the geotechnical report prepared for the project for ground preparation and earthwork would be incorporated in the construction design. The soils evaluations must be conducted by registered soil professionals, and the measures to eliminate inappropriate soil conditions must be applied. The design for soil support of foundations must conform to the analysis and implementation criteria described in the City's Building Code.

Compliance with the above regulations and permit processes would ensure that the underlying soil conditions are identified through geotechnical investigation and that appropriate design features are included to reduce or eliminate post-construction settlement due to ground shaking or liquefaction. Implementation of these regulations would ensure that impacts related to groundshaking, liquefaction, expansive soils or subsidence would not be significant. The proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death due to rupture of a known earthquake fault.

The project site is level, so there would be no impact related to the possibility of landslides.

The proposed project is not expected to create substantial erosion or loss of topsoil because the project site is level, so the water erosion hazard is considered low. However, construction activities would disturb soils, which could lead to erosion. In addition, post-construction changes to drainage patterns on the project site could lead to erosion. The following regulations control construction-related activities with regard to erosion.

The State Regional Water Quality Control Board (SWRCB) permits all regulated construction activities under National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (Order No.2009-0009-DWQ, NPDES No. CAR000002) adopted September 2, 2009. The project's construction activities would be required to comply with the City's Grading, Erosion and Sediment Control Ordinance. Compliance activities under this ordinance include preparation of an erosion and sediment control plan that identifies and implements a variety of Best Management Practices (BMPs) to reduce the potential for erosion or sedimentation. BMPs are intended to reduce impacts to the Maximum Extent Practicable (MEP), a standard created by Congress to allow regulators the flexibility necessary to tailor programs to the site-specific nature of municipal stormwater discharges. Regulations do not define a single MEP standard, but reducing impacts to the MEP generally relies on BMPs that emphasize pollution prevention and source control, with additional structural controls, as needed.

The proposed project would be required to connect to the sewer system and would not include the use of septic tanks or other alternative wastewater disposal systems that would be limited by local soils.

Impacts related to geology and soils would be less than significant with implementation of existing State of California or City of Sacramento regulations related to the design-controllable aspects of building foundation support, protection from seismic ground motion, and soil or slope instability. These regulations require that project designs reduce potential adverse soils, geology, and seismicity effects to less than significant levels. The project applicant must demonstrate that the project complies with applicable regulations before permits for project construction would be issued.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Geology and Soils.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
7. HAZARDS Would the project: A) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities?			X
B) Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials?		X	
C) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities?			X

Existing Regulations

SMAQMD Rule 902 and Commercial Structures

The work practices and administrative requirements of Rule 902 apply to all commercial renovations and demolitions where the amount of Regulated Asbestos-Containing Material (RACM) is greater than:

- 260 lineal feet of RACM on pipes, or
- 160 square feet of RACM on other facility components, or
- 35 cubic feet of RACM that could not be measured otherwise.

The administrative requirements of Rule 902 apply to any demolition of commercial structures, regardless of the amount of RACM.

Asbestos Surveys

To determine the amount of RACM in a structure, Rule 902 requires that a survey be conducted prior to demolition or renovation unless:

- the structure is otherwise exempt from the rule, or
- any material that has a propensity to contain asbestos (so-called "suspect material") is treated as if it is RACM.

Surveys must be done by a licensed asbestos consultant and require laboratory analysis. Asbestos consultants are listed in the phone book under "Asbestos Consultants." Large

industrial facilities may use non-licensed employees if those employees are trained by the U.S. EPA. Questions regarding the use of non-licensed employees should be directed to the AQMD.

Removal Practices, Removal Plans/Notification and Disposal

If the survey shows that there are asbestos-containing materials present, the SMAQMD recommends leaving it in place.

If it is necessary to disturb the asbestos as part of a renovation, remodel, repair or demolition, Cal OSHA and the Contractors State License Board require a licensed asbestos abatement contractor be used to remove the asbestos-containing material.

There are specific disposal requirements in Rule 902 for friable asbestos-containing material, including disposal at a licensed landfill. If the material is non-friable asbestos, any landfill willing to accept asbestos-containing material may be used to dispose of the material.

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if the proposed project would:

- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;
- expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials; or
- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated effects of development on hazardous materials, emergency response and aircraft crash hazards. See Chapter 6.6. Implementation of the General Plan may result in the exposure of people to hazards and hazardous materials during construction activities, and exposure of people to hazards and hazardous materials during the life of the General Plan. Impacts identified related to construction activities and operations were found to be less than significant. Policies included in the 2030 General Plan, including PHS 3.1.1 (investigation of sites for contamination) and PHS 3.1.2 (preparation of hazardous materials actions plans when appropriate) were effective in reducing the identified impacts.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A

Federal regulations and regulations adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD() apply to the identification and treatment of hazardous materials during demolition and construction activities. Failure to comply with these regulations respecting asbestos may result in a Notice of Violation being issued by the AQMD and civil penalties under state and/or federal law, in addition to possible action by U.S. EPA under federal law.

Federal law covers a number of different activities involving asbestos, including demolition and renovation of structures (40 CFR § 61.145).

Question B

A small structure is located on the project site. The structure was apparently used at one time as a snack bar. The regulations identified above regarding asbestos surveys and demolition controls would ensure that no significant effects would result in the event the structure is demolished. A Phase I environmental site assessment was conducted for the project site. The review revealed no evidence of historical recognized environmental conditions, and no evidence of current recognized environmental conditions. The project site was at one time in agricultural use and, since approximately 1961, was used as a baseball field for a little league. (See discussion of cultural resources, above.)

Based on the apparent age of the snack bar structure on the site, it is possible that asbestos-containing materials and lead-based paint are present. Compliance with air district regulations, including completion of surveys for asbestos and lead-containing materials, would ensure that any impacts would be less than significant. The Phase I examination also identified abandoned railroad ties on the project site, and these could be subject to requirements for special disposal. To ensure that these materials are properly handled, Mitigation Measure Haz 1, below, requires that the applicant provide written confirmation of completion of required reports and appropriate disposal prior to the issuance of building permits for the project. This mitigation would reduce any potential impacts to a less-than-significant level.

Question C

Site grading would be minimal, and no dewatering would occur.

MITIGATION MEASURES

Haz 1 Prior to the issuance of building permits, the applicant shall submit written identification and confirmation of all reports required relating to potentially hazardous materials on the project site, including reports required by the air district relating to asbestos-containing materials and lead-based paint, compliance with applicable regulations relating to identification and disposal of all such materials, and appropriate disposal of railroad ties that are located on the project site.

FINDINGS

The project would have no additional project-specific environmental effects relating to Hazards.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
8. HYDROLOGY AND WATER QUALITY Would the project: A) Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the project?			X
B) Substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood ?			X

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to hydrology and water quality may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

- substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the Specific Plan or
- substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.7 of the Master EIR evaluates the potential effects of the 2030 General Plan as they relate to surface water, groundwater, flooding, stormwater and water quality. Potential effects include water quality degradation due to construction activities (Impacts 6.7-1, 6.7-2), and exposure of people to flood risks (Impacts 6.7-3, 6.7-4). Policies included in the 2030 General Plan, including a directive for regional cooperation (Policies ER 1.1.2, EC 2.1.1, EC 2.1.1), comprehensive flood management (Policy EC 2.1.14), and construction of adequate drainage facilities with new development (Policy U 4.1.1) were identified that reduced all impacts to a less-than-significant level.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A

The Master EIR includes a discussion of water quality and discharges of stormwater from sites within the City, and that discussion is incorporated here by reference. See Master EIR, pages 6.7-13 and following. One of the most important of the features is the requirement that the applicant comply with the point discharge requirements under the National Pollutant Discharge Elimination System (NPDES) permits. As part of the project, the applicant will be required to construct an on-site ~~water detention~~ stormwater quality and detention facility to moderate downstream flows of stormwater, and to treat runoff from the site to improve water quality prior to its discharge to the City's stormwater system.

The City's grading ordinance (City Code Chapter 15.88) regulates development conditions to prevent erosion, and prevents pollution of watercourses with sediments and other materials. In addition, the City's Department of Utilities implements policies and guidelines regulating grading, erosion control, stormwater drainage design, inspection and permitting for grading and construction.

Project conditions will require the applicant to reserve easements for water and drainage facilities, and for surface water storm drainage. The applicant will be required to construct a drainage main extension to the satisfaction of the City for a portion of the stormwater flow, and the remaining flow will be diverted to a ditch on the east side of Freeport Boulevard. The construction of an on-site water detention facility will moderate flows and avoid any significant effects on stormwater facilities.

QUESTION B

The project site is located in X (shaded) flood zone. This designates an area of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods. Development of the site would not result in any new significant environmental effect.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Hydrology and Water Quality.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
9. NOISE Would the project: A) Result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases?		X	
B) Result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to the project?		X	
C) Result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance?			X
D) Permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction?			X
E) Permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations?			X
F) Permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic?			X

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts due to noise may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

- result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases;
- result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to the project;
- result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance;

- permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction;
- permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; or
- permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential for development under the 2030 General Plan to increase noise levels in the community. New noise sources include vehicular traffic, aircraft, railways, light rail and stationary sources. The general plan policies establish exterior (Policy EC 3.1.1) and interior (EC 3.1.3) noise standards. A variety of policies provide standards for the types of development envisioned in the general plan. See Policy EC 3.1.8, which requires new mixed-use, commercial and industrial development to mitigate the effects of noise from operations on adjoining sensitive land use, and Policy 3.1.9, which calls for the City to limit hours of operations for parks and active recreation areas to minimize disturbance to nearby residences. Notwithstanding application of the general plan policies, noise impacts for exterior noise levels (Impact 6.8-1) and interior noise levels (Impact 6.8-2), and vibration impacts (Impact 6.8-4) were found to be significant and unavoidable.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A-C

The major noise sources in the area are from traffic on Freeport Boulevard and Florin Road, and from overflights by private aircraft due to the proximity of the Sacramento Executive Airport to the north of the site.

Construction activities associated with the proposed project would generate noise due to grading and construction activities. This is a temporary impact. The City of Sacramento Noise Ordinance (City Code Title 8, Chapter 8.68 et seq.) exempts construction-related noise if the construction takes place between the hours of 7:00 a.m. and 6:00 p.m., on Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday. Operations outside of these hours would be subject to the limits set forth in the ordinance. The project would not include construction activities that could generate significant ground vibration, such as pile driving. The project would not result in any additional significant environmental effect due to noise.

The proposed project would subdivide the site into five parcels. The project includes construction and operation of a retail pharmacy store at the corner of Freeport Boulevard and Florin Road, and anticipated development in the future includes restaurants, retail spaces and office buildings.

The residences east of the project site would be exposed to traffic and other noise generated by

the office and retail project. Noise typically attributable to these sources, and the resulting noise impacts to existing noise-sensitive land uses, include mechanical building equipment, landscape maintenance and parking lot noise.

Mechanical building equipment: Mechanical building equipment (e.g., heating, ventilation and air conditioning systems) in use at the proposed buildings could result in noise levels of approximately 90 dB at 3 feet from the source (EPA 1971). Typically, these mechanical equipment systems are shielded from direct public exposure, with a substantial reduction in noise transmitted to the surrounding environment. Such units are usually housed on rooftops, in equipment rooms or in exterior enclosures, but if not shielded, their operation could result in noise levels of 65 dB at 50 feet. (EPA 1971). Any existing residential dwelling located within 50 feet of such an un-shielded mechanical system could experience noise levels that exceed the City's hourly noise standard for residential uses during the daytime hours and even more so during the nighttime when the standard is stricter. Any such occurrence would be a significant impact.

Landscape maintenance: Landscape equipment such as leaf blowers, lawn mowers, edgers and trimmers associated with maintenance of the proposed project would contribute to long-term increases in ambient noise levels at the residences to the west of the project site. Such equipment could result in noise levels that range from approximately 80 to 90 dBA at 3 feet (EPA 1971). Based on the maximum noise level of 90 dBA at 3 feet and assuming a noise attenuation of 6 dBA per doubling of distance from the source, landscape maintenance equipment could result in exterior noise levels of approximately 65 dBA at 50 feet. Even though maintenance activities would be intermittent and of limited duration (e.g., less than 1 to 2 hours per day during the daytime) such activities could still exceed the City's daytime noise standards at nearby residential dwellings. Any such occurrence would represent a significant impact.

The proposed project includes construction of a 6-foot high masonry wall at the project's eastern and southern boundaries that abut residential uses. The wall would shield neighboring residences from noise generated by the parking lot, and at least some of the mechanical equipment that would be installed as part of the project.

While the masonry wall would substantially reduce noise associated with mechanical equipment and landscape maintenance, noise levels could exceed the threshold levels established by the City. The mitigation measures Noise 1 and Noise 2, set forth below, would ensure that mechanical equipment is shielded, and that landscape maintenance hours are restricted.

Once constructed, the proposed project would generate noise primarily due to arriving and departing automobiles. According to the methodology obtained from the Federal Transit Administration (FTA) for prediction of parking facility-related noise, a parking lot with a maximum hourly traffic volume of approximately 1,000 vehicles per hour with entering or exiting the parking lot would result in peak hour average noise of approximately 56 dBA Leq at 50 feet and daily CNEL/Ldn levels (most sensitive noise standard) of 63 dBA at 50 feet. (South 65th Street Area Plan Draft EIR, pp. 5.1-17, 18)

The proposed project at buildout would include approximately 310 parking spaces, and would generate approximately 143 a.m. peak hour trips and 242 p.m. peak hour trips. The vehicle activity at the project site would be substantially less than the conditions discussed in the FTA data, and the noise generated by the project activity would, therefore, be less than the levels indicated by the FTA. In addition, the project would construct a 6-foot high masonry wall at the eastern and southern project boundaries, thus reducing the noise levels received by the affected residences by approximately 6 decibels. Based on the noise level that could be generated by the parking lot activities, and the construction of a noise barrier, the noise from parking lot activities would be below the thresholds established by the City, and would be ***less than significant.***

The uses anticipated at buildout of the site would generate some truck deliveries, but would not be of sufficient size to require loading docks. Office uses do not require substantial deliveries, and the retail and restaurant uses would be served by occasional tractor-trailer or smaller truck deliveries. Residences in the project vicinity are affected by current ambient noise levels generated by traffic along Freeport Boulevard and Florin Road. The southernmost retail location is approximately 60 feet from the closest property line of a neighboring residence.

Circulation of delivery trucks would generate noise, but the noise would be reduced by the effect of distance to the neighboring residences, and the 6'-high concrete masonry wall that would shield the neighboring residences from the noise source, reducing noise levels by approximately 6 decibels. Office buildings located along the south and eastern portions of the project site would provide screening from noise generated by site activities and Florin Road.

Noise would also be generated by the speakers used for communication with customers using the drive-through facility at the pharmacy. Future uses on the site could include a drive-through restaurant, but the site plan and location of speakers is unknown at this time.

New commercial uses would increase noise and vibration levels in the vicinity consistent with other similar commercial uses already developed in the area. Sources include additional vehicle trips on local and arterial streets, outdoor activities and drive-thru speakers. In the Environmental Impact Report (EIR) for the McDonald's Restaurant in the Pocket Area (2003), to quantify the noise levels from drive-thru vehicle trips and speaker usage, Bollard & Brennan, Inc. used noise level data collected at various fast food drive-thru locations in the Sacramento area to quantify noise levels from drive-thru vehicle trips and speaker usage. The EIR concluded that the maximum noise levels from drive-thru speakers and vehicles parked at the speaker location were 65 dB at 25 feet and 70 dB at 5 feet. Median levels were measured to be approximately 10 dB lower than maximum noise levels.

The drive-through proposed at the retail pharmacy would adjoin the building, and outdoor speakers would be enclosed within structural features of the building. The speakers would be located approximately 380 feet from the nearest residential property line. Based on the estimated noise level of the speakers, attenuation of noise over the intervening distance, and the noise attenuation resulting from the required masonry wall, the noise level generated at the property line would be less than the required 55 decibels. This would comply with the City's noise ordinance, and the resulting noise would be less than significant.

The only physical development proposed as part of the project is on Parcel 1. The applicant has provided general descriptions of uses that could be proposed for the remaining parcels created by the tentative map, and at least one of the parcels could be improved with a drive-through restaurant. The location of the building, drive-through lanes and speakers is unknown at this time, but it is estimated that the outdoor speaker used at the site would be approximately 230 feet from the nearest residential property line. Based on the approximate noise levels of outdoor speakers, distance to residential property lines and noise attenuation provided by the required masonry wall, the noise levels could be significant, but would be reduced to a less-than-significant level with proper design. In order to ensure that the appropriate design is included in any future project, Mitigation Measure Noise 3 requires that the applicant submit confirmation from a qualified noise consultant that the project as designed will comply with the City's noise ordinance. This confirmation shall be submitted prior to issuance of building permits for the site. This mitigation reduces the potential impact to a less-than-significant level.

QUESTIONS D-F

The project site is level, and no buildings have been proposed that would require unusual construction techniques such as pile-driving that would cause substantial vibration. No operations have been proposed that could generate substantial levels of vibration. There would no additional significant environmental effects.

MITIGATION MEASURES

N-1 All mechanical building equipment, including heating, air conditioning and ventilating equipment and other mechanical equipment, shall be completely screened.

N-2 Landscape maintenance activities shall be limited to the hours of 7:00 a.m. to 6:00 p.m.

N-3 Prior to issuance of building permits for any use on Parcels 2 through 5, inclusive, of the project site that includes a drive-through facility, the applicant shall provide written confirmation from a qualified noise consultant that the noise emitted at the project property line adjoining residences by any outside speaker used for communicating with customers will be within the applicable limit set forth in the City's noise ordinance.

Findings

All additional significant environmental effects of the project relating to Noise can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
10. PUBLIC SERVICES Would the project result in the need for new or altered services related to fire protection, police protection, school facilities, roadway maintenance, or other governmental services beyond what was anticipated in the 2030 General Plan?			X

Environmental Setting

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, school facilities, roadway maintenance, or other governmental services beyond what was anticipated in the 2030 General Plan.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential effects of the 2030 General Plan on various public services. These include parks (Chapter 6.9) and police, fire protection, schools, libraries and emergency services (Chapter 6.10).

The general plan provides that adequate staffing levels for police and fire are important for the long-term health, safety and well-being of the community (Goal PHS 1.1, PHS 2.1). The Master EIR concluded that effects would be less than significant.

General plan policies that call for the City to consider impacts of new development on schools (see, for example, Policy ERC 1.1.2 setting forth locational criteria, and Policy ERC 1.1.5 that encourages joint-use development of facilities) reduced impacts on schools to a less-than-significant level. Impacts on library facilities were also considered less than significant (Impact 6.10-8).

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

The proposed project is consistent with the general plan and land use designations for the project site. Impacts of development that could be anticipated pursuant to the general plan were evaluated in the Master EIR certified in March 2009. Cumulative effects of development on public services were discussed and evaluated. See Master EIR Chapter 6.10.

The project site is served by the City of Sacramento Police Department and Fire Department. The Police Department participates in project site design, and the project would be consistent with the principles of Crime prevention through environmental design (CPTED) is a multi-disciplinary approach to deterring criminal behavior through the design of project sites. CPTED principles relate to multiple aspects of site design, including lighting and visibility. These actions will ensure that the site design minimizes enforcement activity and the resulting burden on police services.

Building constructed on the project site would comply with the current Uniform Building Code, which include the installation of sprinklers. The site would be served with adequate water capacity to support fire suppression action if required.

City police and fire services have developed long-range staffing plans and funding. The project is consistent with the general plan, and development of the site has been taken into account in such planning.

No residences will be constructed as part of the project. Any impact on schools would be negligible.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Public Services.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
11. RECREATION Would the project: A) Cause or accelerate substantial physical deterioration of existing area parks or recreational facilities?			X
B) Create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2030 General Plan?			X

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to recreational resources are considered significant if the proposed project would do either of the following:

- cause or accelerate substantial physical deterioration of existing area parks or recreational facilities; or
- create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2030 General Plan.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.9 of the Master EIR considered the effects of the 2030 General Plan on the City's existing parkland, urban forest, recreational facilities and recreational services. The general plan identified a goal of providing an integrated park and recreation system in the City (Goal ERC 2.1). New residential development will be required to dedicate land, pay in-lieu fees or otherwise contribute a fair share to the acquisition and development of parks and recreation facilities. (Policy ERC 2.2.4) Impacts were considered less than significant after application of the applicable policies. (Impacts 6.9-1 and 6.9-2)

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None required.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A AND B

The project includes a tentative map to create five parcels, and approval of a retail pharmacy on one of the resulting parcels. No development is proposed for the remaining parcels. The City has implemented development fees that are used to support parks and recreational facilities in the community. Payment of the impact fees is required at the time of application for building

permits.

The project does not include any residences, and would not result in any direct effect on parks or recreational facilities in the City. The payment of the impact fees would be sufficient to avoid any additional significant effects on these facilities.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Recreation.

Issues:	Effect remains significant with all identified mitigation	Effect can be mitigated to less than significant	No additional significant environmental effect
12. TRANSPORTATION AND CIRCULATION Would the project: A) Roadway segments: degrade peak period Level of Service (LOS) from A,B,C or D (without the project) to E or F (with project) or the LOS (without project) is E or F, and project generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more.		X	
B) Intersections: degrade peak period level of service from A, B, C or D (without project) to E or F (with project) or the LOS (without project) is E or F, and project generated traffic increases the peak period average vehicle delay by five seconds or more.?		X	
C) Freeway facilities: off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway; project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service; project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or the expected ramp queue is greater than the storage capacity?			
D) Transit: adversely affect public transit operations or fail to adequately provide for access to public?			X

E)	Bicycle facilities: adversely affect bicycle travel, bicycle paths or fail to adequately provide for access by bicycle?			X
F)	Pedestrian: adversely affect pedestrian travel, pedestrian paths or fail to adequately provide for access by pedestrians?			X

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts resulting from changes in transportation or circulation may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

Roadway Segments

A) the traffic generated by a project degrades peak period Level of Service (LOS) from A,B,C or D (without the project) to E or F (with project) or
B) the LOS (without project) is E or F, and project generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more.

Intersections

- the traffic generated by a project degrades peak period level of service from A, B, C or D (without project) to E or F (with project) or
- the LOS (without project) is E or F, and project generated traffic increases the peak period average vehicle delay by five seconds or more.

Freeway Facilities

Caltrans considers the following to be significant impacts.

- off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway;
- project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service;
- project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or
- the expected ramp queue is greater than the storage capacity.

Transit

- adversely affect public transit operations or
- fail to adequately provide for access to public transit.

Bicycle Facilities

- adversely affect bicycle travel, bicycle paths or
- fail to adequately provide for access by bicycle.

Pedestrian Circulation

- adversely affect pedestrian travel, pedestrian paths or
- fail to adequately provide for access by pedestrians.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Transportation and circulation were discussed in the Master EIR in Chapter 6.12. Various modes of travel were included in the analysis, including vehicular, transit, bicycle, pedestrian and aviation components. The analysis included consideration of roadway capacity and identification of levels of service, and effects of the 2030 General Plan on the public transportation system. Provisions of the 2030 General Plan that provide substantial guidance include Goal Mobility 1.1, calling for a transportation system that is effectively planned, managed, operated and maintained, promotion of multimodal choices (Policy M 1.2.1), identification of level of service standards (Policy M 1.2.2), development of a fair share funding system for Caltrans facilities (Policy M 1.5.6) and development of complete streets (Goal M 4.2).

While the general plan includes numerous policies that direct the development of the City's transportation system, the Master EIR concluded that the general plan development would result in significant and unavoidable effects. See Impacts 6.12-1, 6.12-8 (roadway segments in the City), Impacts 6.12-2, 6.12-9 (roadway segments in neighboring jurisdictions), and Impacts 6.12-3, 6.12-10 (freeway segments).

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

The City Department of Transportation prepared a traffic study for the proposed project. See Traffic Impact Study, Attachment 8.

The following facilities are included in the traffic impact analysis:

Intersections

1. Florin Road and South Land Park Drive
2. Florin Road and Freeport Boulevard
3. Florin Road and Amherst Street

A Level of Service (LOS) analysis was conducted for the above facilities for both weekday AM and PM peak-hours for the following scenarios:

- Existing Conditions
- Existing plus Phase 1 Conditions
- Existing plus Project Buildout Conditions

The project would be constructed in several phases. Phase 1 of the project would include the 16,500 square feet of a CVS Pharmacy located at the southeast corner of Florin Road and Freeport Boulevard. The Project Buildout would consist of the CVS Pharmacy, a fast food restaurant, retail, medical office, and restaurant ad described in the project description section.

Phase 1 of the proposed project will consist of a 16,500 square feet CVS pharmacy retail store. The project site is anticipated to have a consequent development of retail (15,150 square feet), fast food restaurant (3,100 square feet), restaurant (5,900 square feet), and medical office (20,500 square feet). The proposed project site is generally bound by Florin Road on the north, Freeport Boulevard on the west, commercial and residential parcels adjacent to Amherst Street on the east and south. The project location is shown in **Figure 1.**

Access to the site is proposed to be provided via one driveway on Florin Road and two driveways on Freeport Boulevard. The proposed driveway on Florin Road will provide right-in and right-out access to and from the site and a left turn into the site. A raised median is proposed to be constructed along Freeport Boulevard. It will provide a left-in access to the site and prevent the left-out movement from the site at the northern driveway. The southern driveway on Freeport Boulevard will provide only right-in and right-out access to and from the site. The project site is shown in **Figure 2**.

The following two scenarios were analyzed in the traffic study:

Phase 1: Construction of CVS Pharmacy only.

Project Buildout: The entire project including CVS Pharmacy, fast food restaurant, retail, medical office, and restaurant.

Study Area

The study area was selected based on the project's expected travel characteristics (i.e. project location and amount of project trips) as well as facilities susceptible to being impacted by the project.

The following is a list of intersections selected for the analysis:

1. Florin Road and South Land Park Drive
2. Florin Road and Freeport Boulevard
3. Florin Road and Amherst Street
4. Traffic analysis at the proposed three driveways is also included in this study

The number of trips anticipated to be generated by the proposed project was derived using trip generation data included in the *Trip Generation, 8th Edition*, and *Trip Generation Manual, 2nd*

Edition, both published by the Institute of Transportation Engineers (ITE). The initial phase, which includes the retail pharmacy, would generate 30 peak trips during the a.m. peak hour, and 116 trips in the p.m. peak hour. At buildout the project would generate 143 a.m. peak hour trips, and 242 p.m. peak hour trips. (See Traffic Impact Study, Tables 3 and 4) The traffic study assigned the new trips to area roadways, and analyzed the impact on operations using the City's thresholds of significance.

Questions A and B

Construction of the proposed project will include disruptions to the transportation network near the site, including the possibility of temporary lane closures, street closures, sidewalk closures, and bikeway closures. Pedestrian, bicycle, and transit access may be disrupted. Heavy vehicles will access the site and may need to be staged for construction. These activities could result in degraded roadway operating conditions. As a result, construction activities could result in a ***significant impact***. The mitigation measure identified below, which requires the preparation of a construction traffic management plan based on project plans as submitted, would reduce the effect to a less-than-significant level.

Given the high AM and PM peak hour volumes at Florin Road and the amount of traffic the proposed project would generate, the traffic analysis indicated that the westbound queue from the Freeport Boulevard/Florin Road intersection consistently extends beyond the beyond the available storage length during the AM and PM peak hours and build up cumulative conditions. If the area in front of the driveway is not kept clear, vehicles attempting to enter the project driveway from westbound Florin Road will rapidly queue back into Florin Road mainline or would conflict with the high speed, high volume eastbound traffic , which would impair the roadway operations and lead to a traffic hazard. Therefore this is considered a *significant impact. Mitigation Measure T 2* By implementing Mitigation Measure 2, the westbound left-turn queue at Florin Road/ Freeport Boulevard intersection will be 206 feet and the impact would be less than significant (see Appendix B for queuing calculations).

The project is proposing to construct a raised median along Freeport Boulevard and two driveways to access the site. The northern driveway on Freeport Boulevard is proposed as right-in, right-out, and left-in access to the site. The southern driveway on Freeport Boulevard is proposed as right-in/right-out access to the site.

Freeport Boulevard adjacent to the project site is a high-volume, high-speed, four-lane arterial roadway with 420 northbound vehicles per hour per lane in the AM peak-hour, and 333 southbound vehicles per hour per lane in the PM peak-hour, traveling 54 miles per hour (85^{th} percentile speed). The left-turn movement out of the project from the southern driveway at Freeport Boulevard is not safe and not desirable because it introduces a conflict with the northbound and southbound through traffic.

The existing northbound left-turn and U-turn traffic volume at Freeport Boulevard/Florin Road intersection would increase with the buildout of the site. **Table 7** presents the Existing and Existing plus Project Buildout queues for the northbound left-turn vehicles. A construction of the second left-turn lane is recommended as it would decrease northbound left-turn queues.

Right-turn movement has a significant effect on intersection capacity as well as roadway safety. Given the highway traffic volume and high speed at Freeport Boulevard, a separated right-turn lane is recommended at the northbound traffic at the Freeport Boulevard/Florin Road

intersection and two deceleration lanes are recommended at the proposed driveways along Freeport Boulevard.

Given the high AM and PM peak-hour volumes along Freeport Boulevard and the roadway safety concerns described above with the construction of the proposed project and proposed driveways along Freeport Boulevard, which would impair intersection and driveways operations and lead to a traffic hazard. Therefore this is considered a *significant impact.* With the implementation of Mitigation Measure 3 and as shown on Table 7, the left-turn queue length would be reduced to 125 feet and the impact would be less than significant (see Appendix B for queuing calculations).

Question C

Traffic generated by the proposed project at buildout would not adversely affect the operations of any freeway facility. The construction traffic and parking management plan would reduce impacts from construction activities to ensure that no such impacts occur. Any impacts would be less than significant.

Question D

The Sacramento Regional Transit District (RT) provides public transit service within the project area. The following summarizes RT bus routes adjacent to the proposed project site:

- ***Route 81*** provides daily bus service connecting Florin Road & Riverside Boulevard bus station to University/65th Street Station bus stop, and provides direct access to the project site via Florin Road.

- ***Route 247*** provides weekday September to mid-June bus service connecting Florin Road & Gloria Drive bus station to 21st Street & Meadowview Road bus stop, and provides direct access to the project site via Florin Road.

The proposed project would generate additional ridership for public transit along the existing routes operated by RT. The additional ridership would not be substantial in relation to existing ridership, and any impact would be less than significant.

Questions E and F

The implementation of the project would include improvements to the pedestrian systems in the project area. These improvements include the construction of sidewalks and handicapped ramps at the southwest corner of the Florin Road and Freeport Boulevard intersection to provide connectivity to existing pedestrian facilities. As such, the implementation of the project would not result in significant impacts to the bicycle, pedestrian, or transit systems in the project area. Pedestrians would experience significant benefits with the implementation of the project.

MITIGATION MEASURES

Tran-1 Prior to beginning construction, a construction traffic and parking management plan shall be prepared by the applicant to the satisfaction on the City Traffic Engineer and shall be subject to the review by all affected agencies. The plan shall ensure that acceptable operating conditions on local roadways and freeway facilities are maintained. At a minimum, the plan shall include the following:

- The number of truck trips, time, and day of street closures
- Time of day of arrival and departure of construction vehicles
- Limitation on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting
- Provision of a truck circulation pattern
- Provision of a driveway access plan so that vehicular, pedestrian and bicycle movements are maintained. The driveway access plan should include placement of steel plates, minimum distances for open trenches and private vehicle pick up and drop off areas
- Maintenance of safe and efficient routes for emergency vehicles
- Manual traffic control, if necessary
- Proper advance warning and posted signage concerning street closures
- Provisions for pedestrian safety.

A copy of the construction traffic management plan shall be submitted to local emergency response agencies and these agencies shall be notified as least fourteen (14) days before the commencement of construction that would partially or fully obstruct roadways. Implementation of this mitigation measure would reduce the impact to ***less than significant.***

Tran-2 Prior to issuing the first building permit, the applicant shall submit improvement plans and coordinate with the City to implement the followings:

- Allow U-turn movement on the westbound traffic at Florin Road/Freeport Boulevard intersection. The project applicant shall be required to provide the appropriate signs per the City of Sacramento, Traffic Engineering satisfaction.
- Proposed driveway at Florin Road shall be right-in/right-out only.
- Adjust the traffic signal timing at Freeport Boulevard/ Florin Road intersection. The applicant shall pay a fair share contribution to the City of Sacramento Traffic Operation Center to monitor and adjust the signal timing, when needed.
- The existing westbound left-turn pocket at Florin Road/ Freeport Boulevard intersection needs to be modified with the buildup of the project site to provide a standard left-turn pocket length.

T-3 Prior to issuing the first building permit, the applicant shall submit improvement plans and coordinate with the City of Sacramento, Department of Transportation to implement the followings:

- The project applicant shall construct a second left-turn lane on the northbound direction of Freeport Boulevard at Florin Road.
- The project applicant shall construct a northbound right-turn lane with the development of Phase 1 of the project (the CVS pharmacy store).
- The proposed southern driveway at Freeport Boulevard shall be right-in/right-out only.
- The project applicant shall construct a deceleration lane on both proposed driveways along Freeport Boulevard.

T-4 Prior to issuing the first building permit, the applicant shall submit improvement plans and coordinate with the City of Sacramento, Department of Transportation to implement the following:

- The project applicant shall construct a second left-turn lane on the northbound direction of Freeport Boulevard at Florin Road.
- The project applicant shall construct a northbound right-turn lane with the development of Phase 1 of the project (the CVS pharmacy store).
- The proposed southern driveway at Freeport Boulevard shall be right-in/right-out only.
- The project applicant shall construct a deceleration lane on both proposed driveways along Freeport Boulevard.

FINDINGS

All additional significant environmental effects of the project relating to Transportation and Circulation can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
13. UTILITIES AND SERVICE SYSTEMS Would the project:			
A) Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments?			X
B) Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts?			X

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, or school facilities beyond what was anticipated in the 2030 General Plan:

- result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments or
- require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the effects of development under the 2030 General Plan on water supply, sewer and storm drainage, solid waste, electricity, natural gas and telecommunications. See Chapter 6.11.

The Master EIR evaluated the impacts of increased demand for water that would occur with development under the 2030 General Plan. Policies in the general plan would reduce the impact generally to a less-than-significant level (see Impact 6.11-1) but the need for new water supply facilities results in a significant and unavoidable effect (Impact 6.11-2). The potential need for expansion of wastewater treatment facilities was identified as having a significant and unavoidable effect (Impacts 6.11-4, 6.11-5Impacts on solid waste facilities were less than significant (Impacts 6.11-7, 6.11-8). Implementation of energy efficient standards as set forth in Titles 20 and 24 of the California Code of Regulations for residential and non-residential buildings, would reduce effects for energy to a less-than-significant level.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None available.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A AND B

The project proposes uses and densities that are consistent with the 2030 General Plan land use designations and zoning for the project site. The project site is located in an urbanized portion of the community and is readily served by water and sewer services.

Water service to the site will require a water main extension and the installation of a second water point of connection. An existing 36" water main runs through the site, and the applicant will be required to provide a 15'-wide maintenance easement to avoid conflict with site activities.

The project site does not have existing connections to the City's sewer system. The applicant will be required to construct a sewer main extension to the system to the satisfaction of the City Department of Utilities.

The anticipated demands for utility services at the site have been considered in long-range planning for such services by the City. Cumulative effects of demand associated with development under the 2030 General Plan were considered in the Master EIR, and the project would not result in any additional significant environmental effects related to utilities that were not considered in the Master EIR.

MITIGATION MEASURES

FINDINGS

The project would have no additional project-specific environmental effects relating to Utilities and Service Systems.

MANDATORY FINDINGS OF SIGNIFICANCE

Issues:	Effect remains significant with all identified mitigation	Effect can be mitigated to less than significant	No additional significant environmental effect
14. MANDATORY FINDINGS OF SIGNIFICANCE A.) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X
B.) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X
C.) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X

Answers to Checklist Questions

QUESTION A

The project would result in elimination of foraging habitat for the Swainson's hawk. Mitigation would be required to replace habitat through credits at a mitigation bank or through purchase of appropriate land area. No cultural or historic resources have been identified on the project site, and mitigation would ensure that discovery of unknown resources during project development would be identified and appropriate steps taken regarding treatment.

QUESTION B

The proposed project is consistent with the general plan and zoning land use designations for

the project site. The development proposed would contribute to cumulative effects that have been identified and evaluated in the Master EIR prepared and certified for the 2030 General Plan. No additional significant effects have been identified for the project.

QUESTION C

The proposed project would develop the project site with retail, restaurant and office uses. None of the activities proposed would adversely affect human beings. Project impacts relating to air quality and hazards have been considered in the initial study. No significant adverse effects on human beings have been identified.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would potentially be affected by this project.

X	Light and Glare	X	Hazards
X	Air Quality	X	Noise
	Biological Resources		Public Services
X	Cultural Resources		Recreation
	Energy and Mineral Resources	X	Transportation/Circulation
	Geology and Soils		Utilities and Service Systems
	Hydrology and Water Quality		
	None Identified		

SECTION V - DETERMINATION

On the basis of the initial study:

I find that (a) the proposed project is an anticipated subsequent project identified and described in the 2030 General Plan Master EIR; (b) the proposed project is consistent with the 2030 General Plan land use designation and the permissible densities and intensities of use for the project site; (c) that the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the Master EIR are adequate for the proposed project; and (d) the proposed project will have additional significant environmental effects not previously examined in the Master EIR. A Mitigated Negative Declaration will be prepared. Mitigation measures from the Master EIR will be applied to the project as appropriate, and additional feasible mitigation measures and alternatives will be incorporated to revise the proposed project before the negative declaration is circulated for public review, to avoid or mitigate the identified effects to a level of insignificance. (CEQA Guidelines Section 15178(b))

Tom Buford

Signature

January 28, 2011

Date

Tom Buford, Senior Planner

Printed Name

REFERENCES CITED

Air Resources Board, GHG Emission Inventory Summary (1990-2004)
http://www.arb.ca.gov/app/ghg/ghg_sector_data_php

City of Sacramento, 2009: *2030 General Plan.*

City of Sacramento, 2008: *Sacramento 2030 General Plan Master Environmental Impact Report*

City of Sacramento, Department of Utilities. 2007. *Table 3-2 Stormwater Quality Control Measure Selection Matrix in the Stormwater Quality Design Manual.*

Institute for Transportation Engineers, Trip Generation 7th Edition

Sacramento Metropolitan Air Quality Management District (SMAQMD) 2004. *Guide to Air Quality Assessment in Sacramento County.*

Attachment C

Traffic Study

FEHR PEERS

Memorandum

Date: May 12, 2022

To: Matthew Ilagan, City of Sacramento

From: Rob Hananouchi & Greg Behrens, Fehr & Peers

Subject: Traffic Study for Dutch Bros at 7255 Freeport Blvd.

RS22-4148

This memorandum documents the transportation analysis of the proposed Dutch Bros at 7255 Freeport Boulevard in Sacramento, CA. This study specifically analyzes the vehicle queues at the commercial center driveways, drive-through vehicle queues at the proposed Dutch Bros coffee shop, and on-site circulation.

Introduction

The proposed project would consist of a 1,154± square-foot Dutch Bros drive-through coffee shop in an existing commercial center located at the southeast corner of the Freeport Boulevard / Florin Road intersection. **Figure 1** shows the project location. The existing commercial center consists of a Smart & Final Extra! grocery store, CVS pharmacy with drive-through, and Western Dental & Orthodontics office. The commercial center has three driveways:

- Driveway 1: on Florin Road between the CVS pharmacy and Western Dental & Orthodontics office.
- Driveway 2: on Freeport Boulevard just south of the Smart & Final Extra! grocery store surface parking lot.
- Driveway 3: on Freeport Boulevard south of the proposed Dutch Bros project site.

Figure 2 presents the project site plan. The proposed Dutch Bros would be located between the two existing commercial center driveways on Freeport Boulevard (Driveways 2 and 3). The coffee shop building would be located at the northwest corner of the Dutch Bros site, fronting Freeport Boulevard closer to Driveway 2.

Figure 1

Project Location

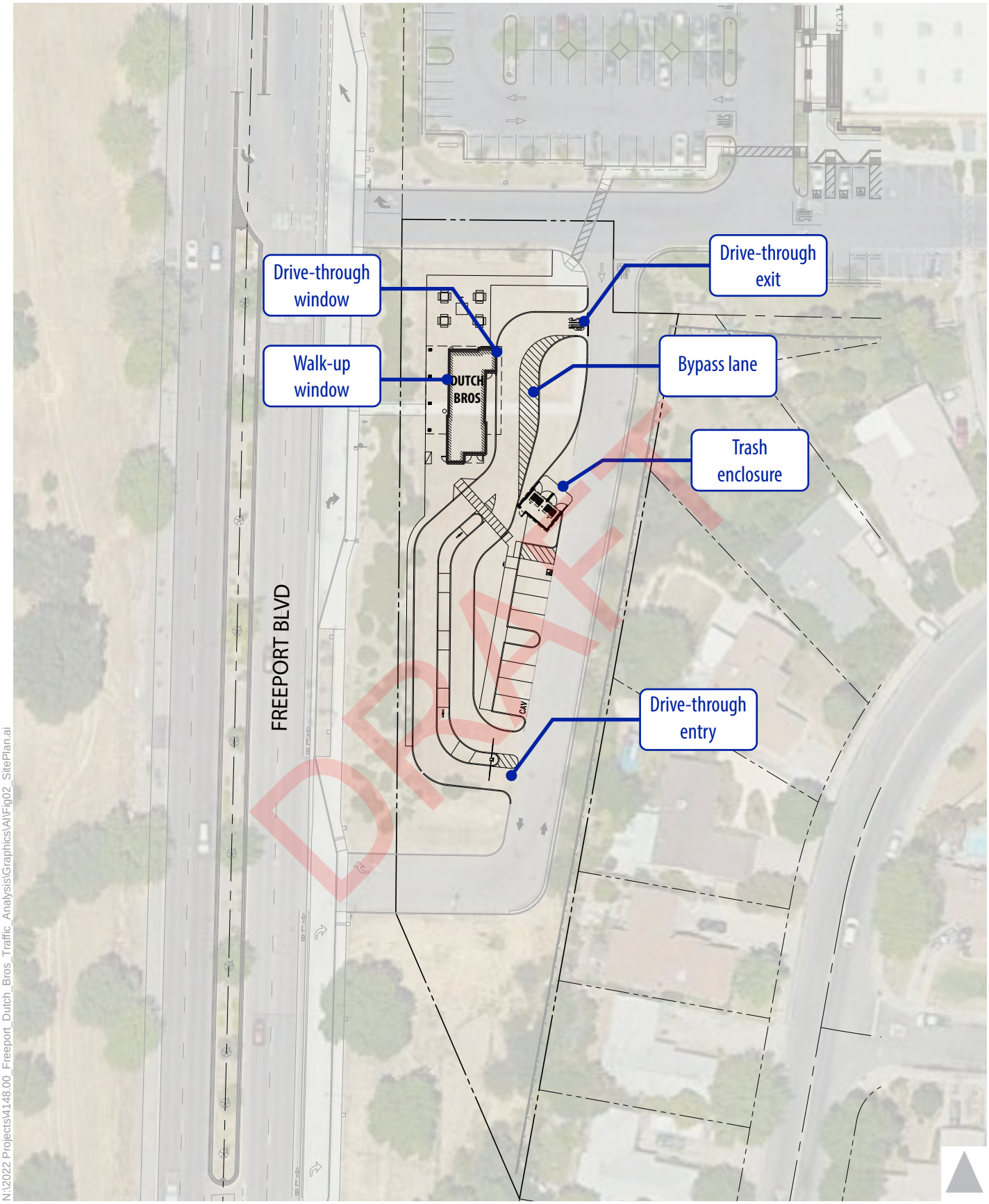

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Figure 2

Project Site Plan

Vehicles would use a drive-through that runs along the east and south sides of the building. Drivers would enter the drive-through from the south and exit at the north. The project proposes two drive-through lanes that merge into a single lane as it approaches the drive-through window. The project also proposes a bypass lane to allow vehicles to go around vehicles stopped at the drive-through window, if necessary. In addition to the drive-through lane, the coffee shop building would have a walk-up window on the west side of the building that faces Freeport Boulevard. An existing sidewalk would connect the Dutch Bros building to the sidewalk on Freeport Boulevard.

The project site includes eight parking stalls to the southeast of the building, with a crosswalk across the drive-through aisles connecting the parking stalls to the coffee shop building. An existing crosswalk near the northeast corner of the Dutch Bros site would provide a pedestrian connection between the proposed Dutch Bros and the existing Smart & Final Extra! grocery store and the other businesses in the existing commercial center to the north.

The remainder of this memorandum is organized into the following sections:

- Existing Conditions
- Project Travel Characteristics
- Project Access, Drive-Through Queueing, & On-Site Circulation

Existing Conditions

Roadway Facilities

The project site takes its primary access from Freeport Boulevard. Freeport Boulevard is a north-south arterial street with two travel lanes in each direction separated by a landscaped median and a posted speed limit of 50 miles per hour (MPH). Florin Road provides secondary access to the project site through the existing commercial center. Florin Road is an east-west arterial street with two travel lanes in each direction separated by a raised median and a posted speed limit of 40 MPH. The signalized Freeport Boulevard / Florin Road intersection is located northwest of the project site. The Interstate 5 (I-5) / Florin Road interchange is located approximately one mile west of the project site, providing regional access to the study area.

Existing Traffic Volumes

The proposed Dutch Bros is expected to generate its peak amount of trips during the mid-morning (i.e., 7:30 to 9:30 AM) and afternoon (i.e., 2:00 to 5:00 PM), based on trip generation counts collected at six Dutch Bros sites in the Sacramento region (see Project Travel Characteristics section below). Given these timeframes, this study collected mid-morning (7:30 to 9:30 AM) and afternoon (2:00 to 5:00 PM) turning movement counts at the existing commercial center driveways and the Freeport Boulevard / Florin Road

intersection on March 10, 2022. Schools in the area were in-session with in-person instruction and weather conditions were fair during the data collection period.

Based on the Dutch Bros trip generation data (see Project Travel Characteristics section below) and the mid-morning and afternoon traffic count data, this study analyzes traffic conditions during the following peak hours:

- Morning: 7:45 AM to 8:45 AM
- Afternoon: 2:00 PM to 3:00 PM

The combination of the Dutch Bros trip generation data and existing traffic volumes on Florin Road and Freeport Boulevard indicate that these hours correspond with near peak level trip generation for Dutch Bros and the highest level of traffic on Florin Road and Freeport Boulevard within the 7:30 AM to 9:30 AM and 2:00 PM to 5:00 PM periods.

Figure 3 shows the existing AM (7:45 to 8:45 AM) and PM (2:00 to 3:00 PM) peak hour turning movement volumes at the existing commercial center driveways and the Freeport Boulevard / Florin Road intersection.

Transit Services and Facilities

Sacramento Regional Transit (SacRT) provides transit service in the area. **Figure 4** displays the fixed route transit service in the immediate area. **Figure 4** shows two fixed-route bus lines operating on Florin Road approximately 600 feet north of the project site: SacRT Bus Route 81 and SacRT Bus Route 247.

As of May 2022, Route 81 operates along the Florin Road and 65th Street corridors extending from Riverside Boulevard in the Pocket area to the Florin Towne Center Transit Center on 65th Street to the University/65th Street light-rail station near Sacramento State. Route 81 operates between 5:20 AM and 11:00 PM with 30-minute headways from Monday through Friday; between 6:20 AM and 10:30 PM with 30-minute headways on Saturdays; and between 6:20 AM and 9:00 PM with 30- or 60-minute headways on Sundays and holidays.

As of May 2022, Route 247 operates a single run from 21st Street & Meadowview Road to Florin Road & Gloria Drive from 7:37 AM to 7:56 AM Monday through Friday. This corresponds with the beginning of the school day at John F Kennedy High School.

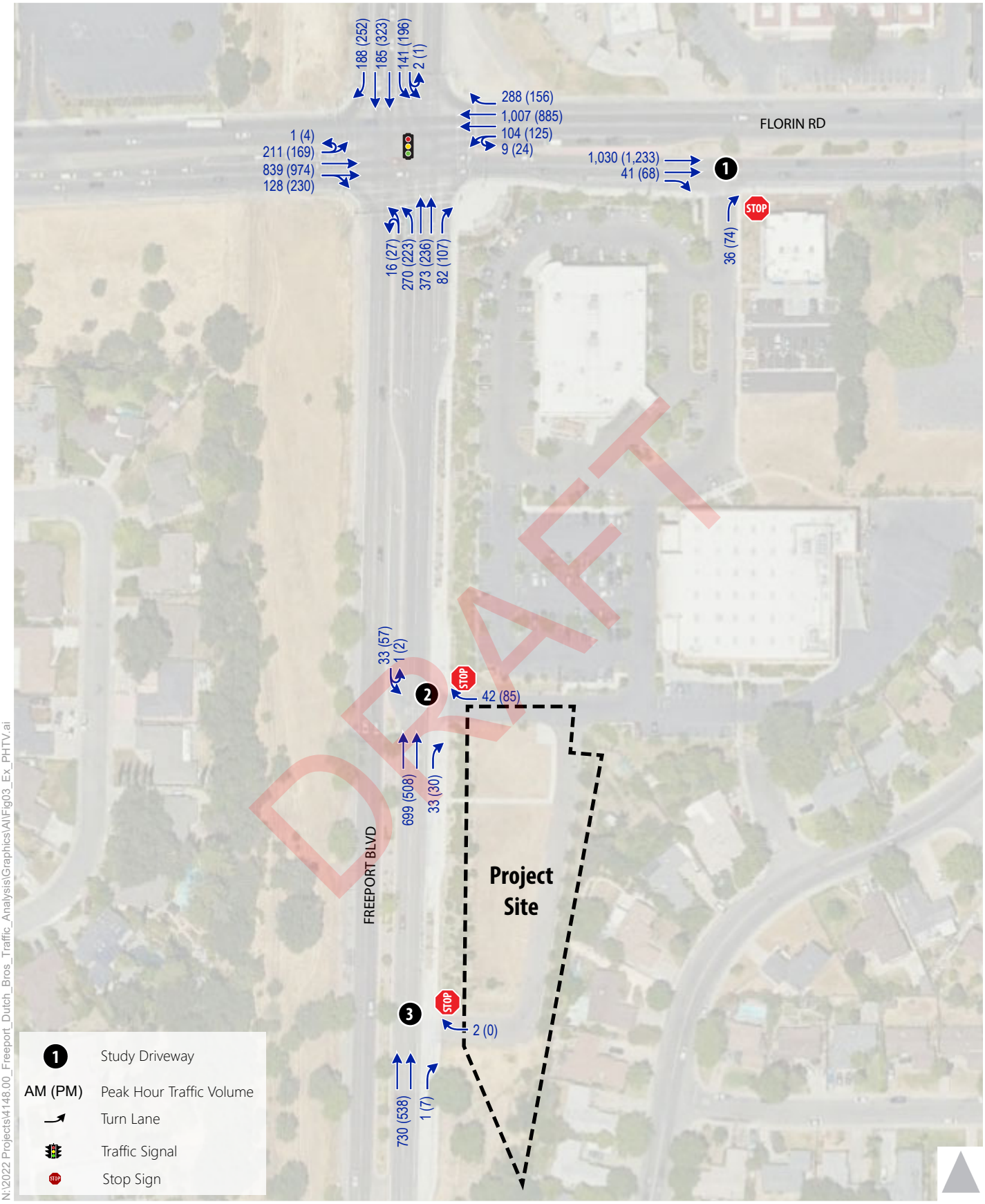

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Figure 3

Peak Hour Traffic Volumes - Existing Conditions

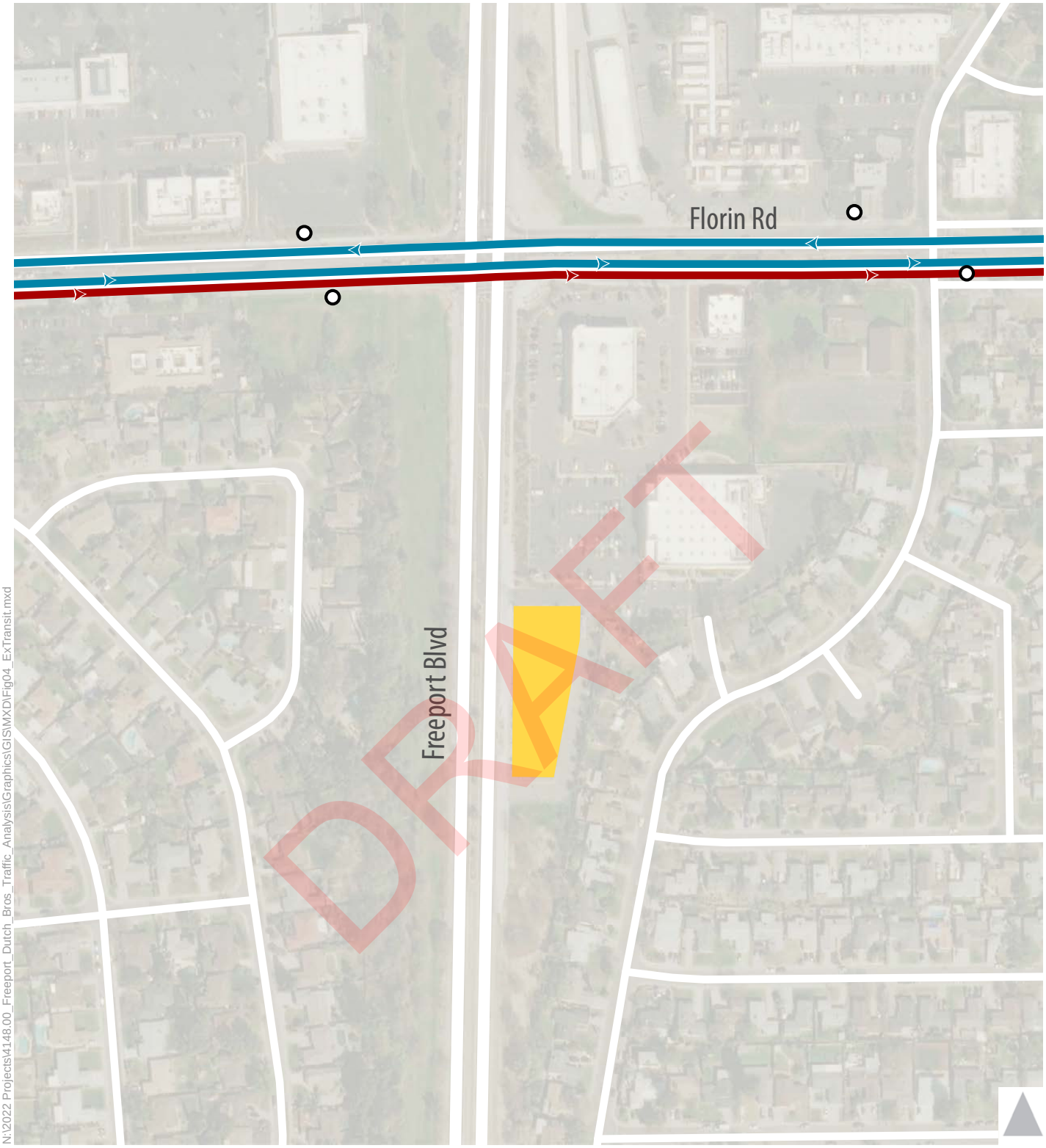

Figure 4

Existing Transit Facilities

Bicycle & Pedestrian Facilities

Figure 5 displays the existing bicycle and pedestrian facilities near the project site. As shown, class II bike lanes are provided in both directions on Freeport Boulevard and on Florin Road. Field observations indicated that the existing bike lane markings are degraded on Freeport Boulevard north of Florin Road and on Florin Road west of Freeport Boulevard.

Sidewalks are present along the project frontage on Freeport Boulevard. However, there are no sidewalks on the west side of Freeport Boulevard opposite the project site. There is also a sidewalk gap on the south side of Florin Road west of Freeport Boulevard which extends to the southwest corner of the Freeport Boulevard / Florin Road intersection. The Freeport Boulevard / Florin Road intersection provides marked pedestrian crossings across all four intersection legs.

The existing commercial center also has internal pedestrian walkways connecting the existing commercial businesses. The commercial center also has walkways connecting to the sidewalks on Freeport Boulevard and Florin Road. This includes an existing walkway that bisects the project site. The project site plan indicates this existing walkway would be repurposed and lead directly to the west side of the proposed Dutch Bros building near the walk-up window. Pedestrians traveling to Smart & Final Extra! would circulate to the north side of the proposed building and around the outdoor seating area for Dutch Bros to access the existing marked crosswalk that crosses the drive aisle toward Smart & Final Extra!

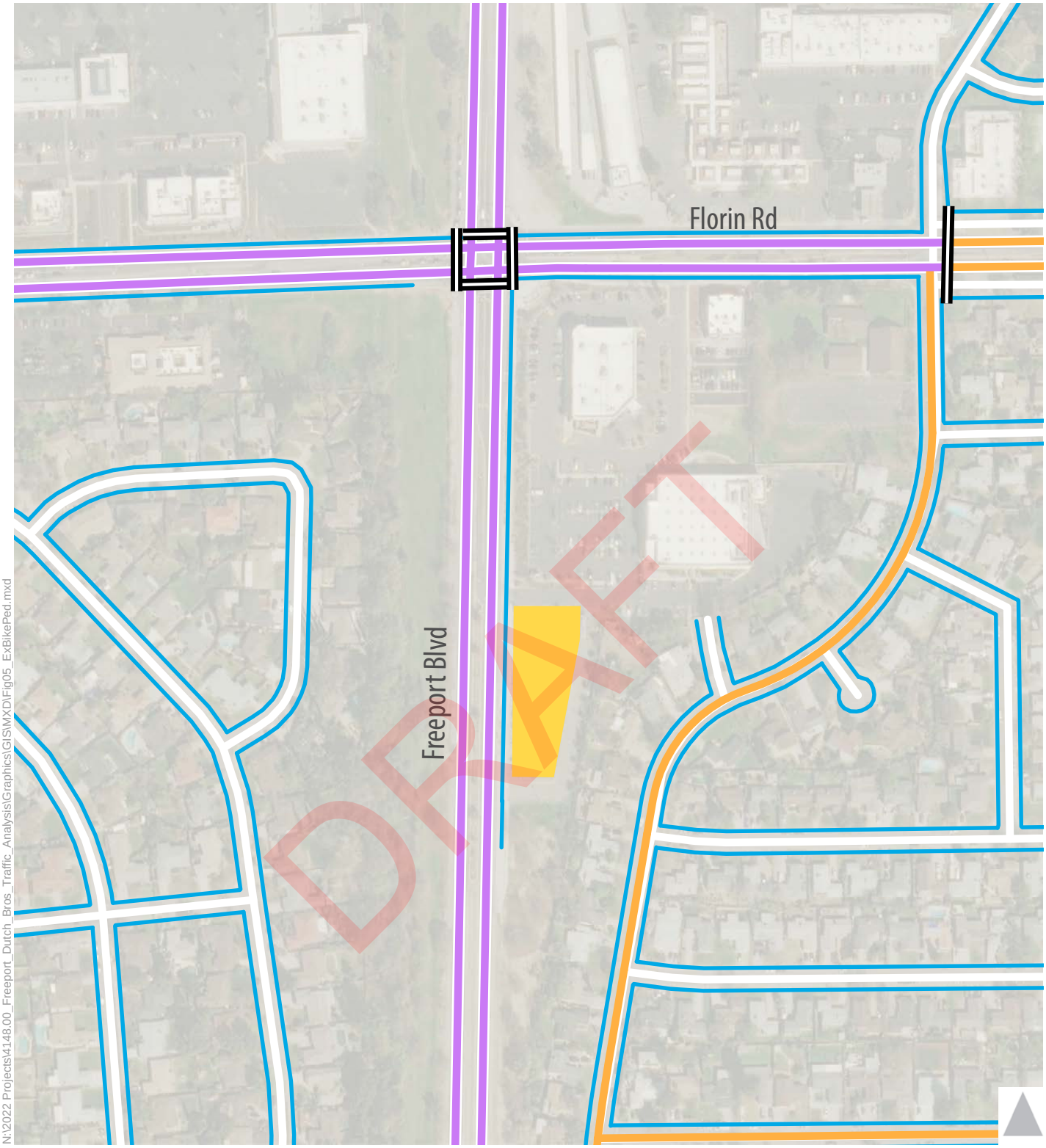

Figure 5

Existing Bicycle & Pedestrian Facilities

Project Travel Characteristics

Trip Generation

This study estimates the project's vehicle trip generation based on field data collected at six existing Dutch Bros drive-through coffee shops in the Sacramento region. Specifically, traffic data was collected from 6:00 AM to 6:00 PM on Thursday, February 17, 2022, at the following six locations:

- 4130 Northgate Boulevard, Sacramento, CA 95834
- 4250 El Camino Avenue, Sacramento, CA 95821
- 5140 Stockton Boulevard, Sacramento, CA 95820
- 8610 Elk Grove Boulevard, Elk Grove, CA 95624
- 4341 Antelope Road, Antelope, CA 95843
- 1225 Baseline Road, Roseville, CA 95747

Appendix A presents the analysis of the traffic data collected at these six Dutch Bros locations.

Trip activity at the six Dutch Bros varied by site throughout the day. **Figure 6** presents a summary of the hourly trip generation for the six Dutch Bros sites from 6:00 AM to 6:00 PM.

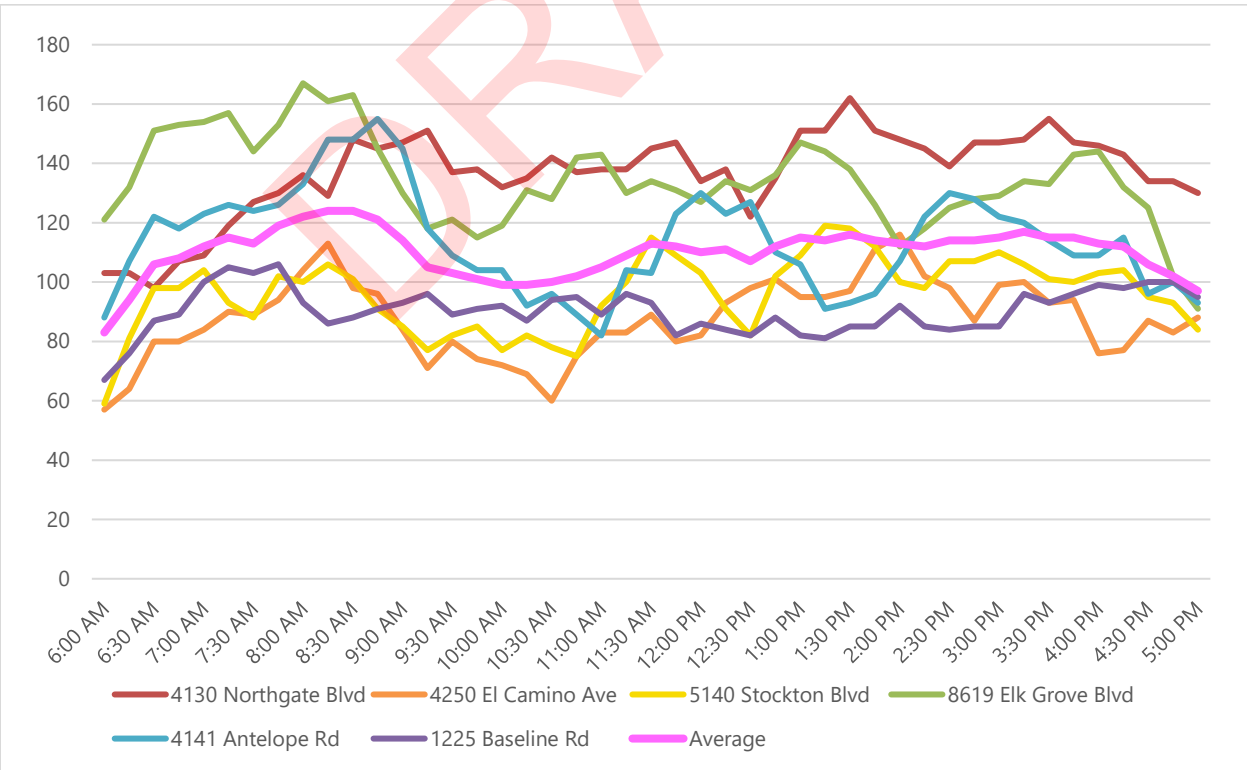

Figure 6: Dutch Bros – Hourly Trip Generation (Trip Ends) 6:00 AM to 6:00 PM

Figure 6 shows that trip activity waxes and wanes at each of the six Dutch Bros sites, with some locations having steady demand throughout the day, such as Northgate Boulevard and Baseline Road, while other locations had more distinct peaks and valleys in demand, such as Antelope Road and Elk Grove Boulevard. When considering all six sites together, there was a distinct peak during the morning from 7:30 AM to 10:00 AM, and a steady demand from 11:30 AM to 5:00 PM with demand dropping off after 5:00 PM.

As noted in the Existing Conditions section above, this Dutch Bros trip generation data and existing traffic volumes on Florin Road and Freeport Boulevard are used to identify a morning and afternoon peak hour for analysis. These peak hours are 7:45 AM to 8:45 AM (morning peak hour) and 2:00 PM to 3:00 PM (afternoon peak hour). These hours correspond with near peak level trip generation for Dutch Bros and the highest level of traffic on Florin Road and Freeport Boulevard within the 7:30 AM to 9:30 AM and 2:00 PM to 5:00 PM periods. **Table 1** presents the vehicle trip generation for the six Dutch Bros sites during these peak hours.

Table 1: Dutch Bros – Analysis Hours Vehicle Trip Generation

Location	AM Peak Hour 7:45 AM to 8:45 AM			PM Peak Hour 2:00 PM to 3:00 PM		
	In	Out	Total	In	Out	Total
4130 Northgate Boulevard	66	64	130	75	73	148
4250 El Camino Avenue	46	48	94	57	59	116
5140 Stockton Boulevard	51	51	102	48	52	100
8610 Elk Grove Boulevard	79	74	153	56	56	112
4341 Antelope Road	63	63	126	54	53	107
1225 Baseline Road	54	52	106	45	47	92
Average	**60**	**59**	**119**	**56**	**57**	**113**

Notes:
Based on data collected on Thursday, February 17, 2022
Source: National Data & Surveying Services, 2022.

This study uses the average trip generation of these six sites presented in **Table 1** above for analyzing the proposed project. This vehicle trip generation represents the total gross trips that would be generated by the proposed project. Some trips to the proposed Dutch Bros would be existing trips on Freeport Boulevard or Florin Road that would stop at the Dutch Bros en route to their primary destination. These trips are called pass-by trips. Since pass-by trips are existing trips, they would not add new trips to the adjacent roadway network but would result in an increase in trips to the commercial center driveways.

This study estimates the number of pass-by trips using average pass-by percentages contained in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. The *Trip Generation Manual* pass-by data for coffee shop with drive-through window and no indoor seating (ITE code 938) was collected in the 1990s and appears overly aggressive (90 and 98 percent for the weekday AM and PM peak periods, respectively) to apply to current-day drive-through coffee shop operations (i.e., businesses like Dutch Bros that are more likely to be destinations for customers compared to the small coffee drive-throughs that were more common in the 1990s). Therefore, this study applies the pass-by percentage for fast-food with drive-through (ITE code 934), a similar type of establishment that tends to be both a destination and serve vehicles that pass-by on the adjacent roadway. The *Trip Generation Manual* data shows that these businesses have a pass-by rate of 50 percent during the weekday AM peak period and 55 percent during the weekday PM peak period.

Table 2 presents the project's estimated vehicle trip generation during the weekday AM and PM peak hours. Table 2 includes the estimated number of pass-by trips and the resulting net new trips that would be added to the transportation network by the proposed project.

Table 2: 7255 Freeport Blvd. Dutch Bros Vehicle Trip Generation Estimate

	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Gross Trip Generation[1]	60	59	119	56	57	113
Pass-by Trips[2]	30	30	60	31	31	62
Net New Project Trips[3]	**30**	**29**	**59**	**25**	**26**	**51**

Notes:

1. Gross trip generation represents the total number of trips to/from the project site. Represents the average trip generation observed at six Dutch Bros sites in the Sacramento region based on data collected on Thursday, February 17, 2022.
2. Pass-by trips = existing trips on adjacent roadways that would access the project en route to their primary destination. Estimated using the average pass-by percentages contained in the ITE *Trip Generation Manual, 11th Edition* for fast-food with drive-through (934): 50% AM peak period, 55% PM peak period.
3. Net new trips = gross trip generation – pass-by trips. Represents the number of new trips added to the transportation network by the proposed project.

Source: Fehr & Peers, 2022.

Trip Distribution

This study estimates the distribution of project trips using the existing traffic counts at commercial center driveways and existing turning movements at the Freeport Boulevard / Florin Road intersection shown in Figure 3.

Figure 7 presents the forecasted project trip distribution for the net new project trips during the weekday AM and PM peak hours. Pass-by trips are assigned proportionally according to the existing weekday AM and PM peak hour traffic volumes on Freeport Boulevard and Florin Road.

Existing Plus Project Forecasts

Project trips are assigned to the commercial center driveway and the adjacent roadway network according to the trip generation and distribution presented above.

Figure 8 presents the resulting AM and PM peak hour existing plus project turning movement forecasts at the commercial center driveways and the Freeport Boulevard / Florin Road intersection.

Figure 7

Project Trip Distribution

Figure 8

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Project Conditions

Project Access, Drive-Through Queueing, & On-Site Circulation

Driveway Throat Depth Analysis

This study uses the existing and existing plus project peak hour traffic volumes at the commercial center driveways to calculate the maximum vehicle queues at the commercial center driveways with and without the proposed project, respectively. Specifically, this study uses the Maximum Queue Estimates for Unsignalized Right-Turn Driveways spreadsheet for right-turn egress movements and the Estimation of Maximum Queue Lengths at Unsignalized Intersections methodology (ITE Journal, November 2001) for left-turn ingress movements (refer to **Appendix B** for detailed calculations). **Table 3** presents the forecasted vehicle queues for ingress and egress movements at the commercial center driveways with and without the project.

Table 3: Maximum Vehicle Queues at Commercial Center Driveways

Movement	Storage[1]	Peak Hour	Maximum Vehicle Queue Length[2]	
			Existing Conditions	Existing + Project
Northbound right-turn egress at Florin Rd. (Driveway 1)	70 feet	AM	2 vehicles (50 feet)	**3 vehicles (75 feet)**
		PM	**3 vehicles (75 feet)**	**4 vehicles (100 feet)**
Westbound right-turn egress at Freeport Blvd. (north) (Driveway 2)	110 feet	AM	2 vehicles (50 feet)	4 vehicles (100 feet)
		PM	3 vehicles (75 feet)	4 vehicles (100 feet)
Southbound left-turn ingress from Freeport Blvd. (Driveway 2)	180 feet	AM	4 vehicles (100 feet)	5 vehicles (125 feet)
		PM	4 vehicles (100 feet)	5 vehicles (125 feet)
Westbound right-turn egress at Freeport Blvd. (south) (Driveway 3)	75 feet	AM	1 vehicle (25 feet)	1 vehicle (25 feet)
		PM	-[4]	-[4]

Notes:

BOLD indicates the maximum vehicle queue exceeds the available storage.

1. Storage represents the driveway throat depth for right-turn egress movements and the left-turn pocket length for left-turn ingress movements. Distances estimated based on aerial imagery.
2. Maximum vehicle queue length based on Maximum Queue Estimates for Unsignalized Right-Turn Driveways spreadsheet (see **Appendix B**).
3. Queue length in feet estimated assuming each vehicle occupies on average 25 feet of space.
4. The right-turn egress at the south driveway on Freeport Blvd. serves zero vehicles during the PM peak hour.

Source: Fehr & Peers, 2022.

Figure 9 illustrates the existing and forecasted existing plus project maximum vehicle queues at the commercial center driveways.

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Existing Vehicle Queue

Existing Plus Project Vehicle Queue

Figure 9

Maximum Vehicle Queues at Project Accesses

Table 3 and **Figure 9** show that there is sufficient storage to accommodate the maximum vehicle queue at the commercial center driveways for most movements with and without the proposed project. The one exception is the driveway on Florin Road (Driveway 1). The existing maximum queue of 75 feet (three vehicles) is just slightly longer than the 70-foot driveway throat depth. The project is forecasted to result in a maximum queue of 100 feet (four vehicles). The existing plus project maximum queue would block vehicles departing the CVS parking area who want to exit towards Florin Road. However, these vehicles could circulate to the south along the east side of the CVS building and make a U-turn movement near the CVS drive-through to enter the back of queue.

Drive-Through Queueing

This study uses observed service rate data from the six Dutch Bros sites in the Sacramento region and a random arrival distribution model to estimate the maximum vehicle queue for the proposed Dutch Bros drive-through. This methodology and the data used for the model are described in more detail below.

Service Rate Data

Table 4 presents a summary of the service rate data collected at the six Dutch Bros sites in the Sacramento region (refer to **Appendix C** for the raw service rate data). The service rate represents the amount of time it took for an order to be fulfilled, measured from the time the Dutch Bros employee took the customer's order until the time the customer received the order.

Table 4: Dutch Bros – Service Rate Data

Location	Average Service Rate	
	Seconds	Minutes
4130 Northgate Boulevard	420.9	7:01
4250 El Camino Avenue	429.8	7:10
5140 Stockton Boulevard	435.1	7:15
8610 Elk Grove Boulevard	207.0	3:27
4341 Antelope Road	299.4	4:59
1225 Baseline Road	369.7	6:10
Average (all six sites)[1]	**349.2**	**5:49**
Average (without 8610 Elk Grove Blvd.)[2]	**381.8**	**6:22**

Notes:
Service rate data collected at six Dutch Bros sites in the Sacramento region in March 2022.
1. Average across all six sites represents the average service time for all drive-through transactions observed.
2. Average without 8610 Elk Grove Blvd. represents the average service time for all drive-through transactions observed at the other five sites.

Source: Fehr & Peers, 2022.

The data in **Table 4** shows that the Elk Grove Boulevard Dutch Bros location had noticeably shorter service times than the other five sites (average service times between three and four minutes; whereas the other sites were generally between five and seven minutes). Therefore, **Table 4** presents the average service rate for all six sites, as well as the average service rate excluding the Elk Grove Boulevard location. As shown, the average service rate when including the data for all six sites is 349 seconds (5 minutes, 49 seconds), while the average service rate excluding the Elk Grove Boulevard location data is 382 seconds (6 minutes, 22 seconds). This study uses an average service rate of 382 seconds to evaluate a more conservative condition (i.e., slightly longer average service time).

Drive-Through Queue Model

Based on the service rate data presented in **Table 4**, this study forecasts that the project would have an average service rate of 382 seconds for the drive-through queueing analysis. Although this represents the average service rate, the service rates varied from customer to customer. Additionally, vehicle arrivals are random and not equally spaced out (i.e., the forecasted 60 inbound trips during the AM peak hour shown in Table 2 will not occur equally spaced at one inbound trip each minute but arrive stochastically across the hour).

Therefore, this study uses a Poisson distribution model to represent random vehicle arrivals and the average service rate to calculate the likelihood of vehicle queue lengths. This model uses a random arrival generator to model when vehicles would arrive within the analysis hour. Based on the average service rate, the model calculates when the vehicle would depart and subsequently tracks the length of the drive-through queue as vehicles arrive/depart over the analysis hour. The model includes a set of 100 runs to provide a sufficient sample size for analysis. For example, the model may predict a maximum drive-through queue of 12 vehicles in one run, while another run using the same inputs may predict a maximum drive-through queue of 14 vehicles. By tallying the maximum drive-through vehicle queue across 100 runs, this model reports the probability of certain vehicle queue events (i.e., X in 100).

Table 5 presents a sample output of the drive-through queue model. The example presented in **Table 5** uses the measured arrival volume (85 peak hour inbound trips) and average service rate (483 seconds per vehicle) for the Dutch Bros at 4130 Northgate Boulevard during the PM peak hour observation period. The outputs represent the probability of a vehicle queue of the given length occurring. For example, based on the results in **Table 5**, the drive-through queue model predicts that a queue length of 19 vehicles would occur in 54 out of 100 runs, and therefore has a 54 percent chance of occurring.

Table 5: Example Maximum Drive-Through Queue Model: Northgate Dutch Bros PM Peak Hour

Model Inputs[1]		Model Outputs	
Variable	Input	Drive-Through Queue Length[2]	Probability
Arrivals (inbound trips)	85 peak hour trips	16 vehicles	100 in 100 (100%)
Service rate	483 seconds per vehicle	17 vehicles	92 in 100 (92%)
		18 vehicles	81 in 100 (81%)
		19 vehicles	54 in 100 (54%)
		20 vehicles	37 in 100 (37%)
		21 vehicles	19 in 100 (19%)
		22 vehicles	9 in 100 (9%)
		23 vehicles	4 in 100 (4%)
		24 vehicles	2 in 100 (2%)
		25 vehicles	0 in 100 (0%)

Notes:

1. Model inputs based on field measured arrivals and service rate times at the Northgate Boulevard Dutch Bros location during the weekday PM peak hour on March 17, 2022.
2. Model reports the probability of a range of maximum vehicle queue lengths. This table only shows the probability of a maximum vehicle queue of 16 to 25 vehicles, as the probability for 15 or fewer vehicles was 100 in 100 times; and 26 or greater vehicles was 0 in 100 times. In other words, the model predicts that the maximum drive-through queue on any given day during the weekday PM peak hour is likely to fall between 16 vehicles (100%) and 24 vehicles (2%).

Source: Fehr & Peers, 2022.

The Northgate Boulevard location experienced a maximum vehicle queue of 21 vehicles during the PM peak hour observations. As shown in **Table 5**, the drive-through queue model predicts this queue length would occur in 19 out of 100 runs or had a 19 percent probability given the observed demand and service rate at the Northgate Boulevard Dutch Bros during the PM peak hour.

The model was run with the observed data at the six Dutch Bros sties and determined to generate results that matched field observations (i.e., the maximum drive-through queue observed in the field at each site fell within the range provided by the model).

Project Drive-Through Queueing Results

The project's trip generation presented in Table 2 and the average service rate observed at the six Dutch Bros data collection sites presented in Table 4 were entered into the drive-through queue model to forecast the maximum drive-through queue for the proposed Dutch Bros on Freeport Boulevard. Since the AM peak hour is forecasted to have a greater trip generation, the analysis uses the 60 inbound trips

forecasted for the AM peak hour as opposed to the 57 inbound trips forecasted for the PM peak hour. **Table 6** presents the drive-through queue probability outputs of the model.

Table 6: Drive-Through Queue Model Outputs – Proposed Project

Drive-Through Queue Length[1]	Probability[2]
9 vehicles	100 in 100 (100%)
10 vehicles	100 in 100 (100%)
11 vehicles	88 in 100 (88%)
12 vehicles	63 in 100 (63%)
13 vehicles	37 in 100 (37%)
14 vehicles	20 in 100 (20%)
15 vehicles	9 in 100 (9%)
16 vehicles	3 in 100 (3%)
17 vehicles	2 in 100 (2%)
18 vehicles	1 in 100 (1%)
19 vehicles	1 in 100 (1%)
20 vehicles	0 in 100 (0%)

Notes:

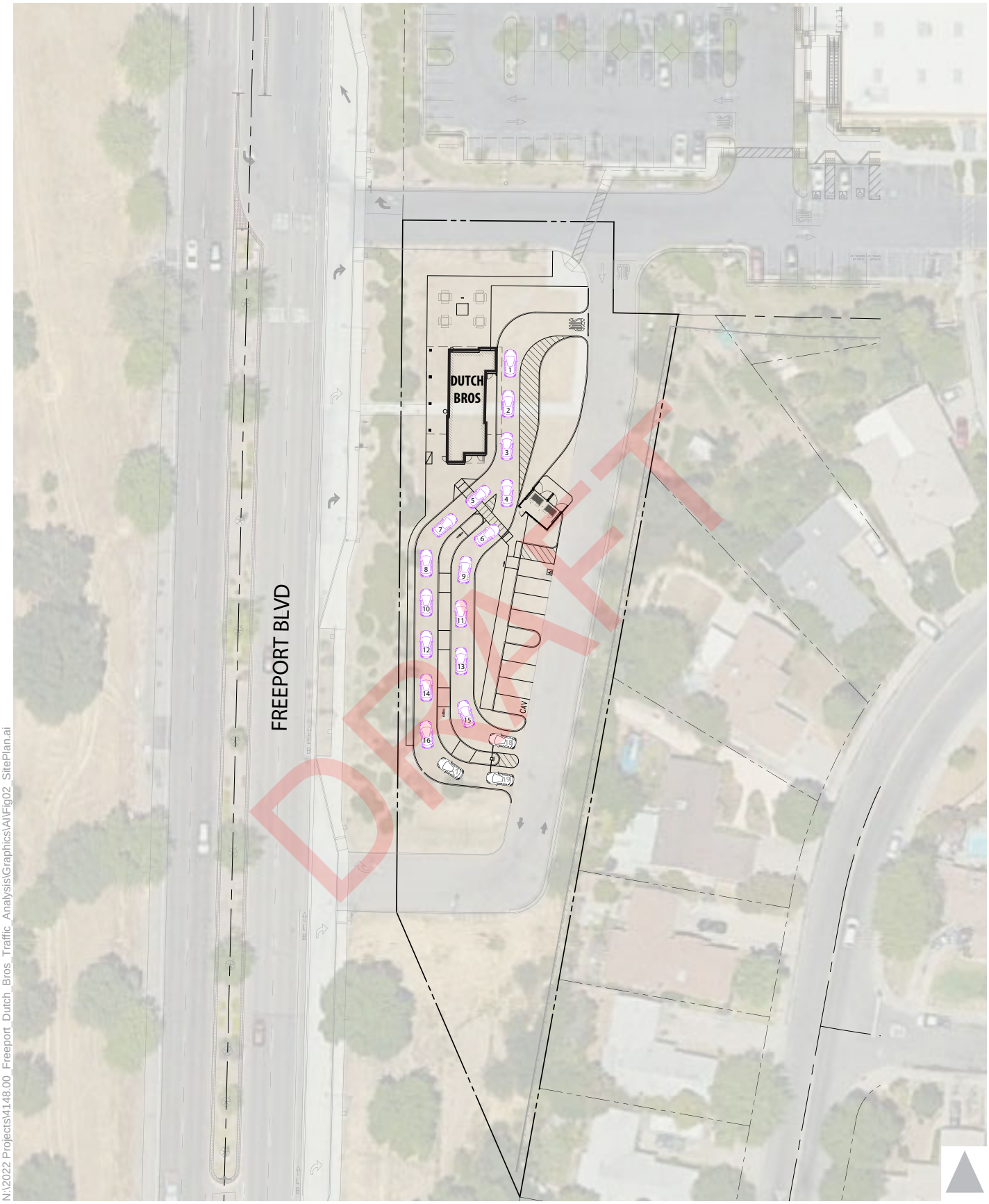
Uses a peak hour inbound demand of 60 vehicles and 382 seconds per vehicle for the average service rate as inputs.

1. Model reports the probability of a range of vehicle queue lengths. This table only shows the probability of a vehicle queue of 9 to 20 vehicles, as the probability for 8 or fewer vehicles occurring was 100 in 100 times; and 21 or greater vehicles was 0 in 100 times. In other words, the model predicts that the maximum drive-through queue during the peak hour is likely to be between 11 vehicles (88%) and 19 vehicles (1%).
2. Probability outputs from the drive-through queue model represents the likelihood of a drive-through queue length occurring based on a set of 100 runs.

Source: Fehr & Peers, 2022.

Based on the results presented in **Table 6**, the 95th percentile drive-through queue would be 16 vehicles. This is illustrated by the purple vehicles in **Figure 10**. **Figure 10** shows the proposed Dutch Bros drive-through has capacity for approximately 19 vehicles, or equivalent to the 99th percentile drive-through queue, according to results in **Table 6**. Therefore, the project drive-through is expected to have sufficient capacity to store the typical maximum drive-through queue.

These results assume a peak hour demand of 60 vehicles and an average service rate of 382 seconds (6 minutes, 22 seconds). This is the average peak hour demand observed at the six Dutch Bros data collection sites, and the average service rate of five of the six Dutch Bros data collection sites (Elk Grove Boulevard location excluded, as described above). Based on the data collected at the six Dutch Bros data collection sites, these average values are expected to represent conditions at the proposed Dutch Bros once it is running with typical operations (i.e., fully trained staff serving typical, non-unique demand).



95th Percentile Drive-Through Queue

Potential Drive-Through Queue Capacity

Figure 10

Maximum Forecasted Drive-Through Queues & Drive-Through Capacity

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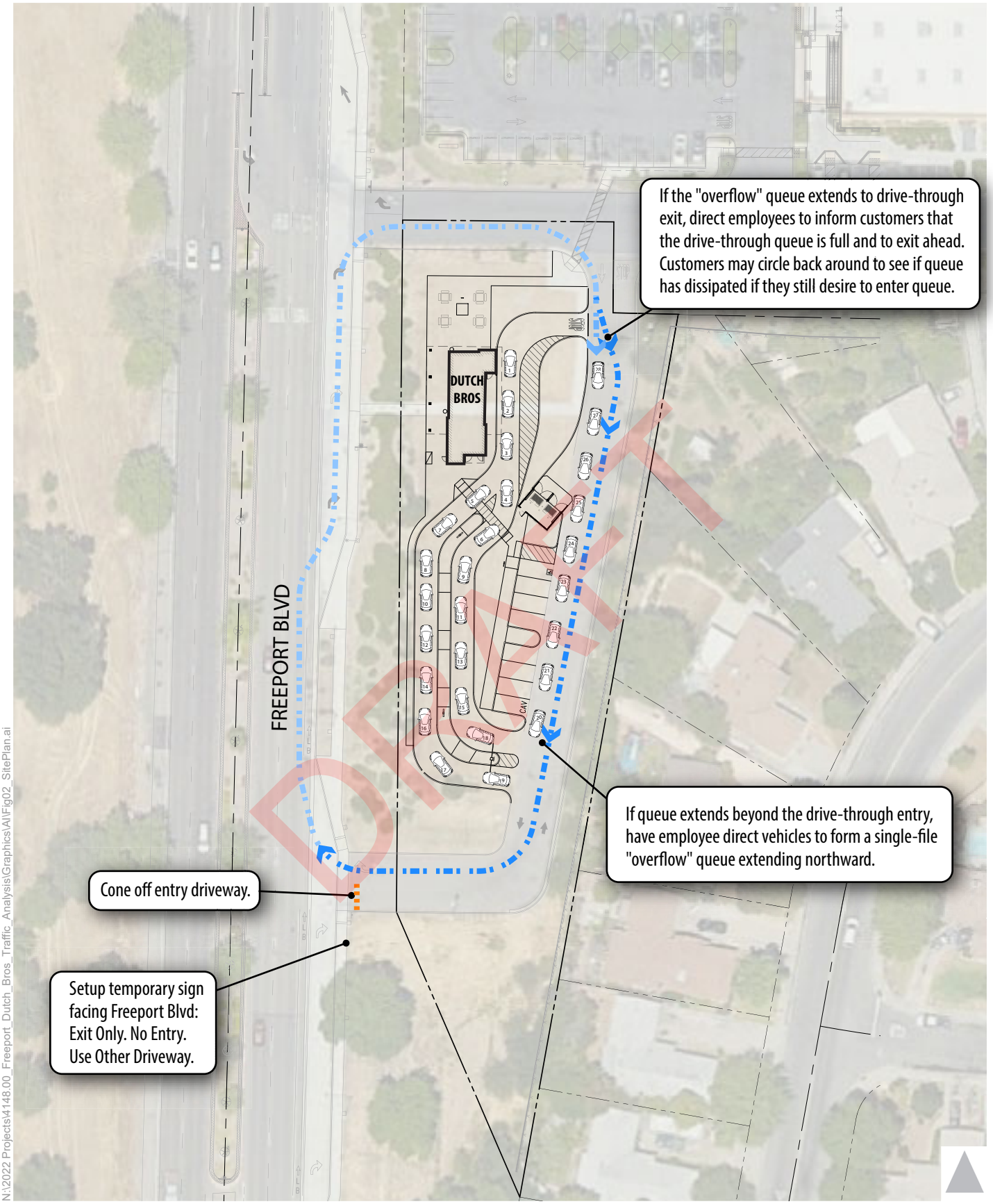
Drive-Through Queue Management

Based on the drive through queueing analysis presented above, the proposed drive-through is expected to provide adequate space for the 95th percentile drive-through queues on a typical day. As noted above, this assumes the demand and order fulfillment times at this location is around the average of the six Dutch Bros sites reviewed (i.e., 60 peak hour inbound trips and average service time of about 6 minutes, 22 seconds). If demand is consistently higher or order fulfillment times consistently longer than this average, the maximum drive-through queue would be longer and could potentially exceed the drive-through capacity. In addition, there may be occasions (e.g., special promotions, after events at nearby schools, hot weather that prompts a higher customer volume, etc.) that result in greater demand than typical conditions.

Therefore, this study recommends that the project have a drive-through queue management plan that can be employed when demand is high, and the drive-through queue is regularly extending beyond the drive-through entry. The queue management plan will need to be reviewed by and coordinated with the City of Sacramento Department of Public Works to determine appropriate strategies. **Figure 11** presents recommendations for this queue management plan. Some key recommendations include:

- If the queue extends beyond the drive-through entry, direct vehicles to form a single file queue extending northward on the drive aisle immediately east of the proposed Dutch Bros building. This would provide queueing space for approximately nine additional vehicles (up to 28 total vehicles in drive-through queue) before the queue would block the drive-through exit.
- If this overflow queue extends to the drive-through exit, have employees inform approaching drivers that the drive-through queue is full, and to drive around the queue towards Driveway 3 to exit onto Freeport Boulevard (represented by the dark blue circulation path in **Figure 11**).
    - Customers may consider circling back around to see if the queue has dissipated and has sufficient space to accommodate them at the back of queue, or could park their vehicle and use the walk-up window (represented by the light-blue circulation path in **Figure 11**).
- If the drive-through queue persistently and excessively extends beyond the formal drive-through entry, temporarily close Driveway 3 to entering vehicles by setting up cones on-site across the driveway entry behind the back of sidewalk, and setting up a temporary sign on-site facing Freeport Boulevard that states: “Exit Only. No Entry. Use Other Driveway.” Blocking access to Driveway 3 as part of the queue management plan would need to be verified with the City of Sacramento Fire Department, Police Department, and/or other City departments, and is subject to conditions required by these departments.



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Vehicle circulation when drive-through queue is full

Vehicle circulation for drivers who want to attempt to re-enter the queue

Vehicle Queue

Figure 11

Drive-Through Queue Management Recommendations

It is important to note that using the drive aisle for overflow queueing is contingent upon the project applicant having the required permission to use this space for queue purposes. Using the drive aisle for drive-through queueing could block outbound traffic from using Driveway 3 for egress onto Freeport Boulevard. However, the demand to use Driveway 3 for egress is very low. The existing traffic counts show that a total of eight vehicles used Driveway 3 for egress during the five hours of traffic counts. This is because using Driveway 2 is far more direct for vehicles departing the commercial center onto Freeport Boulevard. Therefore, very few vehicles from the commercial center would use this drive aisle for egress.

To model a higher demand condition, this study applied a peak arrival rate of 85 vehicles per hour (highest observed arrival rate at the six Dutch Bros sites) and an average service time of 7 minutes, 15 seconds (the slowest average service rate observed at the six Dutch Bros sites shown in Table 4) in the drive-through queue model. **Table 7** presents the drive-through vehicle queue probability outputs of the model for this scenario. **Table 7** shows the model forecasts a maximum vehicle queue of 22 vehicles.

Table 7: Drive-Through Queue Model Outputs – High-Demand/Slow Service Rate Scenario

Drive-Through Queue Length[1]	Probability[2]
13 vehicles	100 in 100 (100%)
14 vehicles	100 in 100 (100%)
15 vehicles	99 in 100 (99%)
16 vehicles	90 in 100 (90%)
17 vehicles	67 in 100 (67%)
18 vehicles	44 in 100 (44%)
19 vehicles	26 in 100 (26%)
20 vehicles	18 in 100 (18%)
21 vehicles	6 in 100 (6%)
22 vehicles	1 in 100 (1%)
23 vehicles	0 in 100 (0%)

Notes:

Uses a peak hour inbound demand of 85 vehicles and 435 seconds per vehicle for the average service rate as inputs.

1. Model reports the probability of a range of vehicle queue lengths. This table shows the probability of a vehicle queue of 13 to 23 vehicles, as the probability for 12 or fewer vehicles was 100 in 100 times; and 24 or greater vehicles was 0 in 100 times. In other words, the model predicts that the maximum drive-through queue during the peak hour is likely to fall between 15 vehicles (99%) and 22 vehicles (1%).
2. Probability outputs from the maximum drive-through queue model represents the likelihood of a maximum drive-through length occurring based on a set of 100 runs.

Source: Fehr & Peers, 2022.

Based on the results presented in **Table 7**, the maximum drive-through queue would extend a few vehicle lengths beyond the drive-through entry point. However, it would be several vehicle lengths short of

blocking the drive-through exit. Therefore, the more disruptive queue management recommendations (i.e., blocking entry at Driveway 3 and requiring would-be customers to exit Driveway 3) would likely not be necessary under most circumstances.

In our observations at the six Dutch Bros sites, we noticed periods where the vehicle queue would occasionally reach its maximum length and remain at that level for few minutes as customer orders were fulfilled. However, this would often dissipate as the pace of fulfilling orders would surpass the rate of new arriving customers. Therefore, although the maximum queue forecasted under this high-demand/slow service rate scenario would extend beyond the drive-through capacity, it would likely dissipate and not block the drive aisle for an extended period.

Once operational, the project applicant can observe the typical maximum drive-through queue and assess how frequently queues extend beyond the drive-through entry. If the proposed project operates such that the maximum drive-through queue more closely matches the results in **Table 6** and rarely exceeds the drive-through capacity, the queue management strategies identified in **Figure 11** may be implemented rarely, and may be limited to directing the queue northward (i.e., not require blocking the entry of Driveway 3). However, if the maximum drive-through queue more closely matches or exceeds the results forecasted in **Table 7**, the queue management strategies would need to be implemented regularly during peak demand, including closing Driveway 3 to entering vehicles.

Special Events

Unique events, such as the grand opening, may result in particularly high demand that are exclusive to those events. The recommendations for drive-through queue management presented above may not be sufficient during the peak demand of these events. In particular, directing customers to exit via Driveway 3 onto Freeport Boulevard when the queue area is full may result in vehicles continuously "circling the block" as they attempt to get into the drive-through queue during a peak demand time.

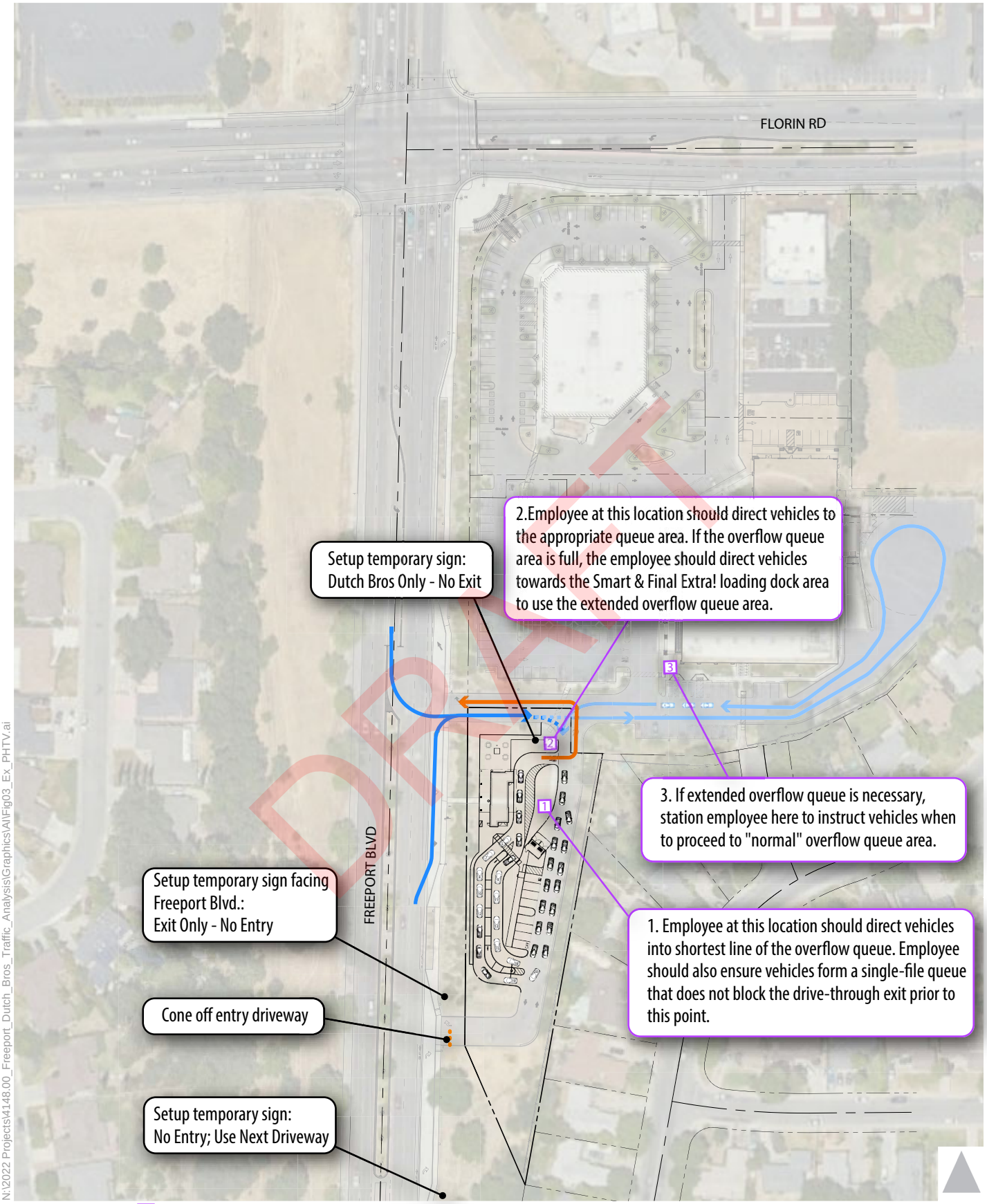
Therefore, a specific queue management plan for these unique events may be required. As with the "normal" queue management plan, the queue management plan for special events will need to be reviewed by and coordinated with the City of Sacramento Department of Public Works to determine appropriate strategies. **Figure 12** presents recommendations for this scenario. Some key recommendations include:

- Use the full width of the drive aisle to form two drive-through queue lanes to maximize vehicle storage. This may require permission to monopolize the drive aisle and close it off for other users.
    - Cone off the entry to Driveway 3 from Freeport Boulevard to prevent two-way circulation on the drive aisle.
    - Use signage and staff to direct traffic to enter from Driveway 2.
- Setup temporary signs on-site to help direct traffic, as shown in **Figure 12**.

- If necessary, utilize the drive aisle to the south of the Smart & Final Extra! grocery store and loading dock area behind the grocery store as an "extended overflow" queue area.
- Station employees at key wayfinding points to direct vehicle traffic and manage traffic flow. This includes:
    - At the Dutch Bros drive aisle to instruct vehicles to form two lines once past the drive-through exit. This employee should also ensure that the drive through queue does not block the drive-through exit. (#1 in **Figure 12**)
    - At the Dutch Bros drive aisle/main drive aisle intersection. This employee will play a crucial role in directing drivers to the appropriate queue area (main drive-through queue if sufficient space; or to the "extended overflow" queue area if the drive-through queue has extended back to the drive-through exit). (#2 in **Figure 12**)
    - In the extended overflow queue area, if in use, to instruct drivers when they can proceed to the main drive-though lines. This employee would also be crucial to monitor the vehicle queue in the extended overflow area and facilitate access to the parking stalls for Smart & Final Extra! customers. (#3 in **Figure 12**)

Note that the circulation recommendations for the special event queue management plan above requires the project applicant to have permission to use the drive aisle and area behind the Smart & Final Extra! grocery store, as illustrated in **Figure 12**.

As described above, Dutch Bros staff would need to play a critical role in directing traffic for this event. If the drive-through queue does not extend to the Dutch Bros drive-through exit, staff should direct enter motorists towards the drive-through entry and ensure vehicles are using both drive-through lines. However, if the drive-through queue extends to or beyond the drive-through exit, Dutch Bros staff would need to direct vehicles towards the Smart & Final Extra! loading dock, which could be used as an extended overflow queue area, as illustrated in **Figure 12**. An additional Dutch Bros staff person would also need to be stationed at this "extended overflow" queue area to monitor the vehicle queue, instruct drivers when they could proceed to the drive-through without blocking the main drive aisle, and facilitate access to the parking stalls along this parking aisle.



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Employee location for directing traffic
Typical inbound circulation to drive-through
Extended overflow queue circulation - use when overflow queue area is full
Outbound circulation

Figure 12

Special Event Drive-Through Queue Management Recommendations

This study modeled a "grand opening" scenario with a peak hour demand of 120 vehicles (double the average inbound peak hour trip generation observed in Table 1) and an average service rate of nine minutes (about 40 percent more than the average 6 minutes, 22 seconds shown in Table 4 to account for potential longer order fulfillment times by newer staff). **Table 8** presents the drive-through vehicle queue outputs of the model for this scenario.

Table 8: Drive-Through Queue Model Outputs – Grand Opening Scenario

Drive-Through Queue Length[1]	Probability[2]
22 vehicles	100 in 100 (100%)
23 vehicles	100 in 100 (100%)
24 vehicles	98 in 100 (98%)
25 vehicles	89 in 100 (89%)
26 vehicles	73 in 100 (73%)
27 vehicles	51 in 100 (51%)
28 vehicles	35 in 100 (35%)
29 vehicles	23 in 100 (23%)
30 vehicles	14 in 100 (14%)
31 vehicles	6 in 100 (6%)
32 vehicles	3 in 100 (3%)
33 vehicles	2 in 100 (2%)
34 vehicles	0 in 100 (0%)

Notes:

Uses a peak hour inbound demand of 120 vehicles and 540 seconds per vehicle for the average service rate as inputs.

1. Model reports the probability of a range of vehicle queue lengths. This table only shows the probability of a vehicle queue of 22 to 34 vehicles, as the probability for 21 or fewer vehicles was 100 in 100 times; and 35 or greater vehicles was 0 in 100 times. In other words, the model predicts that the maximum drive-through queue during the peak hour is likely to fall between 24 vehicles (98%) and 33 vehicles (2%).
2. Probability outputs from the maximum drive-through queue model represents the likelihood of a maximum drive-through length occurring based on a set of 100 runs.

Source: Fehr & Peers, 2022.

Figure 12 shows that the "overflow" queue area in the drive aisle adjacent to Dutch Bros would be able to accommodate approximately 17 vehicles in addition to the 19 in the formal drive-through queue area, for a total capacity of about 36 queued vehicles. Based on the results presented in **Table 8**, the maximum drive-through queue during a "grand opening" event would likely be able to be accommodated within the "overflow" queue area of the drive aisle without blocking the drive-through exit. Therefore, the extended overflow queue area to the south of Smart & Final Extra! grocery store shown in **Figure 12** may be rarely used.

Appendix A:

Dutch Bros Trip Generation Memorandum

FEHR PEERS

Memorandum

Date: April 1, 2022

To: Matthew Ilagan, City of Sacramento

From: Rob Hananouchi & Greg Behrens, Fehr & Peers

Subject: Dutch Bros Trip Generation

RS22-4148

This memorandum presents the trip generation data collected at six Dutch Bros drive-through coffee shops in the Sacramento region. This trip generation data is being used for the traffic analysis for the proposed Dutch Bros at 7255 Freeport Boulevard in Sacramento, CA.

Data Collection

This study collected vehicle traffic count data at six Dutch Bros drive-through coffee shops in the Sacramento region to determine the vehicle trip generation of existing Dutch Bros locations. Specifically, traffic data was collected at the drive-through entries and exits at the following six locations:

- 4130 Northgate Boulevard, Sacramento, CA 95834
- 4250 El Camino Avenue, Sacramento, CA 95821
- 5140 Stockton Boulevard, Sacramento, CA 95820
- 8610 Elk Grove Boulevard, Elk Grove, CA 95624
- 4341 Antelope Road, Antelope, CA 95843
- 1225 Baseline Road, Roseville, CA 95747

Four of the six of the Dutch Bros sites open at 5:00 AM and close between 10:00 PM and midnight. Two of the six Dutch Bros sites operate 24 hours a day. The traffic counts were collected from 6:00 AM to 6:00 PM to observe a consistent period at all six sites and generally capture the typical peaks in activity during the morning, midday, early afternoon, and evening. Traffic counts were collected on Thursday, February 17, 2022 when weather conditions were fair and K-12 school districts were in session with in-person instruction in the region.

Dutch Bros staff at all six locations take customer's orders in-person via mobile devices (i.e., electronic tablets) as the vehicles wait in the drive-through queue. The Dutch Bros drive-throughs at these six sites

consist of either one or two drive-through entry lanes. Some sites also have "bypass" lanes or early exit lanes near the drive-through window, which allows customers who receive their orders before approaching the window to exit without having to wait for vehicles who are idling at the window. **Table 1** presents a summary of each Dutch Bros location's drive-through characteristics.

Table 1: Dutch Bros Site Characteristics

Location	Number of Drive-Through Entry Lanes	Bypass or Early Exit Lane?
4130 Northgate Boulevard	2	Bypass Lane
4250 El Camino Avenue	2	Bypass Lane
5140 Stockton Boulevard	2	Bypass Lane
8610 Elk Grove Boulevard	1	No
4341 Antelope Road	2	Early Exit Lane
1225 Baseline Road	1	No

The Dutch Bros sites with two entry lanes merge prior to approaching the drive-through window to receive their order. The Dutch Bros sites with one drive-through entry lane typically have two Dutch Bros staff taking customer's orders, so customer transactions were occurring at a similar rate to those with two drive-through entry lanes.

Trip Generation Data Summary

The following tables present a summary of the vehicle trip generation data for each of the six Dutch Bros sites. **Table 2** presents the vehicle trip generation observed during the AM peak hour, PM peak hour, and during the entire 6:00 AM to 6:00 PM observation period. **Attachment A** provides the raw data for each Dutch Bros site.

Table 2: Dutch Bros Sacramento Region – Vehicle Trip Generation Summary

Location	AM Peak Hour[1] 8:30 AM to 9:30 AM			PM Peak Hour[2] 3:15 PM to 4:15 PM			Whole Observation Period 6:00 AM to 6:00 PM		
	In	Out	Total	In	Out	Total	In	Out	Total
4130 Northgate Boulevard	74	74	148	75	73	148	816	805	1,621
4250 El Camino Avenue	47	51	98	48	52	100	525	515	1,040
5140 Stockton Boulevard	50	51	101	53	53	106	561	565	1,126
8610 Elk Grove Boulevard	79	84	163	69	65	134	793	791	1,584
4341 Antelope Road	74	74	148	60	60	120	672	670	1,342
1225 Baseline Road	45	43	88	48	48	96	537	536	1,073
Average	**61**	**63**	**124**	**59**	**58**	**117**	**651**	**647**	**1,298**

Notes:

Based on data collected on Thursday, February 17, 2022, between 6:00 AM and 6:00 PM.

1. AM peak hour represents the hour between 6:00 AM and 12:00 PM with the highest trip generation when the data for all six sites is considered together.
2. PM peak hour represents the hour between 12:00 PM and 6:00 PM with the highest trip generation when the data for all six sites is considered together.

Source: National Data & Surveying Services, 2022.

The AM peak hour of 8:30 AM to 9:30 AM represents the hour between 6:00 AM and 12:00 PM with the highest trip generation when the data for all six sites is considered together. Similarly, the PM peak hour of 3:15 PM to 4:15 PM represents the hour between 12:00 PM and 6:00 PM with the highest trip generation when the data for all six sites is considered together. Individual sites may experience different peak hours. **Attachment B** provides a detailed analysis of the hourly trip generation for each site as well as the average across all six sites.

Analysis Hours

We recently collected traffic counts at locations around the 7255 Freeport Boulevard site between 7:30 and 9:30 AM and 2:00 and 5:00 PM. Based on this data, the adjacent street volume is higher outside the AM and PM peak hours of the Dutch Bros sites (i.e., Dutch Bros generates its peak trip generation when the traffic volumes on Freeport Boulevard and Florin Road are lower). Our initial evaluation of the Dutch Bros trip generation data and adjacent street traffic volume data indicate that the 7255 Freeport Boulevard study should focus on specific analysis hours where both the proposed Dutch Bros is expected to be busy and adjacent street traffic would be high. These analysis hours correspond with near-peak level trip generation for Dutch Bros (i.e., slightly less than the AM and PM peak hours shown in Table 2) but higher adjacent street traffic volumes. Based on this evaluation, the analysis hours would be: 7:45 AM to 8:45 AM and 2:00 PM to 3:00 PM. Although these fall outside the typical AM and PM peak hours, the adjacent street volume count data shows that these hourly intervals experienced the highest level of

traffic volume on Freeport Boulevard and Florin Road at the existing commercial center driveways during the 7:30 to 9:30 AM and 2:00 to 5:00 PM periods (i.e., traffic volumes were higher between 2:00 PM to 3:00 PM than 4:00 PM to 5:00 PM). **Table 3** presents the Dutch Bros trip generation during these hours.

Table 3: Dutch Bros – Analysis Hours Vehicle Trip Generation

	AM Peak Hour			PM Peak Hour		
	7:45 AM to 8:45 AM			2:00 PM to 3:00 PM		
Location	In	Out	Total	In	Out	Total
4130 Northgate Boulevard	66	64	130	75	73	148
4250 El Camino Avenue	46	48	94	57	59	116
5140 Stockton Boulevard	51	51	102	48	52	100
8610 Elk Grove Boulevard	79	74	153	56	56	112
4341 Antelope Road	63	63	126	54	53	107
1225 Baseline Road	54	52	106	45	47	92
Average	**60**	**59**	**119**	**56**	**57**	**113**

Notes:
Based on data collected on Thursday, February 17, 2022
Source: National Data & Surveying Services, 2022.

Other Considerations

It is important to note that the trip generation presented in Table 2 and Table 3 represents the gross trip ends generated at the Dutch Bros sites and does not account for pass-by or diverted link trips. Pass-by and diverted link trips are vehicles already on the transportation network that would stop at the proposed Dutch Bros location. The Institute of Transportation Engineers *Trip Generation Handbook, 3rd Edition* contains pass-by and diverted link data for many commercial uses. However, the *Trip Generation Handbook* pass-by data for coffee shop with drive-through window and no indoor seating was collected in the 1990s and appears overly aggressive (90 to 98 percent for the weekday AM and PM peak periods) to apply to current-day drive-through coffee shop operations (i.e., businesses like Dutch Bros are more likely to be destinations than the small coffee drive-throughs that were more common in the 1990s). A pass-by percentage more akin to fast-food restaurants with drive-through may be more reasonable, which the *Trip Generation Handbook* estimates at 49 percent for the weekday AM peak period and 50 percent for the PM peak period. Therefore, the net new trips added to the roadway network by the proposed Dutch Bros would be roughly half the amount presented in Table 2 and Table 3.

Attachment A:

Dutch Bros Raw Trip Generation Data

Prepared by National Data & Surveying Services

Volume

Location: 4130 Northgate Blvd/Dutch Bros Coffee - Coffee shop Dwy E/O Tandy Dr
City: Sacramento
Date: 2/17/2022
Day: Thursday

TIME	NE Drive-Thru Entry	NW Drive-Thru Exit
6:00 AM	14	10
6:15 AM	14	10
6:30 AM	12	12
6:45 AM	12	19
7:00 AM	15	9
7:15 AM	9	10
7:30 AM	17	16
7:45 AM	16	17
8:00 AM	18	16
8:15 AM	14	13
8:30 AM	18	18
8:45 AM	20	19
9:00 AM	14	13
9:15 AM	22	24
9:30 AM	17	16
9:45 AM	22	19
10:00 AM	12	19
10:15 AM	19	13
10:30 AM	17	17
10:45 AM	18	17
11:00 AM	16	18
11:15 AM	20	19
11:30 AM	13	16
11:45 AM	20	16
12:00 PM	17	17
12:15 PM	23	23
12:30 PM	14	17
12:45 PM	13	10
1:00 PM	18	20
1:15 PM	15	15
1:30 PM	22	22

Prepared by National Data & Surveying Services

Volume

Location: 4130 Northgate Blvd/Dutch Bros Coffee - Coffee shop Dwy E/O Tandy Dr
City: Sacramento
Date: 2/17/2022
Day: Thursday

TIME	NE Drive-Thru Entry	NW Drive-Thru Exit
1:45 PM	19	20
2:00 PM	20	18
2:15 PM	20	21
2:30 PM	18	15
2:45 PM	17	19
3:00 PM	17	18
3:15 PM	18	17
3:30 PM	21	20
3:45 PM	17	19
4:00 PM	19	17
4:15 PM	21	21
4:30 PM	17	16
4:45 PM	16	19
5:00 PM	17	16
5:15 PM	16	17
5:30 PM	14	19
5:45 PM	18	13
Totals	***816***	***805***

Prepared by National Data & Surveying Services

Volume

Location: 4250 El Camino Ave/Dutch Bros Coffee - Coffee shop Dwy S/O El Camino Ave
City: Sacramento
Date: 2/17/2022
Day: Thursday

TIME	W Drive-Thru Entry	S Drive-Thru Exit
6:00 AM	6	6
6:15 AM	8	7
6:30 AM	9	7
6:45 AM	7	7
7:00 AM	10	9
7:15 AM	16	15
7:30 AM	8	8
7:45 AM	8	10
8:00 AM	13	12
8:15 AM	15	15
8:30 AM	10	11
8:45 AM	14	14
9:00 AM	17	17
9:15 AM	6	9
9:30 AM	10	9
9:45 AM	9	7
10:00 AM	10	11
10:15 AM	11	13
10:30 AM	7	6
10:45 AM	8	6
11:00 AM	8	10
11:15 AM	9	6
11:30 AM	12	16
11:45 AM	11	11
12:00 PM	11	7
12:15 PM	10	11
12:30 PM	9	10
12:45 PM	11	13
1:00 PM	17	12
1:15 PM	12	14
1:30 PM	13	9

Prepared by National Data & Surveying Services

Volume

Location: 4250 El Camino Ave/Dutch Bros Coffee - Coffee shop Dwy S/O El Camino Ave
City: Sacramento
Date: 2/17/2022
Day: Thursday

TIME	W Drive-Thru Entry	S Drive-Thru Exit
1:45 PM	9	9
2:00 PM	16	13
2:15 PM	13	15
2:30 PM	18	18
2:45 PM	10	13
3:00 PM	9	6
3:15 PM	12	12
3:30 PM	14	11
3:45 PM	15	20
4:00 PM	7	9
4:15 PM	10	7
4:30 PM	14	12
4:45 PM	8	9
5:00 PM	9	8
5:15 PM	14	13
5:30 PM	10	12
5:45 PM	12	10
Totals	***525***	***515***

Prepared by National Data & Surveying Services

Volume

Location: 5140 Stockton Blvd/Dutch Bros Coffee - Coffee shop Dwy W/O Stockton Blvd
City: Sacramento
Date: 2/17/2022
Day: Thursday

TIME	NW Drive-Thru Entry	NE Drive-Thru Exit
6:00 AM	3	7
6:15 AM	7	3
6:30 AM	9	8
6:45 AM	11	11
7:00 AM	18	14
7:15 AM	14	13
7:30 AM	7	10
7:45 AM	14	14
8:00 AM	12	9
8:15 AM	11	11
8:30 AM	14	17
8:45 AM	10	16
9:00 AM	16	11
9:15 AM	10	7
9:30 AM	9	12
9:45 AM	10	10
10:00 AM	6	13
10:15 AM	11	11
10:30 AM	12	12
10:45 AM	5	7
11:00 AM	14	10
11:15 AM	8	10
11:30 AM	11	10
11:45 AM	15	14
12:00 PM	17	15
12:15 PM	14	19
12:30 PM	8	7
12:45 PM	11	12
1:00 PM	10	10
1:15 PM	14	10
1:30 PM	17	18

Prepared by National Data & Surveying Services

Volume

Location: 5140 Stockton Blvd/Dutch Bros Coffee - Coffee shop Dwy W/O Stockton Blvd
City: Sacramento
Date: 2/17/2022
Day: Thursday

TIME	NW Drive-Thru Entry	NE Drive-Thru Exit
1:45 PM	16	14
2:00 PM	16	14
2:15 PM	8	15
2:30 PM	17	12
2:45 PM	7	11
3:00 PM	14	14
3:15 PM	19	13
3:30 PM	14	15
3:45 PM	9	12
4:00 PM	11	13
4:15 PM	15	12
4:30 PM	16	12
4:45 PM	14	10
5:00 PM	11	14
5:15 PM	5	13
5:30 PM	14	12
5:45 PM	7	8
Totals	***561***	***565***

Prepared by National Data & Surveying Services

Volume

Location: 8619 Elk Grove Blvd/Dutch Bros Coffee - Coffee shop Dwy W/O Stockton Blvd
City: Elk Grove
Date: 2/17/2022
Day: Thursday

TIME	SE Drive-Thru Entry	NW Drive-Thru Exit
6:00 AM	14	15
6:15 AM	12	13
6:30 AM	18	18
6:45 AM	16	15
7:00 AM	20	20
7:15 AM	20	24
7:30 AM	20	18
7:45 AM	18	14
8:00 AM	20	23
8:15 AM	18	13
8:30 AM	23	24
8:45 AM	22	24
9:00 AM	17	20
9:15 AM	17	16
9:30 AM	14	15
9:45 AM	15	16
10:00 AM	14	11
10:15 AM	18	18
10:30 AM	13	10
10:45 AM	17	18
11:00 AM	18	19
11:15 AM	16	17
11:30 AM	16	21
11:45 AM	20	16
12:00 PM	13	11
12:15 PM	17	20
12:30 PM	18	16
12:45 PM	15	17
1:00 PM	16	15
1:15 PM	17	17
1:30 PM	18	21

Prepared by National Data & Surveying Services

Volume

Location: 8619 Elk Grove Blvd/Dutch Bros Coffee - Coffee shop Dwy W/O Stockton Blvd
City: Elk Grove
Date: 2/17/2022
Day: Thursday

TIME	SE Drive-Thru Entry	NW Drive-Thru Exit
1:45 PM	24	19
2:00 PM	12	16
2:15 PM	14	14
2:30 PM	15	12
2:45 PM	15	14
3:00 PM	16	18
3:15 PM	16	19
3:30 PM	19	11
3:45 PM	16	14
4:00 PM	18	21
4:15 PM	18	16
4:30 PM	18	22
4:45 PM	16	15
5:00 PM	14	13
5:15 PM	13	14
5:30 PM	9	8
5:45 PM	10	10
Totals	***793***	***791***

Prepared by National Data & Surveying Services

Volume

Location: 4341 Antelope Rd/Dutch Bros Coffee - Coffee shop Dwy N/O Antelope Rd
City: Antelope
Date: 2/17/2022
Day: Thursday

TIME	N Drive-Thru Entry	SE Drive-Thru Exit
6:00 AM	9	8
6:15 AM	9	10
6:30 AM	16	14
6:45 AM	11	11
7:00 AM	18	18
7:15 AM	17	17
7:30 AM	13	13
7:45 AM	14	13
8:00 AM	19	20
8:15 AM	16	16
8:30 AM	14	14
8:45 AM	17	17
9:00 AM	27	27
9:15 AM	16	16
9:30 AM	18	17
9:45 AM	12	12
10:00 AM	13	14
10:15 AM	12	11
10:30 AM	15	15
10:45 AM	12	12
11:00 AM	8	7
11:15 AM	14	13
11:30 AM	11	12
11:45 AM	9	8
12:00 PM	18	19
12:15 PM	13	13
12:30 PM	21	22
12:45 PM	11	13
1:00 PM	16	14
1:15 PM	14	16
1:30 PM	13	13

Prepared by National Data & Surveying Services

Volume

Location: 4341 Antelope Rd/Dutch Bros Coffee - Coffee shop Dwy N/O Antelope Rd
City: Antelope
Date: 2/17/2022
Day: Thursday

TIME	N Drive-Thru Entry	SE Drive-Thru Exit
1:45 PM	11	9
2:00 PM	7	8
2:15 PM	17	15
2:30 PM	14	15
2:45 PM	16	15
3:00 PM	15	15
3:15 PM	20	20
3:30 PM	13	14
3:45 PM	13	12
4:00 PM	14	14
4:15 PM	16	18
4:30 PM	12	10
4:45 PM	12	13
5:00 PM	17	17
5:15 PM	8	7
5:30 PM	13	13
5:45 PM	8	10
Totals	***672***	***670***

Prepared by National Data & Surveying Services

Volume

Location: 1225 Baseline Rd/Dutch Bros Coffee - Coffee shop Dwy S/O Baseline Rd
City: Roseville
Date: 2/17/2022
Day: Thursday

TIME	SE Drive-Thru Entry	WN Drive-Thru Exit
6:00 AM	5	8
6:15 AM	9	7
6:30 AM	7	9
6:45 AM	12	10
7:00 AM	12	10
7:15 AM	14	13
7:30 AM	9	9
7:45 AM	16	17
8:00 AM	14	13
8:15 AM	13	12
8:30 AM	11	10
8:45 AM	9	11
9:00 AM	11	9
9:15 AM	14	13
9:30 AM	11	13
9:45 AM	11	11
10:00 AM	10	13
10:15 AM	12	8
10:30 AM	12	14
10:45 AM	14	9
11:00 AM	7	11
11:15 AM	14	13
11:30 AM	12	15
11:45 AM	10	7
12:00 PM	13	12
12:15 PM	10	14
12:30 PM	8	8
12:45 PM	12	9
1:00 PM	9	14
1:15 PM	14	8
1:30 PM	12	10

Prepared by National Data & Surveying Services

Volume

Location: 1225 Baseline Rd/Dutch Bros Coffee - Coffee shop Dwy S/O Baseline Rd
City: Roseville
Date: 2/17/2022
Day: Thursday

TIME	SE Drive-Thru Entry	WN Drive-Thru Exit
1:45 PM	7	8
2:00 PM	11	11
2:15 PM	13	13
2:30 PM	10	12
2:45 PM	11	11
3:00 PM	8	7
3:15 PM	13	12
3:30 PM	10	13
3:45 PM	11	11
4:00 PM	14	12
4:15 PM	11	11
4:30 PM	14	12
4:45 PM	11	14
5:00 PM	13	12
5:15 PM	12	12
5:30 PM	13	13
5:45 PM	8	12
Totals	***537***	***536***

Attachment B:

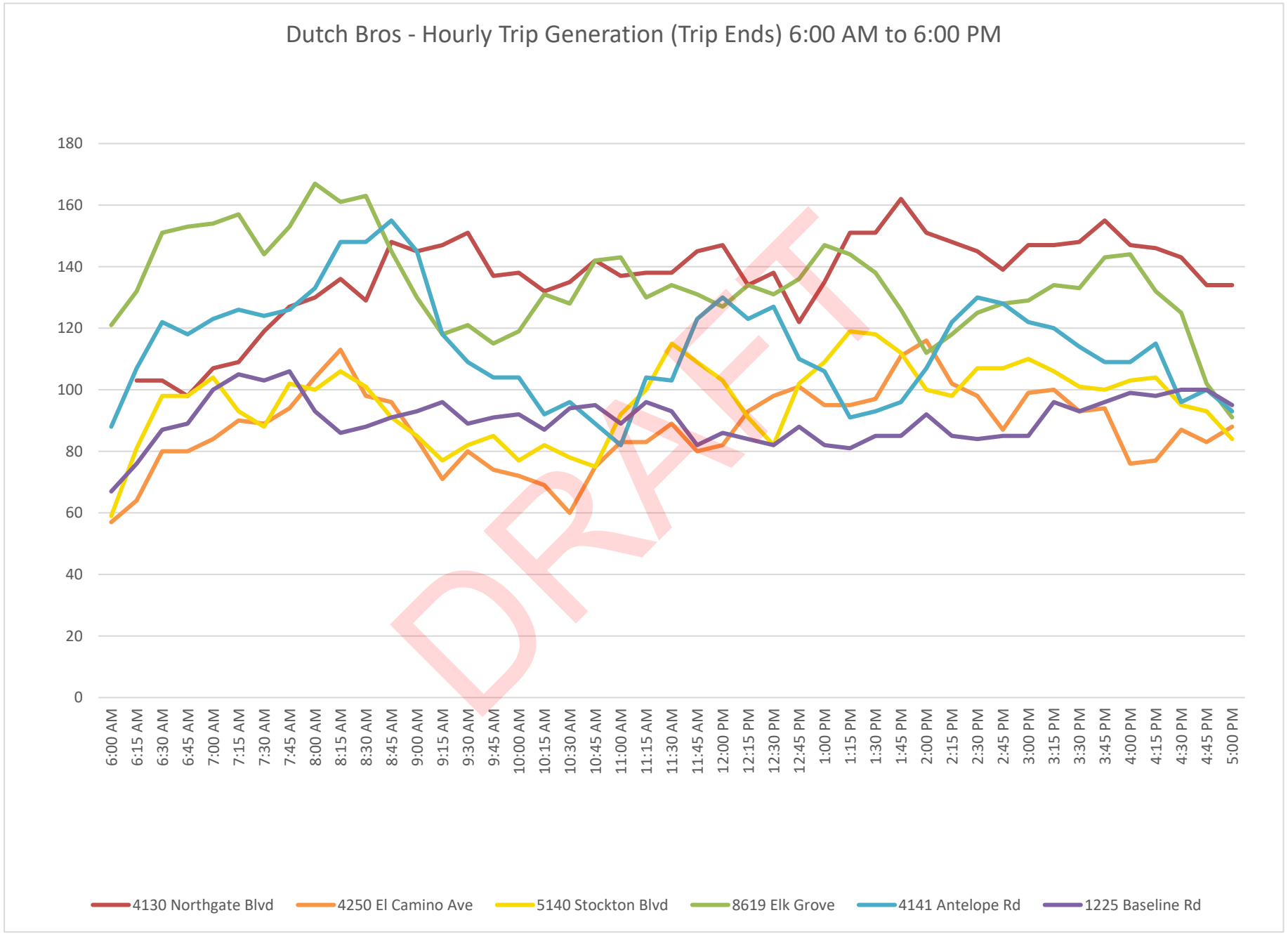
Dutch Bros Trip Generation

Hourly Trip Generation Processing & Charts

Dutch Bros. Hourly Trip Generation

Total = Inbound + Outbound

Hour	4130 Northgate	4250 El Camino	5140 Stockton	8619 Elk Grove	4341 Antelope	1225 Baseline	All Sites	
							Total	Average
6:00 AM to 7:00 AM	103	57	59	121	88	67	495	83
6:15 AM to 7:15 AM	103	64	81	132	107	76	563	94
6:30 AM to 7:30 AM	98	80	98	151	122	87	636	106
6:45 AM to 7:45 AM	107	80	98	153	118	89	645	108
7:00 AM to 8:00 AM	109	84	104	154	123	100	674	112
7:15 AM to 8:15 AM	119	90	93	157	126	105	690	115
7:30 AM to 8:30 AM	127	89	88	144	124	103	675	113
7:45 AM to 8:45 AM	130	94	102	153	126	106	711	119
8:00 AM to 9:00 AM	136	104	100	167	133	93	733	122
8:15 AM to 9:15 AM	129	113	106	161	148	86	743	124
8:30 AM to 9:30 AM	148	98	101	163	148	88	**746**	**124**
8:45 AM to 9:45 AM	145	96	91	145	155	91	723	121
9:00 AM to 10:00 AM	147	84	85	130	145	93	684	114
9:15 AM to 10:15 AM	151	71	77	118	118	96	631	105
9:30 AM to 10:30 AM	137	80	82	121	109	89	618	103
9:45 AM to 10:45 AM	138	74	85	115	104	91	607	101
10:00 AM to 11:00 AM	132	72	77	119	104	92	596	99
10:15 AM to 11:15 AM	135	69	82	131	92	87	596	99
10:30 AM to 11:30 AM	142	60	78	128	96	94	598	100
10:45 AM to 11:45 AM	137	75	75	142	89	95	613	102
11:00 AM to 12:00 PM	138	83	92	143	82	89	627	105
11:15 AM to 12:15 PM	138	83	100	130	104	96	651	109
11:30 AM to 12:30 PM	145	89	115	134	103	93	679	113
11:45 AM to 12:45 PM	147	80	109	131	123	82	672	112
12:00 PM to 1:00 PM	134	82	103	127	130	86	662	110
12:15 PM to 1:15 PM	138	93	91	134	123	84	663	111
12:30 PM to 1:30 PM	122	98	82	131	127	82	642	107
12:45 PM to 1:45 PM	135	101	102	136	110	88	672	112
1:00 PM to 2:00 PM	151	95	109	147	106	82	690	115
1:15 PM to 2:15 PM	151	95	119	144	91	81	681	114
1:30 PM to 2:30 PM	162	97	118	138	93	85	693	116
1:45 PM to 2:45 PM	151	111	112	126	96	85	681	114
2:00 PM to 3:00 PM	148	116	100	112	107	92	675	113
2:15 PM to 3:15 PM	145	102	98	118	122	85	670	112
2:30 PM to 3:30 PM	139	98	107	125	130	84	683	114
2:45 PM to 3:45 PM	147	87	107	128	128	85	682	114
3:00 PM to 4:00 PM	147	99	110	129	122	85	692	115
3:15 PM to 4:15 PM	148	100	106	134	120	96	**704**	**117**
3:30 PM to 4:30 PM	155	93	101	133	114	93	689	115
3:45 PM to 4:45 PM	147	94	100	143	109	96	689	115
4:00 PM to 5:00 PM	146	76	103	144	109	99	677	113
4:15 PM to 5:15 PM	143	77	104	132	115	98	669	112
4:30 PM to 5:30 PM	134	87	95	125	96	100	637	106
4:45 PM to 5:45 PM	134	83	93	102	100	100	612	102
5:00 PM to 6:00 PM	130	88	84	91	93	95	581	97


Dutch Bros - Hourly Trip Generation (Trip Ends) 6:00 AM to 6:00 PM
180
160
140
120
100
80
60
40
20
0
6:00 AM
6:15 AM
6:30 AM
6:45 AM
7:00 AM
7:15 AM
7:30 AM
7:45 AM
8:00 AM
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2:45 PM
3:00 PM
3:15 PM
3:30 PM
3:45 PM
4:00 PM
4:15 PM
4:30 PM
4:45 PM
5:00 PM
4130 Northgate Blvd
4250 El Camino Ave
5140 Stockton Blvd
8619 Elk Grove
4141 Antelope Rd
1225 Baseline Rd
DRAFT

Dutch Bros. Sacramento Region - Vehicle Trip Generation Summary

Location	AM Analysis Hour[1] 7:45 AM to 8:45 AM			AM Peak Hour[2] 8:30 AM to 9:30 AM			PM Analysis Hour[3] 2:00 PM to 3:00 PM			PM Peak Hour[4] 3:15 PM to 4:15 PM		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
4130 Northgate Boulevard	66	64	130	74	74	148	75	73	148	75	73	148
4250 El Camino Avenue	46	48	94	47	51	98	57	59	116	48	52	100
5140 Stockton Boulevard	51	51	102	50	51	101	48	52	100	53	53	106
8610 Elk Grove Boulevard	79	74	153	79	84	163	56	56	112	69	65	134
4341 Antelope Road	63	63	126	74	74	148	54	53	107	60	60	120
1225 Baseline Road	54	52	106	45	43	88	45	47	92	48	48	96
Average	**60**	**59**	**119**	**62**	**63**	**124**	**56**	**57**	**113**	**59**	**59**	**117**

Location	AM Peak Hour - Site[5]				PM Peak Hour - Site[6]				6:00 AM to 6:00 PM		
	In	Out	Total	Peak Hr.	In	Out	Total	Peak Hr.	In	Out	Total
4130 Northgate Boulevard	73	78	151	9:15 AM to 10:15 AM	81	81	162	1:30 PM to 2:30 PM	816	805	1,621
4250 El Camino Avenue	56	57	113	8:15 AM to 9:15 AM	57	59	116	2:00 PM to 3:00 PM	525	515	1,040
5140 Stockton Boulevard	51	55	106	8:15 AM to 9:15 AM	63	56	119	1:15 PM to 2:15 PM	561	565	1,126
8610 Elk Grove Boulevard	83	84	167	8:00 AM to 9:00 AM	75	72	147	1:00 PM to 2:00 PM	793	791	1,584
4341 Antelope Road	78	77	155	8:45 AM to 9:45 AM	65	65	130	2:30 PM to 3:30 PM	672	670	1,342
1225 Baseline Road	54	52	106	7:45 AM to 8:45 AM	50	50	100	4:30 PM to 5:30 PM	537	536	1,073
								Average	**651**	**647**	**1,298**

Notes:

Based on data collected on Thursday, February 17, 2022 between 6:00 AM and 6:00 PM.

1. "AM Analysis Hour" presents the trip generation for each site between 7:45 AM and 8:45 AM (the proposed AM analysis hour).
2. AM Peak Hour presents the trip generation for each site between 8:30 AM and 9:30 AM, which is the morning hour with the highest trip generation when the data for all six sites are considered together.
3. "PM Analysis Hour" presents the trip generation for each site between 2:00 PM and 3:00 PM (the proposed PM analysis hour).
4. PM Peak Hour presents the trip generation for each site between 3:15 PM and 4:15 PM, which is the afternoon hour with the highest trip generation when the data for all six sites are considered together.
5. "AM Peak Hour - Site" represents the hour with the greatest trip generation between 6:00 AM and 12:00 PM for each individual site.
6. "PM Peak Hour - Site" represents the hour with the greatest trip generation between 12:00 PM and 6:00 PM for each individual site.

Source: National Data & Surveying Services, 2022.

Appendix B:

Technical Calculations

Driveway Queue Length Analysis

Table B-1: Maximum Vehicle Queues at Project Driveway Exits - Existing Conditions

Driveway	Peak Hour	Major Street			Driveway	
		Volume	# of Lanes	Volume per Lane	Approach Volume	MRTD Queue[1]
1. Florin Rd / CVS Dwy	AM	1,071	2	536	36	2 vehicles
	PM	1,301		651	74	3 vehicles
2. Freeport Blvd / North Dwy	AM	732	2	366	42	2 vehicles
	PM	538		269	85	3 vehicles
3. Freeport Blvd / South Dwy	AM	731	2	366	2	1 vehicle
	PM	545		273	0	0 vehicles

Notes:

[1]MRTD Queue = 0.877+0.02365*(Approach Vol)+0.001307*(Conflicting Volume Per Lane)

MRTD Queue = maximum queue estimate for unsignalized right-turn movement out of driveway.

Source: Fehr & Peers, 2022.

Table B-2: Maximum Vehicle Queues at Project Driveway Exits - Existing Plus Project Conditions

Driveway	Peak Hour	Major Street			Driveway	
		Volume	# of Lanes	Volume per Lane	Approach Volume	MRTD Queue[1]
1. Florin Rd / CVS Dwy	AM	1,074	2	537	43	3 vehicles
	PM	1,305		653	79	4 vehicles
2. Freeport Blvd / North Dwy	AM	726	2	363	94	4 vehicles
	PM	533		267	137	4 vehicles
3. Freeport Blvd / South Dwy	AM	741	2	371	2	1 vehicle
	PM	551		276	0	0 vehicles

Notes:

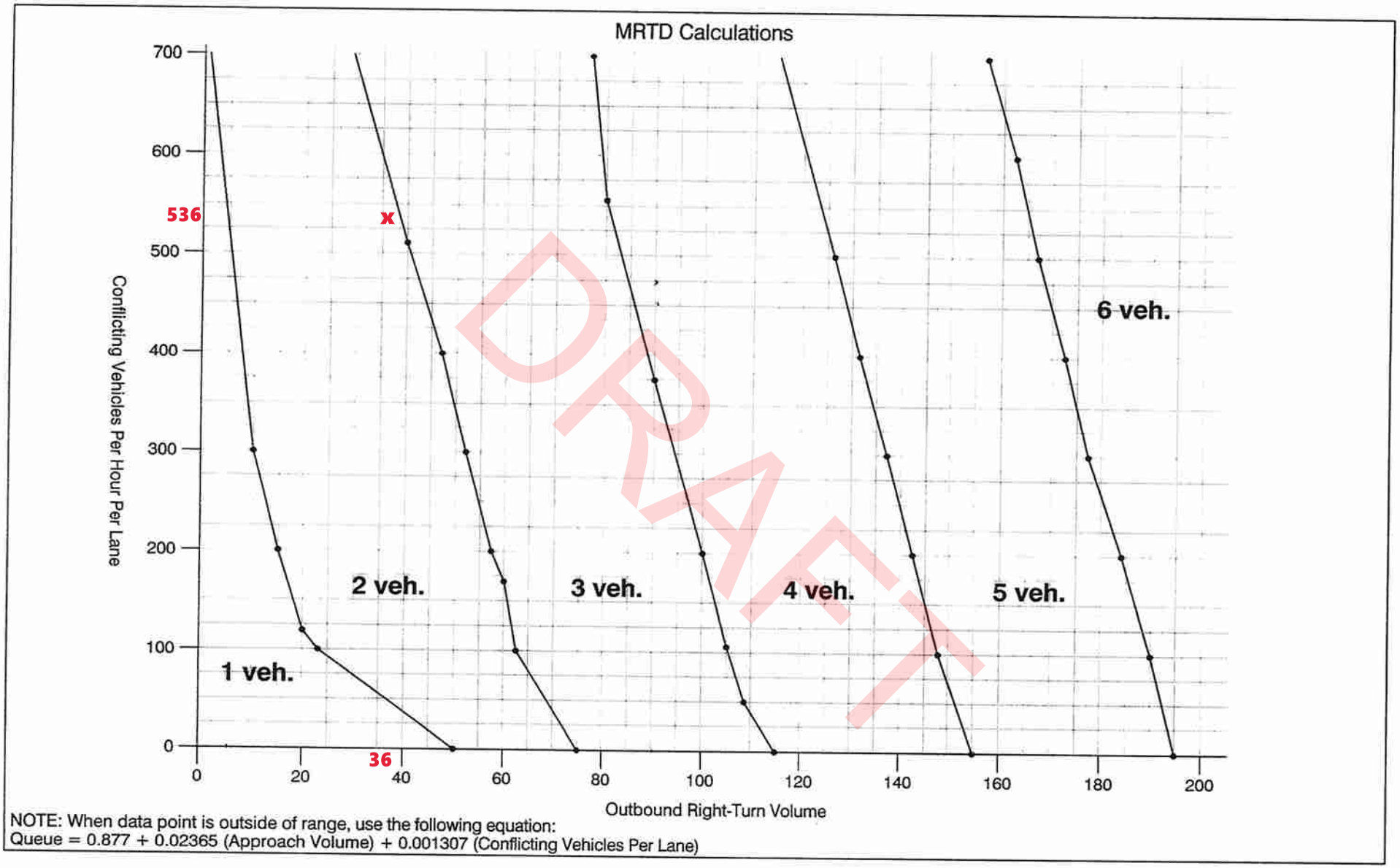
[1]MRTD Queue = 0.877+0.02365*(Approach Vol)+0.001307*(Conflicting Volume Per Lane)

MRTD Queue = maximum queue estimate for unsignalized right-turn movement out of driveway.

Source: Fehr & Peers, 2022.

Driveway 1 on Florin Road

Existing Conditions - AM Peak Hour



NOTE: When data point is outside of range, use the following equation:
Queue = 0.877 + 0.02365 (Approach Volume) + 0.001307 (Conflicting Vehicles Per Lane)

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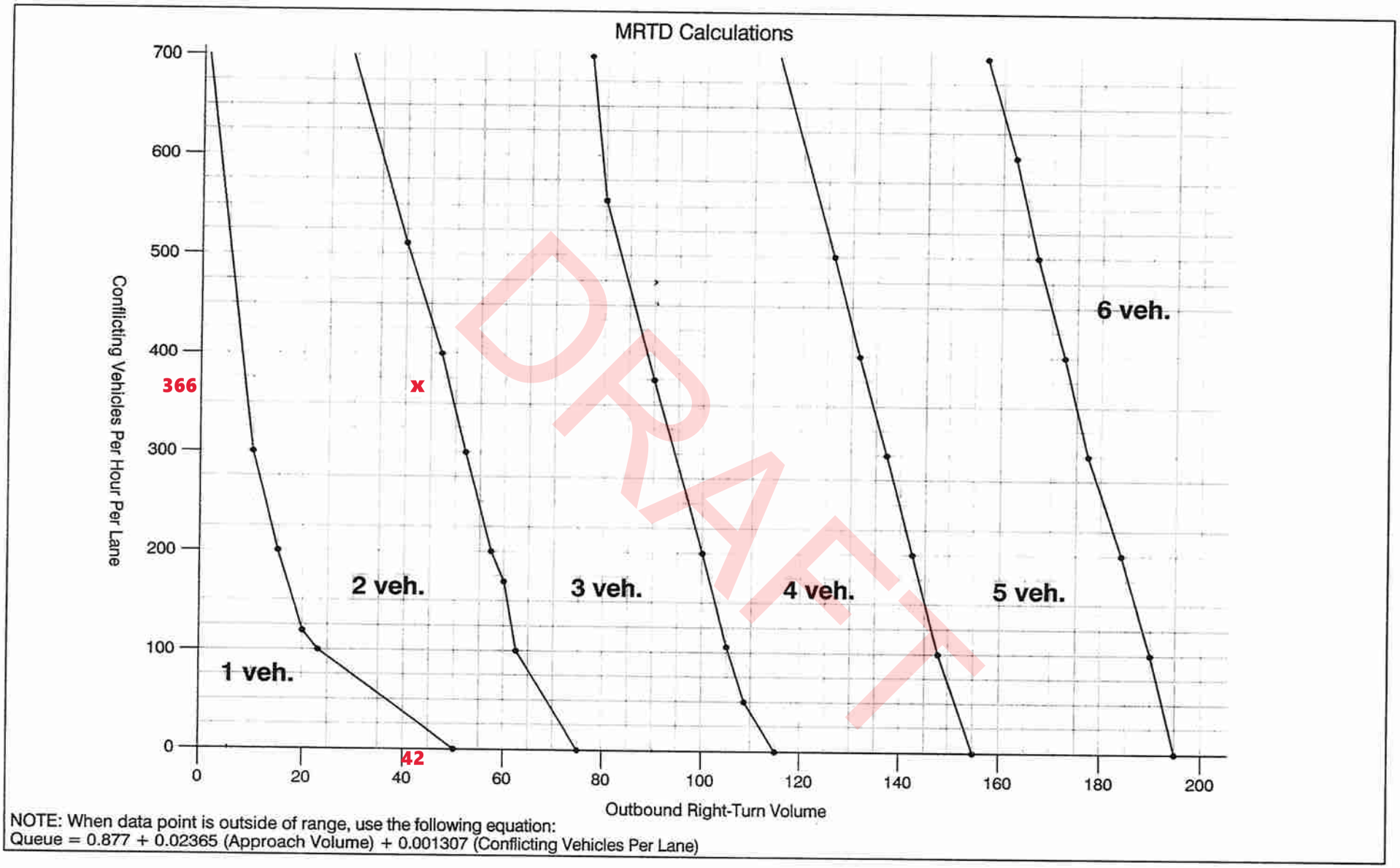
MAXIMUM QUEUE ESTIMATES FOR UNSIGNALIZED RIGHT-TURN DRIVEWAYS

Driveway 2 (north) on Freeport Boulevard

Existing Conditions - AM Peak Hour



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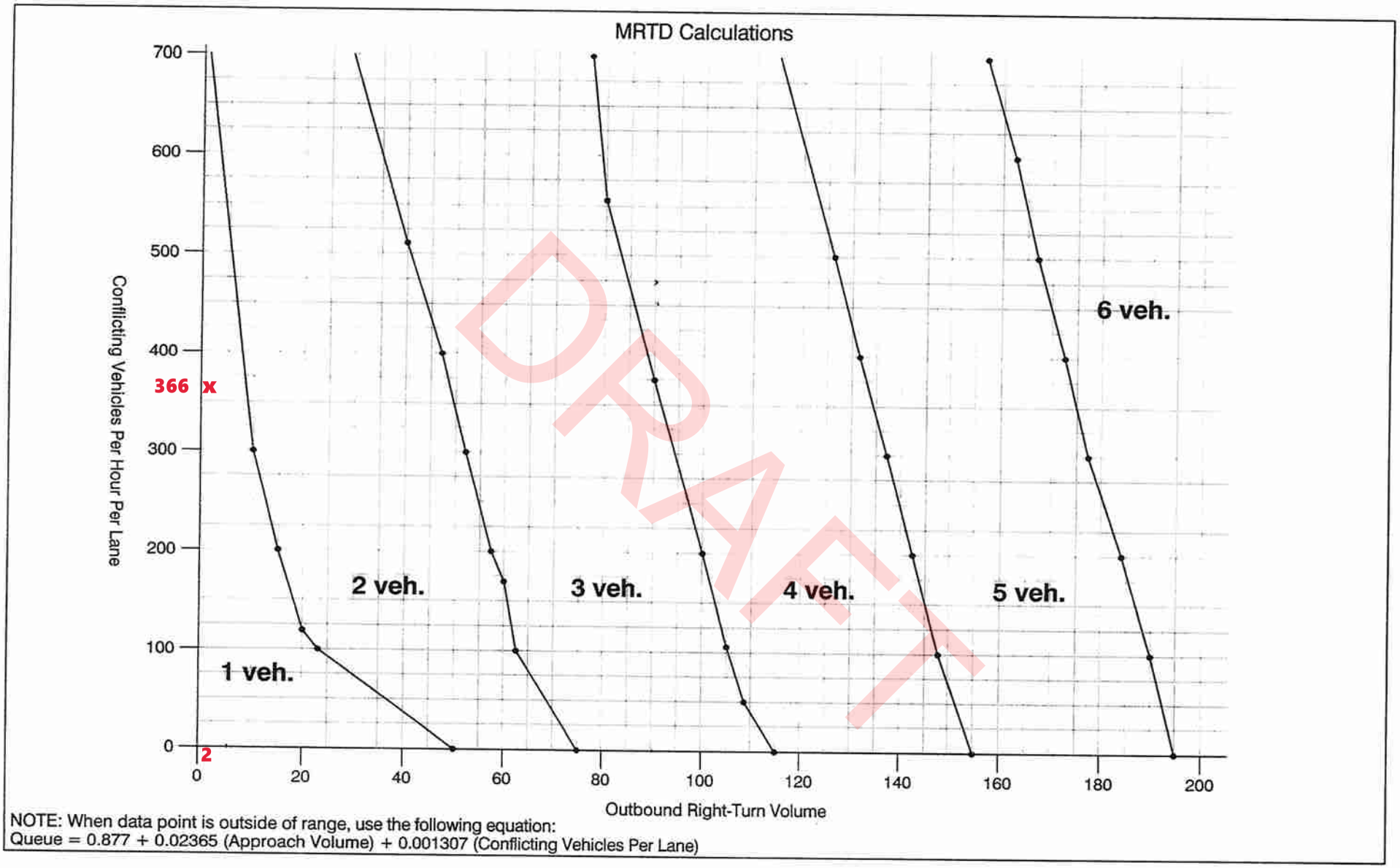
MAXIMUM QUEUE ESTIMATES FOR UNSIGNALIZED RIGHT-TURN DRIVEWAYS

Driveway 3 (south) on Freeport Boulevard

Existing Conditions - AM Peak Hour



NOTE: When data point is outside of range, use the following equation:
Queue = 0.877 + 0.02365 (Approach Volume) + 0.001307 (Conflicting Vehicles Per Lane)

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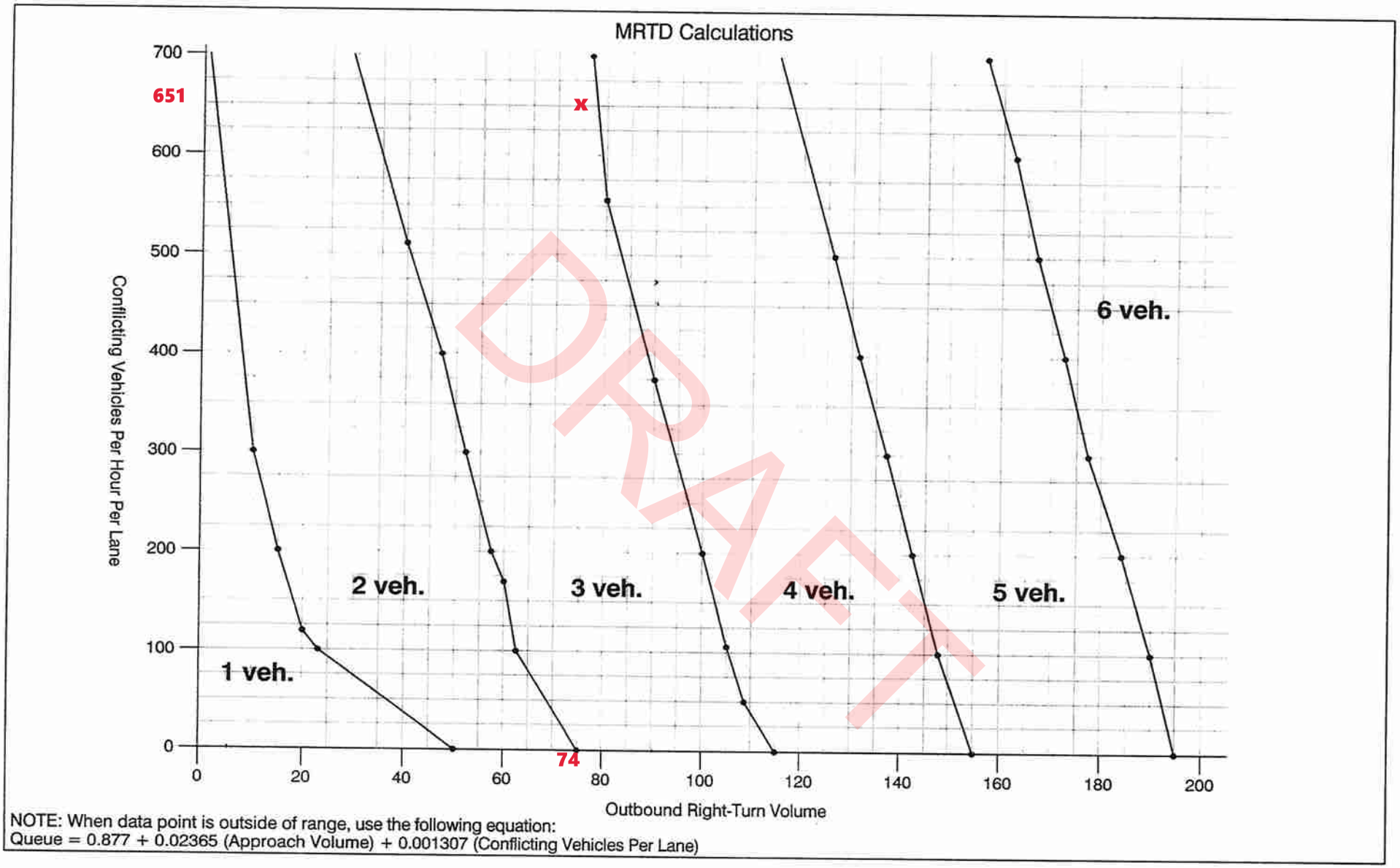
MAXIMUM QUEUE ESTIMATES FOR UNSIGNALIZED RIGHT-TURN DRIVEWAYS

Driveway 1 on Florin Road

Existing Conditions - PM Peak Hour



NOTE: When data point is outside of range, use the following equation:
Queue = 0.877 + 0.02365 (Approach Volume) + 0.001307 (Conflicting Vehicles Per Lane)

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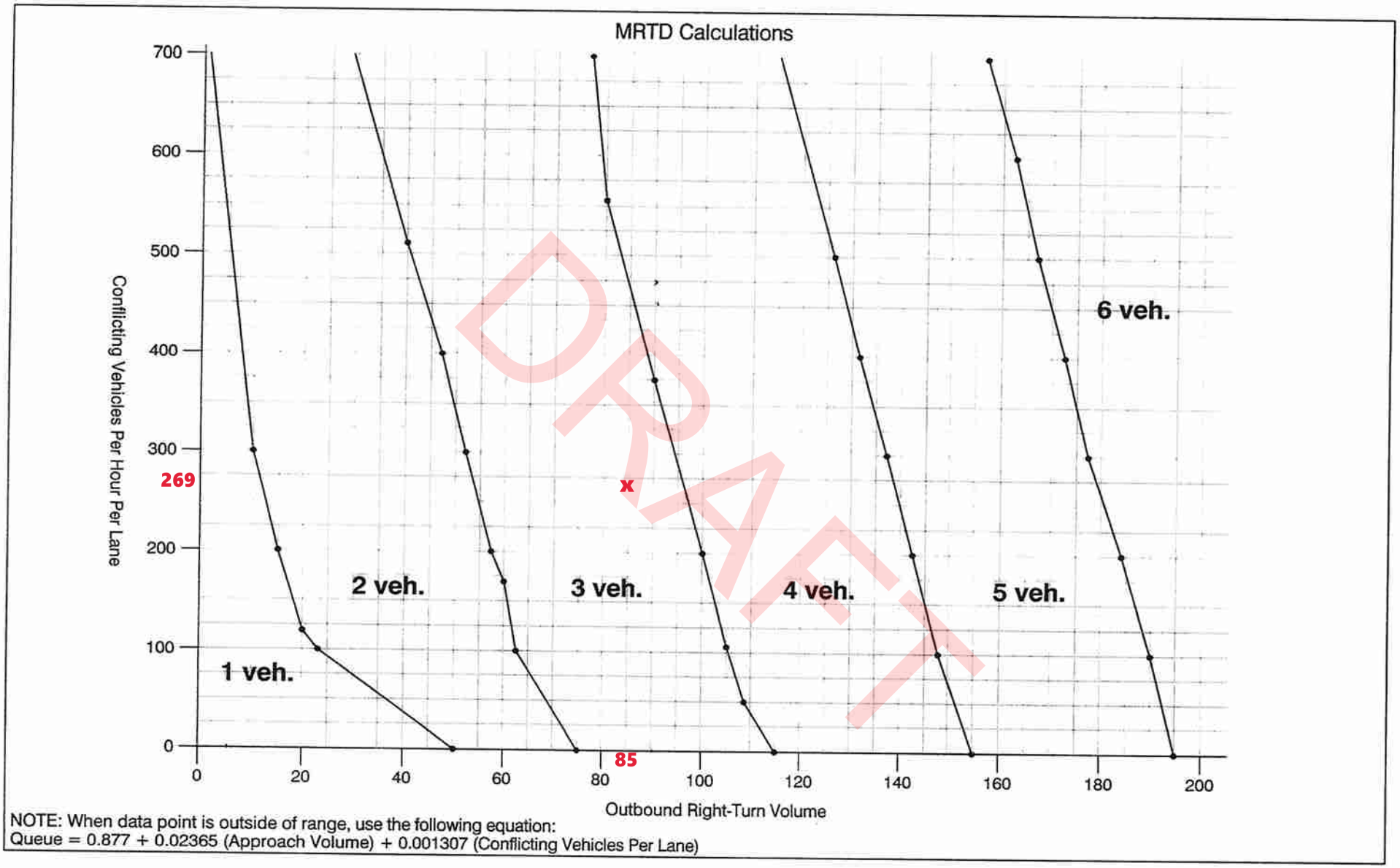
MAXIMUM QUEUE ESTIMATES FOR UNSIGNALIZED RIGHT-TURN DRIVEWAYS

Driveway 2 (north) on Freeport Boulevard

Existing Conditions - PM Peak Hour



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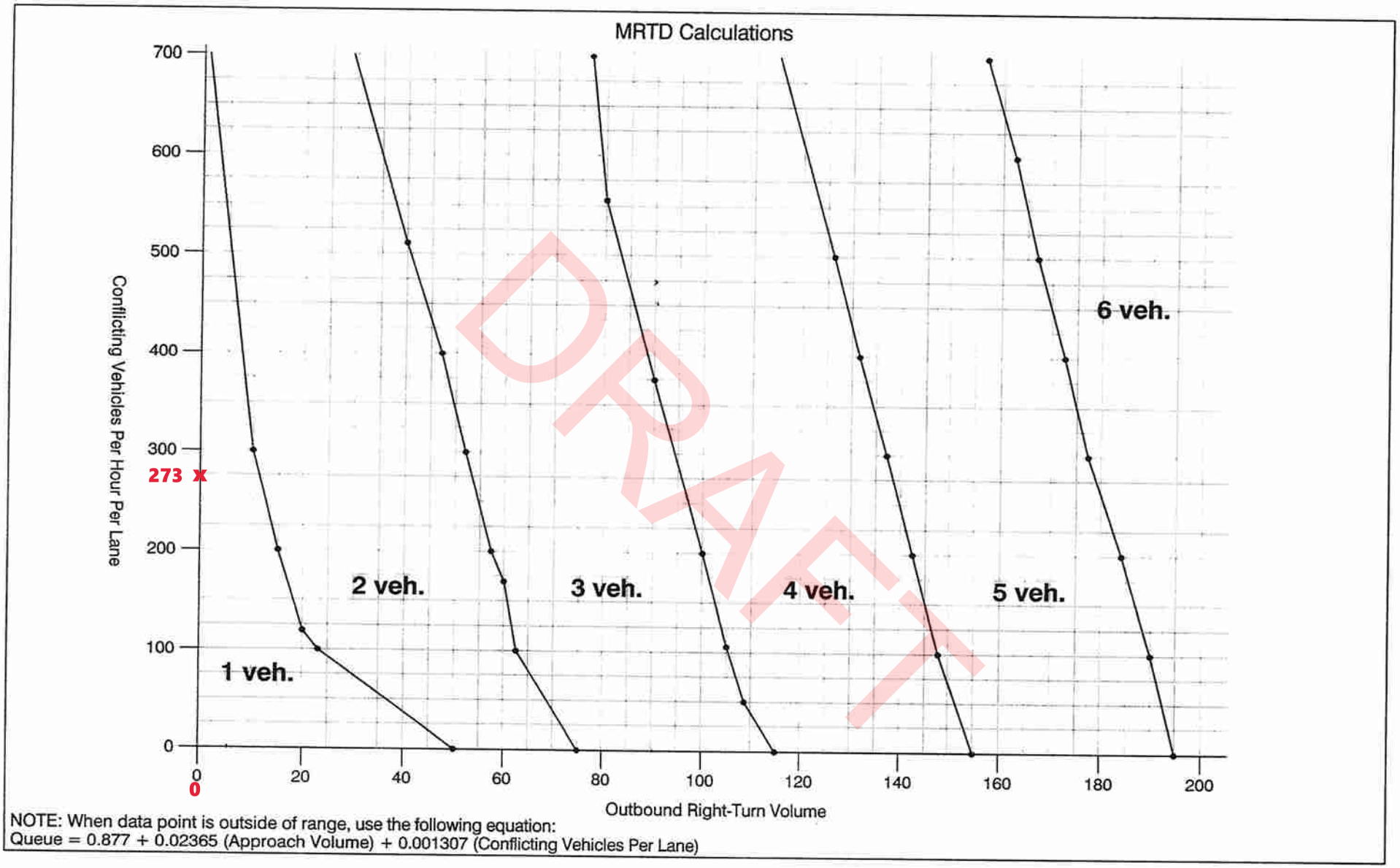
MAXIMUM QUEUE ESTIMATES FOR UNSIGNALIZED RIGHT-TURN DRIVEWAYS

Driveway 3 (south) on Freeport Boulevard

Existing Conditions - PM Peak Hour



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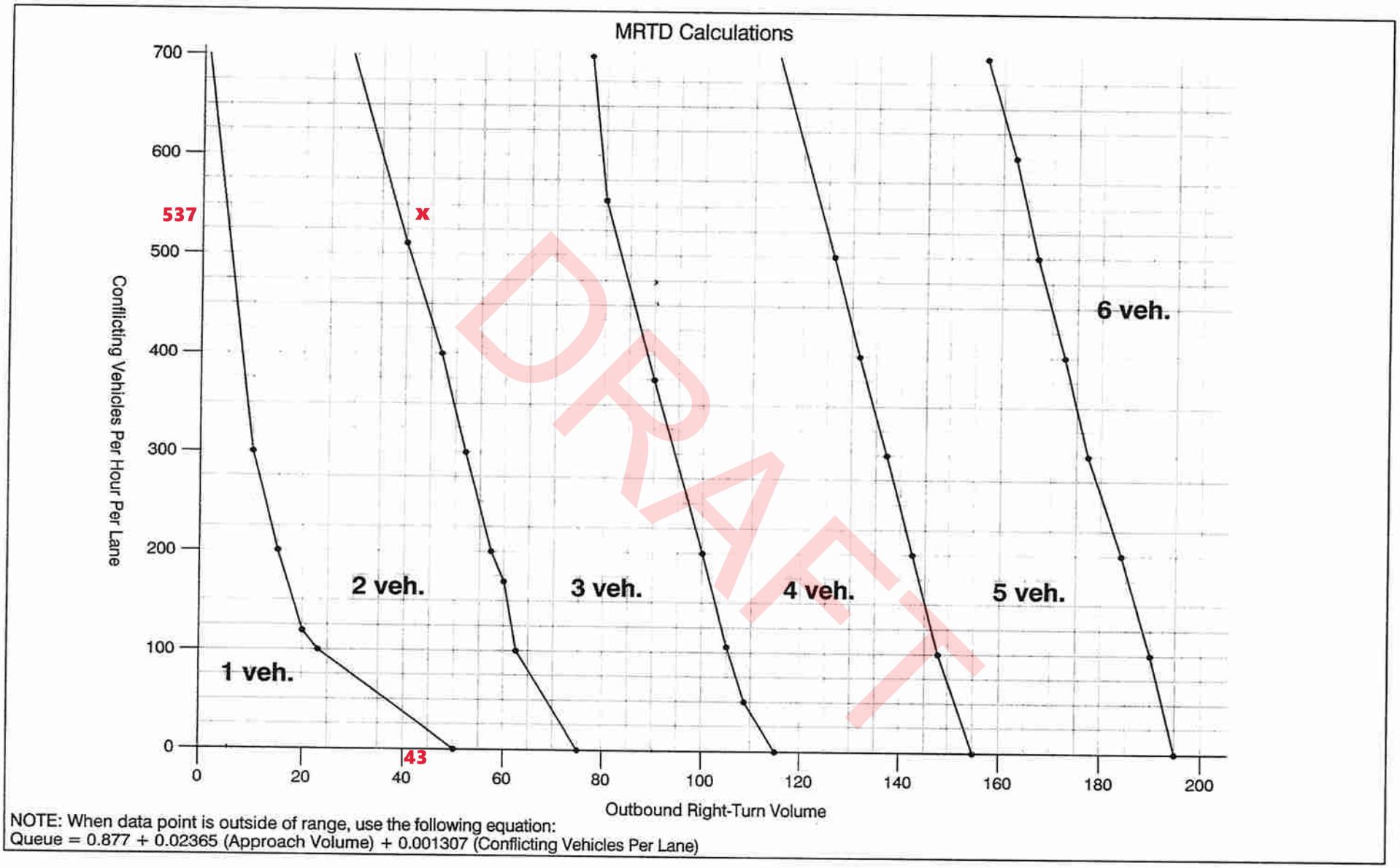
MAXIMUM QUEUE ESTIMATES FOR UNSIGNALIZED RIGHT-TURN DRIVEWAYS

Driveway 1 on Florin Road

Existing Plus Project - AM Peak Hour



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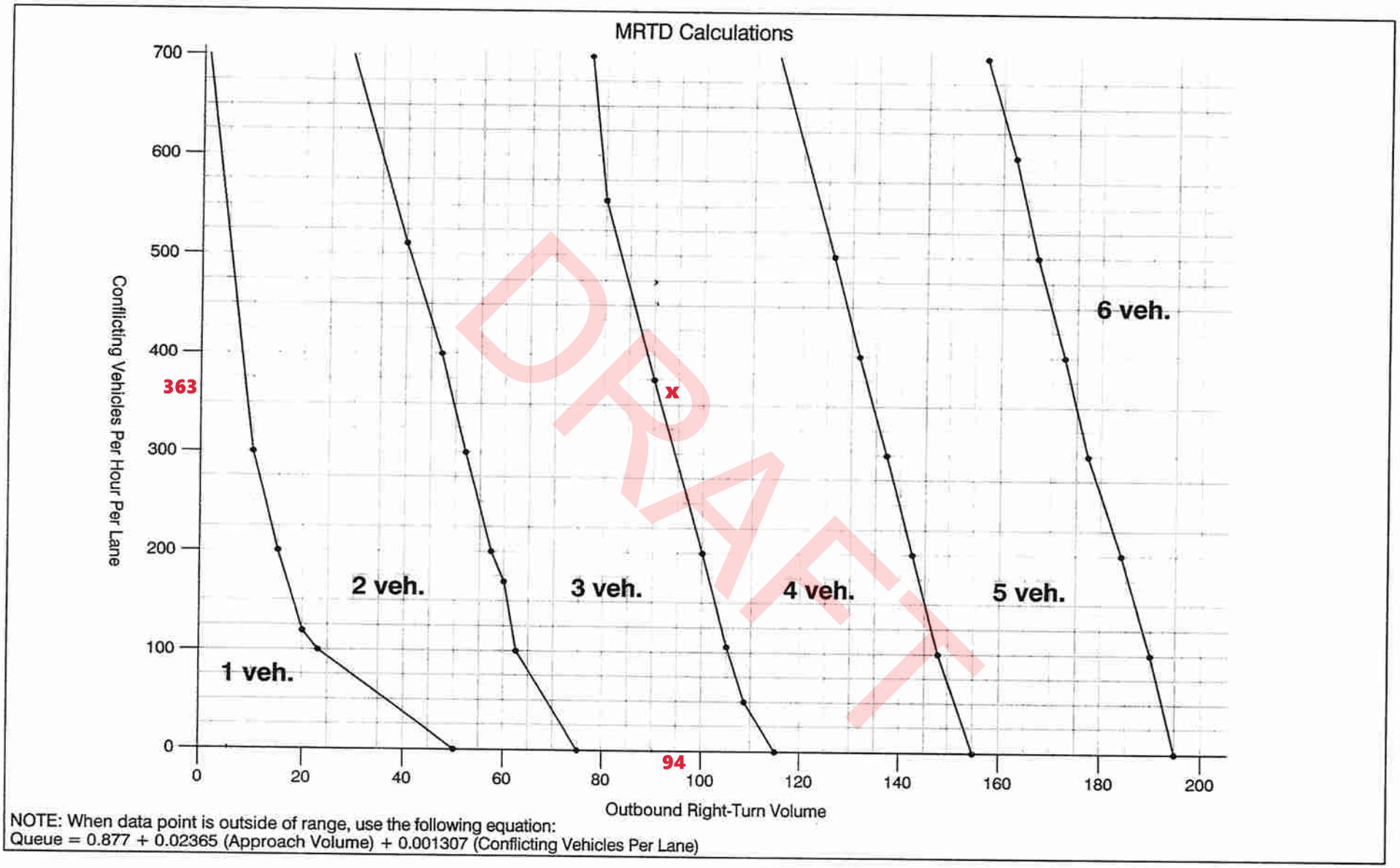
MAXIMUM QUEUE ESTIMATES FOR UNSIGNALIZED RIGHT-TURN DRIVEWAYS

Driveway 2 (north) on Freeport Boulevard

Existing Plus Project - AM Peak Hour



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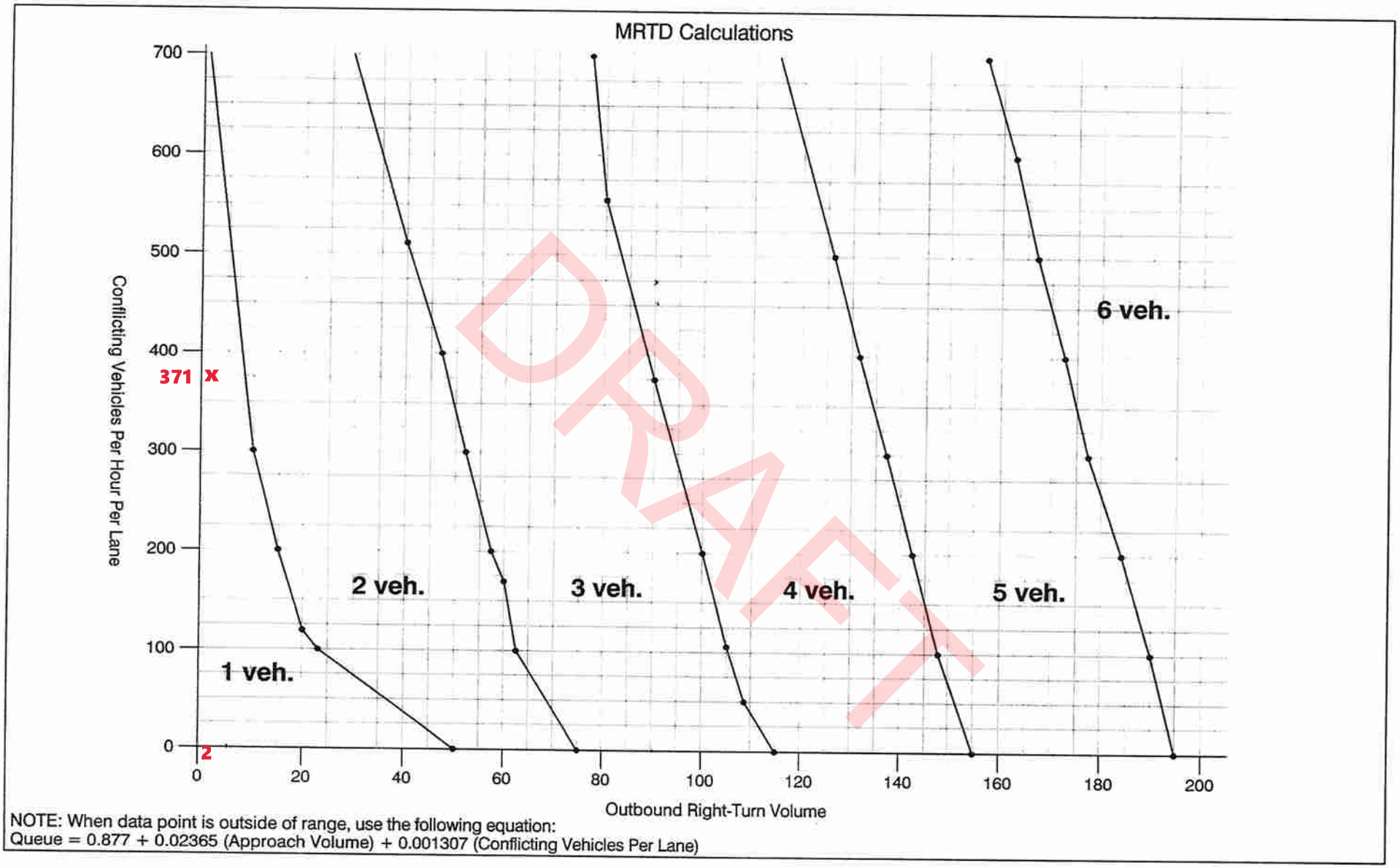
MAXIMUM QUEUE ESTIMATES FOR UNSIGNALIZED RIGHT-TURN DRIVEWAYS

Driveway 3 (south) on Freeport Boulevard

Existing Plus Project - AM Peak Hour



NOTE: When data point is outside of range, use the following equation:
Queue = 0.877 + 0.02365 (Approach Volume) + 0.001307 (Conflicting Vehicles Per Lane)

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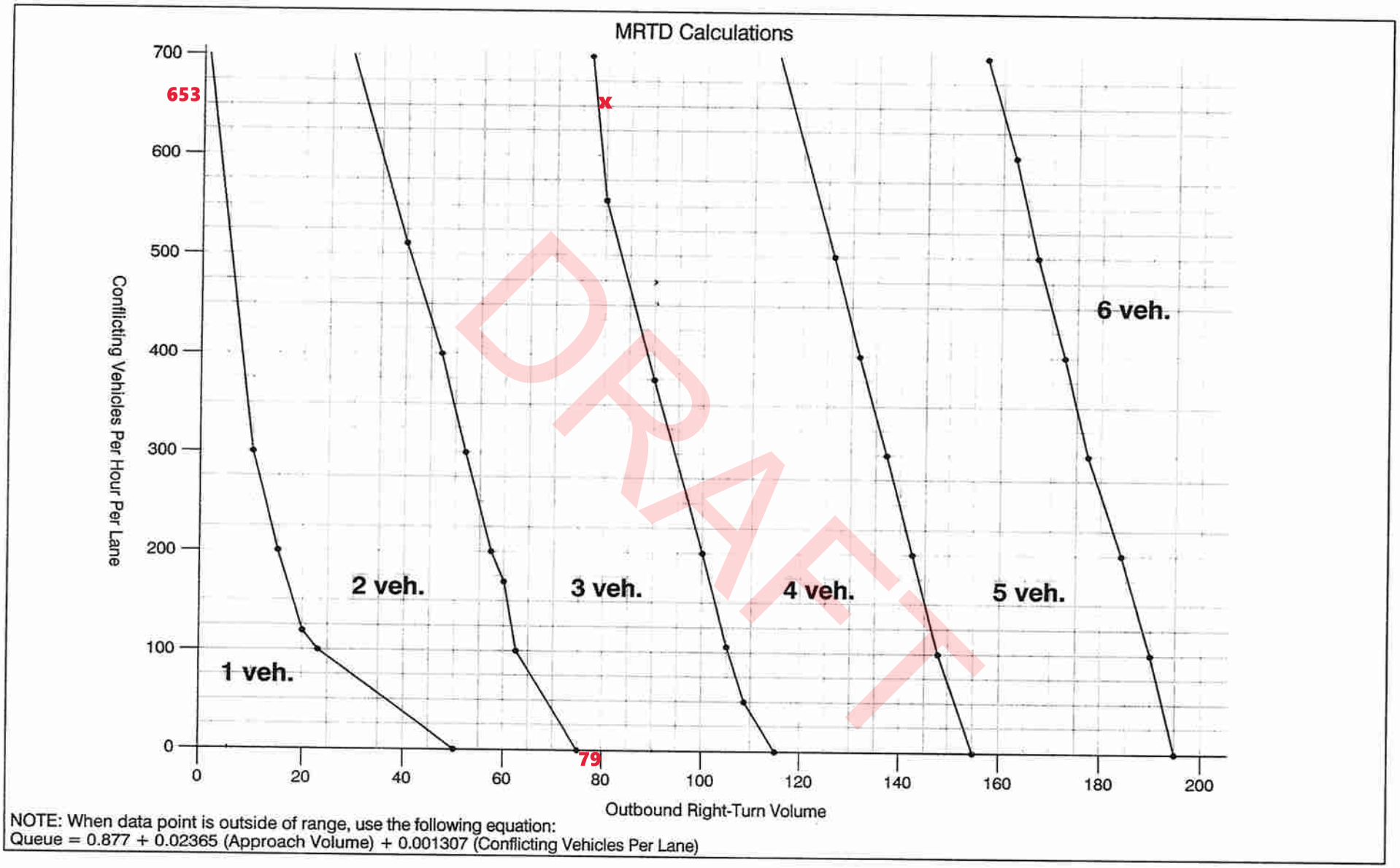
MAXIMUM QUEUE ESTIMATES FOR UNSIGNALIZED RIGHT-TURN DRIVEWAYS

Driveway 1 on Florin Road

Existing Plus Project - PM Peak Hour



NOTE: When data point is outside of range, use the following equation:
Queue = 0.877 + 0.02365 (Approach Volume) + 0.001307 (Conflicting Vehicles Per Lane)

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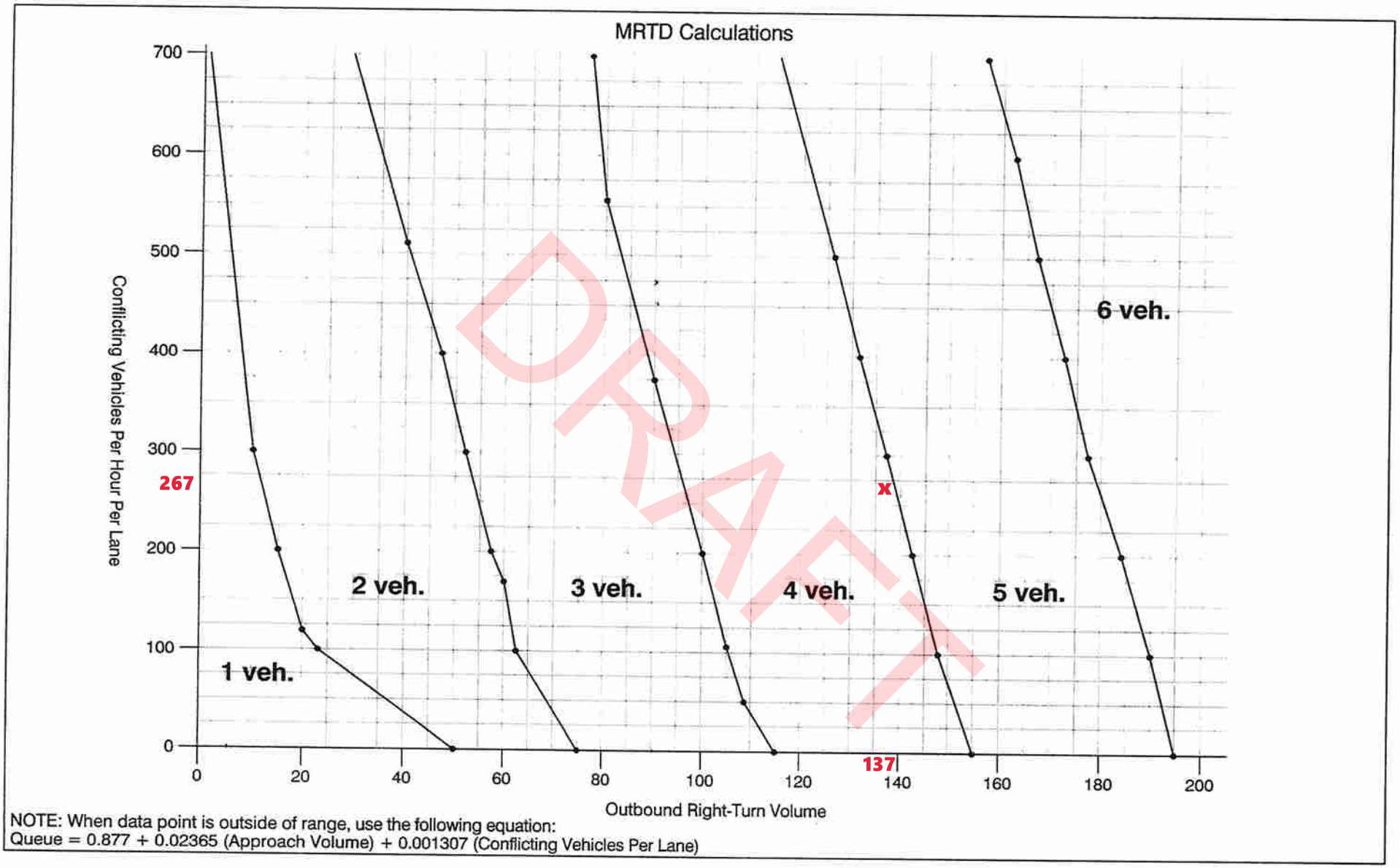
MAXIMUM QUEUE ESTIMATES FOR UNSIGNALIZED RIGHT-TURN DRIVEWAYS

Driveway 2 (north) on Freeport Boulevard

Existing Plus Project - PM Peak Hour



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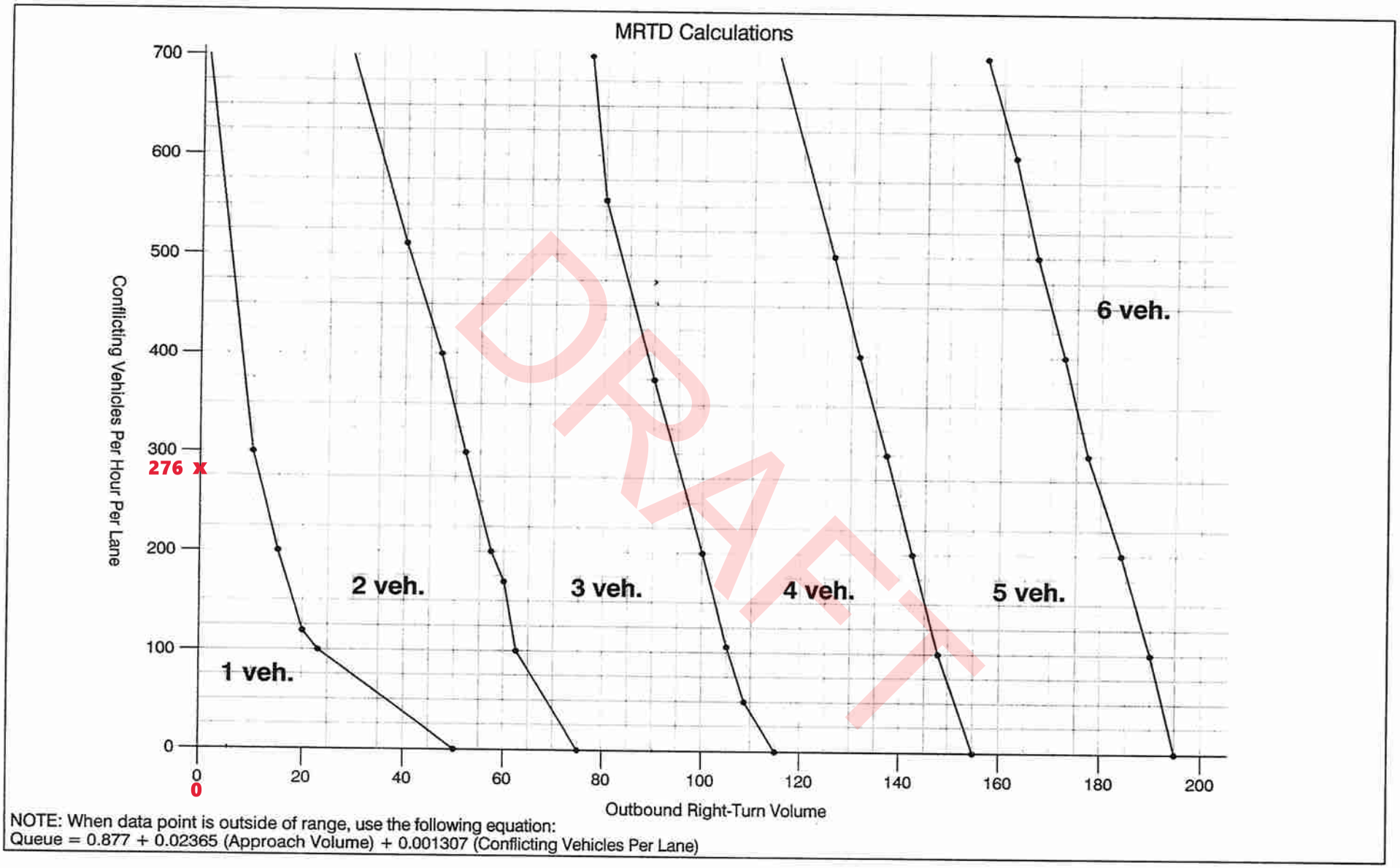
MAXIMUM QUEUE ESTIMATES FOR UNSIGNALIZED RIGHT-TURN DRIVEWAYS

Driveway 3 (south) on Freeport Boulevard

Existing Plus Project - PM Peak Hour



NOTE: When data point is outside of range, use the following equation:
Queue = 0.877 + 0.02365 (Approach Volume) + 0.001307 (Conflicting Vehicles Per Lane)

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MAXIMUM QUEUE ESTIMATES FOR UNSIGNALIZED RIGHT-TURN DRIVEWAYS

Appendix C:

Dutch Bros

Raw Service Rate Data

Dutch Bros Sacramento Region - Average Service Times

Location	Peak Period	Observation Period (minutes)	Number of Arrivals	Average Service Times			
				By Peak Period		Combined: Both Pk Periods	
				Minutes	Seconds	Minutes	Seconds
Northgate	AM	40	57	5.2	314.6	7.0	420.9
	PM	65	89	8.1	489.0		
El Camino	AM	50	49	7.3	437.0	7.2	429.8
	PM	70	67	7.1	424.5		
Stockton	AM					7.3	435.1
	PM	55	41	7.3	435.1		
Elk Grove	AM	70	76	3.7	224.0	3.4	207.0
	PM	55	51	3.0	181.5		
Antelope	AM	65	62	3.3	200.0	5.0	299.4
	PM	78	86	6.2	371.0		
Baseline	AM	45	37	5.8	345.7	6.2	369.7
	PM	95	66	6.4	383.1		
					Average (all sites)	5.8	349.2
					Average (excluding Elk Grove)	6.4	381.8

Location **4130 Northgate Boulevard**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
1	8:28:43 AM	8:37:33 AM	08:50	
2	8:29:21 AM	8:38:04 AM	08:43	
3	8:30:52 AM	8:38:58 AM	08:06	
4	8:31:09 AM	8:38:41 AM	07:32	
5	8:32:50 AM	8:39:24 AM	06:34	
6	8:33:00 AM	8:39:45 AM	06:45	
7	8:33:29 AM	8:40:31 AM	07:02	
8	8:33:56 AM	8:41:00 AM	07:04	
9	8:33:49 AM	8:39:53 AM	06:04	
10	8:34:10 AM	8:42:47 AM	08:37	
11	8:34:25 AM	8:43:47 AM	09:22	Max queue of 21 vehicles from window to end of line
30	9:29:04 AM	9:33:25 AM	04:21	
31	9:29:38 AM	9:33:04 AM	03:26	
32	9:30:10 AM	9:33:54 AM	03:44	
33	9:30:34 AM	9:34:19 AM	03:45	
34	9:31:05 AM	9:34:56 AM	03:51	
35	9:32:18 AM	9:35:40 AM	03:22	
36	9:33:02 AM	9:35:45 AM	02:43	
37	9:33:25 AM	9:36:14 AM	02:49	
38	9:33:58 AM	9:36:33 AM	02:35	
39	9:34:48 AM	9:37:57 AM	03:09	
40	9:35:38 AM	9:42:02 AM	06:24	
41	9:37:37 AM	9:43:05 AM	05:28	
42	9:38:04 AM	9:44:15 AM	06:11	
43	9:38:23 AM	9:44:39 AM	06:16	
44	9:41:17 AM	9:45:01 AM	03:44	
45	9:41:50 AM	9:48:44 AM	06:54	
46	9:41:53 AM	9:47:20 AM	05:27	
47	9:43:25 AM	9:47:24 AM	03:59	
48	9:44:13 AM	9:47:41 AM	03:28	
49	9:44:55 AM	9:48:08 AM	03:13	
50	9:45:13 AM	9:49:57 AM	04:44	
51	9:45:54 AM	9:50:22 AM	04:28	
52	9:46:46 AM	9:50:44 AM	03:58	
53	9:47:33 AM	9:51:51 AM	04:18	
54	9:48:03 AM	9:52:41 AM	04:38	
55	9:48:30 AM	9:52:50 AM	04:20	
56	9:48:58 AM	9:55:58 AM	07:00	
57	9:51:09 AM	9:56:24 AM	05:15	
58	9:51:58 AM	9:56:42 AM	04:44	
59	9:52:08 AM	9:57:32 AM	05:24	
60	9:53:13 AM	9:56:54 AM	03:41	

Location **4130 Northgate Boulevard**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
61	9:53:25 AM	9:57:58 AM	04:33	
62	9:54:11 AM	9:58:46 AM	04:35	
63	9:54:25 AM	9:58:09 AM	03:44	
64	9:55:42 AM	9:59:01 AM	03:19	
65	9:55:56 AM	10:00:07 AM	04:11	
66	9:56:49 AM	9:59:45 AM	02:56	
67	9:57:12 AM	10:01:50 AM	04:38	
68	9:57:42 AM	10:02:38 AM	04:56	
69	9:58:26 AM	10:03:37 AM	05:11	
70	9:59:06 AM	10:04:33 AM	05:27	
71	9:59:31 AM	10:05:32 AM	06:01	
72	10:00:05 AM	10:06:44 AM	06:39	
73	10:00:32 AM	10:07:40 AM	07:08	
74	10:01:28 AM	10:08:11 AM	06:43	
75	10:01:45 AM	10:08:38 AM	06:53	

Location **4130 Northgate Boulevard**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
1	3:02:58 PM	3:10:16 PM	07:18	
2	3:03:23 PM	3:10:18 PM	06:55	left at same time as #1
3	3:03:53 PM	3:11:33 PM	07:40	
4	3:04:57 PM	3:13:30 PM	08:33	
5	3:06:49 PM	3:12:24 PM	05:35	
6	3:07:04 PM	3:12:50 PM	05:46	
7	3:08:01 PM	3:13:02 PM	05:01	
8	3:08:37 PM	3:13:15 PM	04:38	
9	3:09:02 PM	3:15:18 PM	06:16	
10	3:09:15 PM	3:15:50 PM	06:35	
11	3:09:59 PM	3:16:55 PM	06:56	
12	3:10:24 PM	3:17:33 PM	07:09	
13	3:11:37 PM	3:18:36 PM	06:59	
14	3:12:44 PM	3:20:05 PM	07:21	
15	3:13:57 PM	3:20:36 PM	06:39	
16	3:14:17 PM	3:18:47 PM	04:30	
17	3:15:52 PM	3:23:51 PM	07:59	long wait at window
18	3:16:03 PM	3:24:55 PM	08:52	
19	3:16:45 PM	3:25:38 PM	08:53	
20	3:17:19 PM	3:25:55 PM	08:36	
21	3:17:59 PM	3:26:35 PM	08:36	
22	3:18:19 PM	3:26:53 PM	08:34	
23	3:19:33 PM	3:27:22 PM	07:49	
24	3:19:49 PM	3:27:40 PM	07:51	
25	3:20:00 PM	3:28:01 PM	08:01	
26	3:20:20 PM	3:30:11 PM	09:51	
27	3:20:52 PM	3:30:27 PM	09:35	
28	3:21:17 PM	3:31:18 PM	10:01	
29	3:22:52 PM	3:32:02 PM	09:10	
30	3:23:53 PM	3:32:29 PM	08:36	
31	3:25:55 PM	3:33:28 PM	07:33	
32	3:26:09 PM	3:36:26 PM	10:17	
33	3:26:11 PM	3:33:58 PM	07:47	
34	3:27:01 PM	3:36:40 PM	09:39	
35	3:27:53 PM	3:36:56 PM	09:03	
36	3:29:12 PM	3:37:56 PM	08:44	
37	3:29:20 PM	3:38:09 PM	08:49	
38	3:31:01 PM	3:37:34 PM	06:33	
39	3:31:37 PM	3:39:44 PM	08:07	
40	3:32:49 PM	3:40:45 PM	07:56	
41	3:33:02 PM	3:41:09 PM	08:07	
42	3:33:39 PM	3:42:14 PM	08:35	

Location **4130 Northgate Boulevard**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
43	3:34:54 PM	3:44:02 PM	09:08	
44	3:35:26 PM	3:44:04 PM	08:38	
45	3:35:35 PM	3:44:18 PM	08:43	
46	3:36:19 PM	3:44:57 PM	08:38	
47	3:37:06 PM	3:45:38 PM	08:32	
48	3:37:06 PM	3:46:06 PM	09:00	
49	3:37:42 PM	3:47:03 PM	09:21	
50	3:38:03 PM	3:46:35 PM	08:32	
51	3:39:00 PM	3:45:55 PM	06:55	
52	3:39:37 PM	3:46:15 PM	06:38	
53	3:40:05 PM	3:48:24 PM	08:19	
54	3:42:54 PM	3:48:33 PM	05:39	delay in getting order while organizing queue
55	3:43:54 PM	3:49:26 PM	05:32	
56	3:43:50 PM	3:50:51 PM	07:01	
57	3:44:40 PM	3:50:29 PM	05:49	
58	3:44:48 PM	3:51:13 PM	06:25	
59	3:45:17 PM	3:54:44 PM	09:27	
60	3:46:10 PM	3:51:43 PM	05:33	
61	3:46:22 PM	3:52:40 PM	06:18	
62	3:47:01 PM	3:53:39 PM	06:38	
63	3:46:44 PM	3:54:38 PM	07:54	Queue of 21 vehicles from window to end of line
64	3:47:48 PM	3:56:40 PM	08:52	
65	3:48:41 PM	3:56:08 PM	07:27	
66	3:49:12 PM	3:57:19 PM	08:07	
67	3:50:18 PM	3:57:44 PM	07:26	
68	3:51:04 PM	3:58:18 PM	07:14	
69	3:51:52 PM	3:59:32 PM	07:40	
70	3:52:29 PM	4:03:02 PM	10:33	
71	3:52:31 PM	4:01:28 PM	08:57	
72	3:53:24 PM	4:03:06 PM	09:42	was stuck behind #70
73	3:53:26 PM	4:06:28 PM	13:02	
74	3:54:22 PM	4:03:44 PM	09:22	
75	3:55:30 PM	4:03:58 PM	08:28	
76	3:56:57 PM	4:05:14 PM	08:17	
77	3:57:57 PM	4:06:40 PM	08:43	
78	3:58:42 PM	4:08:16 PM	09:34	
79	3:58:49 PM	4:08:57 PM	10:08	
80	3:59:21 PM	4:08:46 PM	09:25	
81	4:00:32 PM	4:10:17 PM	09:45	
82	4:00:54 PM	4:09:37 PM	08:43	
83	4:01:32 PM	4:10:24 PM	08:52	
84	4:01:45 PM	4:10:42 PM	08:57	

Location **4130 Northgate Boulevard**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
85	4:02:22 PM	4:11:03 PM	08:41	
86	4:04:41 PM	4:15:47 PM	11:06	left at same time as #87
87	4:05:21 PM	4:15:45 PM	10:24	long delay at window
88	4:05:56 PM	4:16:28 PM	10:32	
89	4:08:10 PM	4:17:26 PM	09:16	

Location **4250 El Camino Avenue**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
1	8:02:00 AM	8:11:22 AM	09:22	
2	8:03:00 AM	8:08:59 AM	05:59	
3	8:04:19 AM	8:11:56 AM	07:37	
4	8:06:21 AM	8:12:38 AM	06:17	
5	8:06:54 AM	8:13:04 AM	06:10	
6	8:07:18 AM	8:13:26 AM	06:08	
7	8:08:52 AM	8:13:45 AM	04:53	
8	8:08:49 AM	8:14:06 AM	05:17	
9	8:09:47 AM	8:15:24 AM	05:37	
10	8:10:17 AM	8:14:55 AM	04:38	
11	8:12:29 AM	8:16:00 AM	03:31	delayed by outbound queue
12	8:13:33 AM	8:16:26 AM	02:53	
13	8:13:41 AM	8:20:45 AM	07:04	extra long order
14	8:14:11 AM	8:22:56 AM	08:45	
15	8:17:08 AM	8:23:16 AM	06:08	
16	8:19:09 AM	8:23:56 AM	04:47	
17	8:20:03 AM	8:25:43 AM	05:40	
18	8:21:27 AM	8:27:07 AM	05:40	
19	8:21:45 AM	8:31:48 AM	10:03	6+ drinks - had to wait behind #22
20	8:22:05 AM	8:30:54 AM	08:49	
21	8:23:45 AM	8:32:16 AM	08:31	received order quickly once #19, 22 received theirs
22	8:24:28 AM	8:33:07 AM	08:39	long wait for drink at window
23	8:25:27 AM	8:35:21 AM	09:54	
24	8:25:35 AM	8:35:43 AM	10:08	delayed by #25
25	8:26:46 AM	8:38:12 AM	11:26	
26	8:27:51 AM	8:40:58 AM	13:07	
27	8:27:56 AM	8:38:18 AM	10:22	received order while waiting behind #26
28	8:29:06 AM	8:38:14 AM	09:08	received order while waiting behind #26
29	8:29:52 AM	8:38:34 AM	08:42	received order while waiting behind #26
30	8:31:07 AM	8:39:00 AM	07:53	received order while waiting behind #26
31	8:31:50 AM	8:41:10 AM	09:20	
32	8:32:05 AM	8:41:31 AM	09:26	
33	8:33:10 AM	8:39:19 AM	06:09	11 in queue (measured from window)
34	8:39:23 AM	8:43:27 AM	04:04	
35	8:40:11 AM	8:56:19 AM	16:08	
36	8:42:09 AM	8:46:37 AM	04:28	
37	8:42:48 AM	8:45:33 AM	02:45	
38	8:43:50 AM	8:47:15 AM	03:25	
39	8:44:34 AM	8:49:50 AM	05:16	needed to wait for multiple drinks
40	8:45:43 AM	8:51:53 AM	06:10	
41	8:46:14 AM	8:52:29 AM	06:15	
42	8:48:32 AM	8:56:14 AM	07:42	

Location **4250 El Camino Avenue**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
43	8:48:35 AM	8:56:45 AM	08:10	
44	8:49:05 AM	8:53:23 AM	04:18	
45	8:50:52 AM	8:58:39 AM	07:47	
46	8:50:06 AM	9:02:01 AM	11:55	
47	8:54:17 AM	9:00:40 AM	06:23	
48	8:50:55 AM	8:57:42 AM	06:47	12 in queue (measured from window)
49	8:51:47 AM	8:59:05 AM	07:18	

Location **4250 El Camino Avenue**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
1	1:50:57 PM	1:56:08 PM	05:11	9 cars in queue
2	1:51:12 PM	1:58:16 PM	07:04	
3	1:51:47 PM	1:59:03 PM	07:16	
4	1:53:42 PM	1:59:58 PM	06:16	
5	1:54:09 PM	2:02:20 PM	08:11	
6	1:55:02 PM	2:01:02 PM	06:00	
7	1:56:29 PM	2:01:39 PM	05:10	
8	1:57:48 PM	2:05:18 PM	07:30	
9	1:58:31 PM	2:05:08 PM	06:37	
10	1:59:55 PM	2:04:28 PM	04:33	
11	2:02:46 PM	2:07:51 PM	05:05	
12	2:04:09 PM	2:10:15 PM	06:06	
13	2:04:51 PM	2:11:09 PM	06:18	
14	2:05:31 PM	2:11:45 PM	06:14	
15	2:06:07 PM	2:13:08 PM	07:01	
16	2:07:40 PM	2:12:13 PM	04:33	
17	2:07:45 PM	2:14:41 PM	06:56	
18	2:10:32 PM	2:17:18 PM	06:46	
19	2:10:51 PM	2:16:33 PM	05:42	
20	2:11:31 PM	2:17:11 PM	05:40	
21	2:11:40 PM	2:19:36 PM	07:56	
22	2:15:21 PM	2:22:43 PM	07:22	
23	2:15:12 PM	2:23:07 PM	07:55	
24	2:17:15 PM	2:24:07 PM	06:52	
25	2:18:21 PM	2:24:38 PM	06:17	
26	2:20:25 PM	2:26:48 PM	06:23	
27	2:20:28 PM	2:27:42 PM	07:14	
28	2:21:13 PM	2:27:53 PM	06:40	
29	2:21:18 PM	2:31:35 PM	10:17	multiple drink order
30	2:22:25 PM	2:29:12 PM	06:47	
31	2:22:40 PM	2:32:35 PM	09:55	
32	2:23:01 PM	2:33:49 PM	10:48	
33	2:23:15 PM	2:33:31 PM	10:16	
34	2:23:35 PM	2:33:40 PM	10:05	
35	2:24:43 PM	2:35:05 PM	10:22	
36	2:23:43 PM	2:34:09 PM	10:26	no vehicles arrived for a couple mins - queue to trash
37	2:30:02 PM	2:34:59 PM	04:57	
38	2:30:38 PM	2:35:10 PM	04:32	
39	2:30:09 PM	2:39:33 PM	09:24	
40	2:34:27 PM	2:40:48 PM	06:21	
41	2:35:53 PM	2:42:52 PM	06:59	
42	2:35:57 PM	2:41:14 PM	05:17	

Location **4250 El Camino Avenue**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
43	2:37:30 PM	2:44:14 PM	06:44	
44	2:37:34 PM	2:42:13 PM	04:39	
45	2:38:21 PM	2:44:59 PM	06:38	
46	2:38:28 PM	2:46:17 PM	07:49	
47	2:42:34 PM	2:47:18 PM	04:44	
48	2:42:39 PM	2:48:32 PM	05:53	
49	2:42:50 PM	2:47:33 PM	04:43	
50	2:42:31 PM	2:51:17 PM	08:46	
51	2:45:38 PM	2:50:50 PM	05:12	
52	2:45:41 PM	2:50:55 PM	05:14	
53	2:46:59 PM	2:51:34 PM	04:35	
54	2:49:14 PM	2:55:50 PM	06:36	5 vehicles queued
55	2:50:37 PM	2:59:56 PM	09:19	
56	2:50:44 PM	2:56:48 PM	06:04	
57	2:51:26 PM	2:56:25 PM	04:59	
58	2:52:22 PM	2:59:29 PM	07:07	
59	2:53:29 PM	3:02:29 PM	09:00	
60	2:53:33 PM	3:03:34 PM	10:01	
61	2:54:58 PM	3:04:05 PM	09:07	5+ drink order
62	2:55:46 PM	3:05:05 PM	09:19	
63	2:56:44 PM	3:06:19 PM	09:35	
64	2:57:35 PM	3:05:45 PM	08:10	
65	2:59:20 PM	3:08:15 PM	08:55	
66	3:00:52 PM	3:07:11 PM	06:19	
67	3:00:58 PM	3:08:19 PM	07:21	

Location **5140 Stockton Boulevard**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
1	2:45:49 PM	2:50:57 PM	05:08	4-5 cars ahead
2	2:46:23 PM	2:51:50 PM	05:27	
3	2:47:09 PM	2:52:42 PM	05:33	
4	2:47:58 PM	2:54:00 PM	06:02	
5	2:49:00 PM	2:54:43 PM	05:43	
6	2:49:46 PM	2:56:15 PM	06:29	long order time
7	2:52:08 PM	2:57:07 PM	04:59	queue to drivethru entrance
8	2:53:05 PM	3:01:23 PM	08:18	
9	2:54:50 PM	3:02:30 PM	07:40	
10	2:55:10 PM	3:03:32 PM	08:22	
11	2:55:33 PM	3:03:56 PM	08:23	
12	2:56:26 PM	3:05:49 PM	09:23	
13	2:56:41 PM	3:06:57 PM	10:16	
14	2:56:47 PM	3:09:04 PM	12:17	
15	2:57:33 PM	3:09:56 PM	12:23	
16	2:58:21 PM	3:10:46 PM	12:25	
17	3:00:27 PM	3:11:09 PM	10:42	
18	3:02:43 PM	3:12:30 PM	09:47	
19	3:03:00 PM	3:13:38 PM	10:38	
20	3:04:20 PM	3:15:51 PM	11:31	
21	3:07:19 PM	3:17:43 PM	10:24	
22	3:08:18 PM	3:18:11 PM	09:53	
23	3:09:32 PM	3:19:57 PM	10:25	
24	3:11:40 PM	3:20:19 PM	08:39	
25	3:13:04 PM	3:21:33 PM	08:29	
26	3:15:04 PM	3:21:58 PM	06:54	
27	3:16:26 PM	3:22:56 PM	06:30	
28	3:18:24 PM	3:24:24 PM	06:00	
29	3:19:06 PM	3:25:02 PM	05:56	
30	3:20:54 PM	3:25:34 PM	04:40	
31	3:25:08 PM	3:27:54 PM	02:46	
32	3:25:43 PM	3:29:09 PM	03:26	
33	3:26:36 PM	3:31:12 PM	04:36	only 4 cars queued
34	3:30:36 PM	3:34:42 PM	04:06	first car in awhile
35	3:32:32 PM	3:36:01 PM	03:29	
36	3:33:06 PM	3:36:41 PM	03:35	
37	3:33:54 PM	3:37:57 PM	04:03	short queue - only one attendant taking orders
38	3:35:18 PM	3:40:24 PM	05:06	
39	3:36:36 PM	3:41:26 PM	04:50	
40	3:37:15 PM	3:43:42 PM	06:27	long order time
41	3:39:26 PM	3:45:05 PM	05:39	

Location **8610 Elk Grove Boulevard**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
1	8:03:15 AM	8:05:03 AM	01:48	
2	8:04:40 AM	8:07:55 AM	03:15	
3	8:05:28 AM	8:09:33 AM	04:05	
4	8:06:52 AM	8:09:50 AM	02:58	
5	8:07:19 AM	8:10:01 AM	02:42	
6	8:08:35 AM	8:10:19 AM	01:44	
7	8:09:42 AM	8:11:09 AM	01:27	
8	8:10:27 AM	8:12:22 AM	01:55	
9	8:10:49 AM	8:13:25 AM	02:36	
10	8:11:52 AM	8:15:37 AM	03:45	
11	8:12:17 AM	8:15:41 AM	03:24	
12	8:13:29 AM	8:16:39 AM	03:10	
13	8:14:33 AM	8:18:38 AM	04:05	
14	8:14:56 AM	8:18:59 AM	04:03	
15	8:16:46 AM	8:20:25 AM	03:39	
16	8:17:21 AM	8:21:54 AM	04:33	
17	8:18:43 AM	8:22:52 AM	04:09	
18	8:19:33 AM	8:23:37 AM	04:04	
19	8:20:54 AM	8:23:48 AM	02:54	
20	8:21:45 AM	8:24:02 AM	02:17	
21	8:22:20 AM	8:24:14 AM	01:54	
22	8:22:46 AM	8:26:58 AM	04:12	
23	8:24:18 AM	8:27:12 AM	02:54	
24	8:24:45 AM	8:29:06 AM	04:21	
25	8:25:16 AM	8:29:25 AM	04:09	
26	8:25:48 AM	8:29:51 AM	04:03	
27	8:26:22 AM	8:30:30 AM	04:08	
28	8:27:23 AM	8:30:44 AM	03:21	
29	8:28:13 AM	8:31:23 AM	03:10	
30	8:29:31 AM	8:32:50 AM	03:19	
31	8:30:40 AM	8:33:00 AM	02:20	
32	8:30:56 AM	8:33:33 AM	02:37	
33	8:32:09 AM	8:35:13 AM	03:04	
34	8:32:57 AM	8:36:39 AM	03:42	
35	8:33:45 AM	8:37:19 AM	03:34	
36	8:34:15 AM	8:38:43 AM	04:28	
37	8:35:23 AM	8:39:09 AM	03:46	
38	8:36:04 AM	8:39:38 AM	03:34	
39	8:37:26 AM	8:39:54 AM	02:28	
40	8:37:35 AM	8:40:37 AM	03:02	
41	8:38:12 AM	8:40:48 AM	02:36	
42	8:38:59 AM	8:42:07 AM	03:08	

Location **8610 Elk Grove Boulevard**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
43	8:40:44 AM	8:43:39 AM	02:55	
44	8:41:35 AM	8:44:09 AM	02:34	
45	8:42:48 AM	8:45:16 AM	02:28	
46	8:43:02 AM	8:46:18 AM	03:16	
47	8:44:48 AM	8:47:40 AM	02:52	no cars queued
48	8:47:10 AM	8:50:57 AM	03:47	spent long time ordering
49	8:50:01 AM	8:51:19 AM	01:18	
50	8:50:16 AM	8:51:25 AM	01:09	
51	8:50:25 AM	8:51:33 AM	01:08	
52	8:50:48 AM	8:52:11 AM	01:23	
53	8:51:41 AM	8:53:11 AM	01:30	
54	8:52:00 AM	8:53:26 AM	01:26	
55	8:52:28 AM	8:58:21 AM	05:53	
56	8:52:51 AM	8:59:20 AM	06:29	shift change
57	8:53:31 AM	9:01:24 AM	07:53	
58	8:53:53 AM	9:01:40 AM	07:47	
59	8:55:23 AM	9:02:19 AM	06:56	
60	8:55:38 AM	9:03:36 AM	07:58	
61	8:56:18 AM	9:04:22 AM	08:04	
62	8:56:28 AM	9:05:02 AM	08:34	
63	8:57:21 AM	9:07:14 AM	09:53	
64	8:57:28 AM	9:07:54 AM	10:26	
65	9:02:27 AM	9:10:02 AM	07:35	
66	9:03:39 AM	9:10:44 AM	07:05	
67	9:06:52 AM	9:10:49 AM	03:57	cars queued to raised median
68	9:08:11 AM	9:10:58 AM	02:47	
69	9:08:58 AM	9:11:12 AM	02:14	drink served to third car in queue
70	9:10:42 AM	9:12:44 AM	02:02	
71	9:11:03 AM	9:12:50 AM	01:47	
72	9:11:08 AM	9:13:47 AM	02:39	
73	9:11:18 AM	9:14:26 AM	03:08	
74	9:11:28 AM	9:15:24 AM	03:56	
75	9:12:21 AM	9:15:28 AM	03:07	
76	9:14:32 AM	9:15:59 AM	01:27	

Location **8610 Elk Grove Boulevard**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
1	4:10:20 PM	4:14:55 PM	04:35	est. 6 cars in queue
2	4:11:37 PM	4:15:44 PM	04:07	
3	4:11:41 PM	4:16:02 PM	04:21	
4	4:12:11 PM	4:16:25 PM	04:14	
5	4:12:22 PM	4:16:29 PM	04:07	
6	4:13:35 PM	4:16:56 PM	03:21	
7	4:13:46 PM	4:17:33 PM	03:47	
8	4:16:36 PM	4:19:23 PM	02:47	no vehicles in queue
9	4:17:59 PM	4:19:48 PM	01:49	
10	4:18:50 PM	4:22:28 PM	03:38	
11	4:20:19 PM	4:23:11 PM	02:52	
12	4:20:53 PM	4:23:17 PM	02:24	
13	4:21:28 PM	4:25:29 PM	04:01	
14	4:21:48 PM	4:25:48 PM	04:00	
15	4:24:18 PM	4:26:06 PM	01:48	
16	4:25:14 PM	4:27:14 PM	02:00	
17	4:26:02 PM	4:28:28 PM	02:26	
18	4:27:21 PM	4:29:57 PM	02:36	
19	4:27:40 PM	4:30:32 PM	02:52	
20	4:29:17 PM	4:32:08 PM	02:51	
21	4:30:16 PM	4:33:30 PM	03:14	only vehicle in queue
22	4:32:27 PM	4:34:49 PM	02:22	only vehicle in queue
23	4:35:39 PM	4:37:09 PM	01:30	
24	4:36:40 PM	4:38:49 PM	02:09	
25	4:37:29 PM	4:39:04 PM	01:35	
26	4:38:26 PM	4:40:40 PM	02:14	
27	4:39:16 PM	4:41:46 PM	02:30	
28	4:40:16 PM	4:42:05 PM	01:49	
29	4:41:07 PM	4:42:55 PM	01:48	
30	4:41:25 PM	4:43:46 PM	02:21	
31	4:42:43 PM	4:46:23 PM	03:40	
32	4:43:02 PM	4:47:06 PM	04:04	3 attendants out
33	4:45:01 PM	4:47:38 PM	02:37	
34	4:45:54 PM	4:47:47 PM	01:53	no vehicles in queue
35	4:49:39 PM	4:50:53 PM	01:14	
36	4:50:11 PM	4:51:27 PM	01:16	
37	4:50:19 PM	4:52:49 PM	02:30	
38	4:52:19 PM	4:55:13 PM	02:54	
39	4:52:38 PM	4:55:49 PM	03:11	
40	4:53:04 PM	4:56:30 PM	03:26	
41	4:53:39 PM	4:56:58 PM	03:19	
42	4:54:53 PM	4:57:28 PM	02:35	

Location **8610 Elk Grove Boulevard**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
43	4:54:57 PM	4:57:58 PM	03:01	
44	4:56:16 PM	4:58:45 PM	02:29	
45	4:57:34 PM	5:02:20 PM	04:46	
46	4:57:54 PM	5:03:44 PM	05:50	
47	4:59:52 PM	5:03:47 PM	03:55	
48	5:00:52 PM	5:03:56 PM	03:04	
49	5:01:50 PM	5:04:56 PM	03:06	
50	5:02:43 PM	5:07:24 PM	04:41	
51	5:02:50 PM	5:07:28 PM	04:38	no cars queued

Location **4341 Antelope Road**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
1	8:50:49 AM	8:54:02 AM	03:13	served in queue with 2 cars ahead of it in line so additional
2	8:51:06 AM	8:56:22 AM	05:16	
3	8:52:59 AM	8:55:50 AM	02:51	served w/ 1 ahead
4	8:53:17 AM	8:56:36 AM	03:19	
5	8:53:34 AM	8:57:05 AM	03:31	
6	8:55:01 AM	8:57:24 AM	02:23	
7	8:56:09 AM	8:58:20 AM	02:11	
8	8:56:15 AM	8:59:41 AM	03:26	
9	8:56:50 AM	9:00:16 AM	03:26	
10	8:59:20 AM	9:01:46 AM	02:26	only car in queue
11	9:02:06 AM	9:04:21 AM	02:15	
12	9:02:39 AM	9:05:01 AM	02:22	
13	9:03:07 AM	9:05:20 AM	02:13	
14	9:03:32 AM	9:06:28 AM	02:56	2 attendants - able to serve vehicles as they arrive
15	9:04:17 AM	9:07:35 AM	03:18	
16	9:04:55 AM	9:08:09 AM	03:14	
17	9:06:03 AM	9:08:54 AM	02:51	
18	9:06:48 AM	9:09:20 AM	02:32	
19	9:09:27 AM	9:11:07 AM	01:40	
20	9:11:42 AM	9:13:53 AM	02:11	
21	9:12:18 AM	9:14:43 AM	02:25	
22	9:12:36 AM	9:15:52 AM	03:16	
23	9:13:09 AM	9:16:38 AM	03:29	
24	9:13:49 AM	9:19:29 AM	05:40	
25	9:15:20 AM	9:20:39 AM	05:19	
26	9:16:24 AM	9:20:51 AM	04:27	
27	9:17:50 AM	9:21:23 AM	03:33	
28	9:18:40 AM	9:22:36 AM	03:56	
29	9:19:22 AM	9:23:01 AM	03:39	
30	9:20:47 AM	9:23:27 AM	02:40	
31	9:21:34 AM	9:24:18 AM	02:44	2 drink order
32	9:21:54 AM	9:24:38 AM	02:44	
33	9:22:24 AM	9:25:49 AM	03:25	
34	9:24:00 AM	9:28:22 AM	04:22	
35	9:25:27 AM	9:26:49 AM	01:22	
36	9:26:41 AM	9:30:21 AM	03:40	
37	9:26:43 AM	9:32:32 AM	05:49	8 drink order
38	9:27:58 AM	9:32:54 AM	04:56	
39	9:29:24 AM	9:33:11 AM	03:47	
40	9:30:23 AM	9:33:04 AM	02:41	
41	9:31:00 AM	9:35:38 AM	04:38	4 drinks
42	9:33:15 AM	9:36:16 AM	03:01	

Location **4341 Antelope Road**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
43	9:34:58 AM	9:36:40 AM	01:42	
44	9:35:17 AM	9:37:16 AM	01:59	
45	9:35:56 AM	9:42:56 AM	07:00	long ordering process - 5 additional vehicles queue vehind the
46	9:36:28 AM	9:39:31 AM	03:03	
47	9:41:23 AM	9:43:44 AM	02:21	
48	9:42:41 AM	9:44:07 AM	01:26	
49	9:43:15 AM	9:47:12 AM	03:57	
50	9:43:35 AM	9:46:26 AM	02:51	
51	9:43:53 AM	9:48:02 AM	04:09	
52	9:44:59 AM	9:49:26 AM	04:27	
53	9:46:06 AM	9:50:47 AM	04:41	
54	9:46:42 AM	9:51:19 AM	04:37	
55	9:47:06 AM	9:50:49 AM	03:43	
56	9:47:38 AM	9:52:02 AM	04:24	
57	9:47:52 AM	9:52:37 AM	04:45	6 cars in queue (only one lane)
58	9:49:09 AM	9:53:16 AM	04:07	
59	9:50:14 AM	9:53:27 AM	03:13	
60	9:51:36 AM	9:53:02 AM	01:26	served w/ 2 vehicle ahead
61	9:52:46 AM	9:55:15 AM	02:29	only vehicle in queue
62	9:55:09 AM	9:56:21 AM	01:12	only in queue when left at 9:56 AM

Location **4341 Antelope Road**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
1	2:36:25 PM	2:40:19 PM	03:54	
2	2:37:14 PM	2:39:50 PM	02:36	
3	2:37:25 PM	2:40:33 PM	03:08	
4	2:38:59 PM	2:42:22 PM	03:23	talking with barista at window when no queue
5	2:41:57 PM	2:43:20 PM	01:23	no queue when arrived (cleared at 2:40)
6	2:45:17 PM	2:46:47 PM	01:30	no queue when arrived
7	2:46:30 PM	2:49:22 PM	02:52	arrived at 2:45, but waited to order. Didn't approach staff upor
8	2:46:29 PM	2:49:41 PM	03:12	first drink came out quick; second drink took an additional 90
9	2:48:11 PM	2:50:44 PM	02:33	
10	2:48:29 PM	2:54:46 PM	06:17	#19 cut in front - got drink immediately
11	2:49:02 PM	2:54:54 PM	05:52	#19 cut in front - got drink immediately
12	2:49:14 PM	2:54:09 PM	04:55	
13	2:50:06 PM	2:56:30 PM	06:24	4 drinks
14	2:51:46 PM	2:57:16 PM	05:30	
15	2:53:07 PM	2:59:34 PM	06:27	
16	2:54:14 PM	3:00:51 PM	06:37	
17	2:53:27 PM	2:57:52 PM	04:25	
18	2:55:21 PM	3:02:10 PM	06:49	
19	2:53:42 PM	2:59:39 PM	05:57	
20	2:56:39 PM	3:01:24 PM	04:45	drink delivered in line
21	2:55:38 PM	3:01:00 PM	05:22	
22	2:55:38 PM	3:01:10 PM	05:32	drink delivered in line
23	2:56:51 PM	3:04:41 PM	07:50	
24	2:57:32 PM	3:04:40 PM	07:08	drink delivered in line
25	2:58:56 PM	3:06:29 PM	07:33	
26	2:59:46 PM	3:08:42 PM	08:56	
27	3:00:04 PM	3:08:23 PM	08:19	
28	3:00:23 PM	3:08:37 PM	08:14	drink delivered in line
29	3:01:44 PM	3:09:08 PM	07:24	drink delivered in line
30	3:02:16 PM	3:09:26 PM	07:10	
31	3:02:21 PM	3:09:45 PM	07:24	
32	3:02:49 PM	3:10:25 PM	07:36	
33	3:03:48 PM	3:10:13 PM	06:25	
34	3:06:12 PM	3:12:26 PM	06:14	
35	3:06:43 PM	3:11:25 PM	04:42	
36	3:08:57 PM	3:12:58 PM	04:01	
37	3:08:10 PM	3:12:49 PM	04:39	
38	3:09:53 PM	3:15:53 PM	06:00	
39	3:09:38 PM	3:13:20 PM	03:42	
40	3:10:38 PM	3:14:36 PM	03:58	
41	3:11:43 PM	3:16:22 PM	04:39	
42	3:12:35 PM	3:19:48 PM	07:13	

Location **4341 Antelope Road**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
43	3:13:03 PM	3:19:26 PM	06:23	drink delivered in line
44	3:14:18 PM	3:21:26 PM	07:08	
45	3:14:46 PM	3:19:55 PM	05:09	drink delivered in line
46	3:15:29 PM	3:23:03 PM	07:34	
47	3:16:18 PM	3:24:18 PM	08:00	
48	3:18:01 PM	3:23:10 PM	05:09	
49	3:19:41 PM	3:24:45 PM	05:04	
50	3:21:10 PM	3:25:42 PM	04:32	
51	3:21:11 PM	3:25:18 PM	04:07	
52	3:22:58 PM	3:26:22 PM	03:24	
53	3:25:11 PM	3:27:00 PM	01:49	
54	3:25:31 PM	3:28:00 PM	02:29	
55	3:26:25 PM	3:29:07 PM	02:42	
56	3:29:00 PM	3:30:40 PM	01:40	still ordering when #62 departed
57	3:29:05 PM	3:31:41 PM	02:36	
58	3:29:53 PM	3:32:52 PM	02:59	
59	3:30:59 PM	3:33:34 PM	02:35	
60	3:31:46 PM	3:35:43 PM	03:57	
61	3:31:54 PM	3:37:54 PM	06:00	
62	3:33:48 PM	3:47:13 PM	13:25	long order - needed to talk to barista
63	3:34:08 PM	3:43:16 PM	09:08	delivered in line - delayed by #69
64	3:35:13 PM	3:44:21 PM	09:08	delivered in line - delayed by #69
65	3:37:09 PM	3:40:36 PM	03:27	drink delivered in line - #69
66	3:37:29 PM	3:45:26 PM	07:57	drink delivered in line - #69
67	3:38:15 PM	3:47:54 PM	09:39	delayed by #69
68	3:39:21 PM	3:46:12 PM	06:51	drink delivered in line - #69
69	3:39:20 PM	3:46:29 PM	07:09	drink delivered in line - #69
70	3:39:59 PM	3:48:46 PM	08:47	
71	3:42:11 PM	3:50:44 PM	08:33	
72	3:42:30 PM	3:50:08 PM	07:38	drink delivered in line
73	3:42:42 PM	3:51:11 PM	08:29	12 in queue
74	3:42:59 PM	3:53:53 PM	10:54	
75	3:44:02 PM	3:53:59 PM	09:57	drink delivered in line - behind #81
76	3:44:26 PM	3:54:00 PM	09:34	
77	3:44:36 PM	3:55:17 PM	10:41	
78	3:47:12 PM	3:54:58 PM	07:46	14 in queue
79	3:48:32 PM	3:57:33 PM	09:01	
80	3:48:11 PM	4:02:29 PM	14:18	large order
81	3:49:48 PM	3:57:57 PM	08:09	
82	3:50:35 PM	3:59:35 PM	09:00	drink delivered in line - behind #87
83	3:53:00 PM	4:00:12 PM	07:12	drink delivered in line - behind #87
84	3:53:00 PM	4:00:47 PM	07:47	drink delivered in line - behind #87

Location **4341 Antelope Road**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
85	3:53:00 PM	4:00:48 PM	07:48	drink delivered in line - behind #87
86	3:54:00 PM	4:01:44 PM	07:44	drink delivered in line - behind #87

Location **1225 Baseline Road**

Observation	Start	End	Service Time	Notes
1	7:45:26 AM	7:51:39 AM	06:13	est. 5 cars in queue
2	7:46:47 AM	7:52:42 AM	05:55	
3	7:48:21 AM	7:53:55 AM	05:34	
4	7:50:31 AM	7:56:18 AM	05:47	
5	7:40:29 AM	7:57:15 AM	16:46	
6	7:53:45 AM	7:58:56 AM	05:11	
7	7:54:44 AM	7:59:56 AM	05:12	
8	7:55:18 AM	8:00:49 AM	05:31	
9	7:56:31 AM	8:02:47 AM	06:16	
10	7:57:34 AM	8:03:18 AM	05:44	
11	7:57:43 AM	8:03:43 AM	06:00	
12	7:58:44 AM	8:04:03 AM	05:19	
13	8:03:01 AM	8:06:59 AM	03:58	
14	8:03:12 AM	8:07:25 AM	04:13	
15	8:04:46 AM	8:08:14 AM	03:28	
16	8:05:36 AM	8:11:03 AM	05:27	infreqeuent arrivals - queued to shack/pedestrian area
17	8:07:56 AM	8:13:26 AM	05:30	
18	8:08:25 AM	8:13:51 AM	05:26	
19	8:08:43 AM	8:14:15 AM	05:32	
20	8:10:11 AM	8:15:24 AM	05:13	
21	8:11:16 AM	8:16:02 AM	04:46	
22	8:12:44 AM	8:16:32 AM	03:48	
23	8:14:05 AM	8:17:41 AM	03:36	
24	8:15:10 AM	8:18:09 AM	02:59	
25	8:15:46 AM	8:21:02 AM	05:16	
26	8:18:14 AM	8:22:42 AM	04:28	queued to trash chute - shortened to ped ordering window
27	8:20:23 AM	8:24:43 AM	04:20	
28	8:22:00 AM	8:26:26 AM	04:26	
29	8:22:54 AM	8:28:01 AM	05:07	
30	8:23:49 AM	8:29:03 AM	05:14	
31	8:24:40 AM	8:29:26 AM	04:46	
32	8:25:25 AM	8:31:40 AM	06:15	
33	8:26:46 AM	8:36:24 AM	09:38	
34	8:27:53 AM	8:35:17 AM	07:24	
35	8:27:57 AM	8:36:00 AM	08:03	
36	8:28:33 AM	8:36:40 AM	08:07	
37	8:30:03 AM	8:36:47 AM	06:44	

Location **1225 Baseline Road**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
1	4:27:35 PM	4:31:28 PM	03:53	
2	4:28:07 PM	4:31:51 PM	03:44	
3	4:29:35 PM	4:32:40 PM	03:05	
4	4:30:28 PM	4:33:11 PM	02:43	
5	4:30:49 PM	4:35:00 PM	04:11	
6	4:31:53 PM	4:35:45 PM	03:52	
7	4:33:28 PM	4:36:04 PM	02:36	
8	4:33:46 PM	4:36:33 PM	02:47	
9	4:39:04 PM	4:46:32 PM	07:28	No queue from 4:34 until car arrived at 4:39; long wait at the w
10	4:40:22 PM	4:47:14 PM	06:52	
11	4:41:09 PM	4:49:59 PM	08:50	2 minute wait at window
12	4:41:14 PM	4:51:47 PM	10:33	
13	4:42:31 PM	4:52:28 PM	09:57	
14	4:44:17 PM	4:53:06 PM	08:49	
15	4:45:45 PM	4:53:50 PM	08:05	
16	4:47:02 PM	4:54:36 PM	07:34	
17	4:49:04 PM	4:55:50 PM	06:46	9 in queue - caused by delay by #13
18	4:50:49 PM	4:58:06 PM	07:17	
19	4:53:34 PM	4:58:56 PM	05:22	
20	4:54:19 PM	4:59:56 PM	05:37	
21	4:55:35 PM	5:00:44 PM	05:09	
22	5:00:52 PM	5:05:11 PM	04:19	order taken at window due to staff on break
23	5:03:16 PM	5:07:11 PM	03:55	order taken while #26 at window
24	5:04:25 PM	5:09:46 PM	05:21	order taken while #26 at window
25	5:06:22 PM	5:11:17 PM	04:55	
26	5:07:36 PM	5:12:21 PM	04:45	
27	5:08:25 PM	5:15:01 PM	06:36	
28	5:09:16 PM	5:15:48 PM	06:32	
29	5:10:55 PM	5:16:16 PM	05:21	
30	5:12:05 PM	5:18:45 PM	06:40	
31	5:13:32 PM	5:20:29 PM	06:57	
32	5:14:21 PM	5:23:32 PM	09:11	
33	5:16:36 PM	5:24:44 PM	08:08	
34	5:17:44 PM	5:25:24 PM	07:40	queue of 13ish at 5:05
35	5:18:45 PM	5:26:57 PM	08:12	
36	5:19:40 PM	5:27:29 PM	07:49	
37	5:21:32 PM	5:27:59 PM	06:27	
38	5:23:28 PM	5:28:40 PM	05:12	
39	5:24:52 PM	5:30:45 PM	05:53	took a long time to order
40	5:27:54 PM	5:32:17 PM	04:23	
41	5:28:50 PM	5:34:44 PM	05:54	steady queue of 9+ vehicles
42	5:29:22 PM	5:35:26 PM	06:04	

Location **1225 Baseline Road**

Observation	Drive-Thru (vehicles)			
	Start	End	Service Time	Notes
43	5:29:54 PM	5:36:51 PM	06:57	
44	5:30:41 PM	5:37:32 PM	06:51	
45	5:31:57 PM	5:37:47 PM	05:50	
46	5:32:05 PM	5:39:55 PM	07:50	14-ish in queue at 5:23
47	5:33:37 PM	5:42:40 PM	09:03	
48	5:35:29 PM	5:44:20 PM	08:51	
49	5:38:37 PM	5:45:51 PM	07:14	arrived at 5:38 after queue dissipated to 3 vehicles
50	5:39:22 PM	5:46:32 PM	07:10	
51	5:41:40 PM	5:46:57 PM	05:17	
52	5:42:41 PM	5:48:07 PM	05:26	
53	5:44:09 PM	5:50:14 PM	06:05	
54	5:45:09 PM	5:51:24 PM	06:15	
55	5:46:58 PM	5:55:06 PM	08:08	long wait at window
56	5:50:29 PM	5:59:21 PM	08:52	long wait at window
57	5:52:53 PM	6:00:08 PM	07:15	
58	5:53:58 PM	6:00:47 PM	06:49	
59	5:55:23 PM	6:01:44 PM	06:21	
60	5:56:02 PM	6:02:20 PM	06:18	
61	5:57:01 PM	6:03:01 PM	06:00	
62	5:57:36 PM	6:04:43 PM	07:07	customer/driver wasn't paying attention when drink was ready
63	5:58:35 PM	6:05:43 PM	07:08	
64	5:59:46 PM	6:06:13 PM	06:27	
65	6:00:31 PM	6:07:23 PM	06:52	
66	6:02:54 PM	6:08:46 PM	05:52	

Attachment D

Environmental Noise Assessment

Environmental Noise Assessment

Dutch Bros. Coffee Drive-Through

City of Sacramento, California

BAC Job # 2021-178

Prepared For:

TAIT & Associates, Inc.

112802 Trade Center Drive
Rancho Cordova, CA 95742

Prepared By:

Bollard Acoustical Consultants, Inc.

Dario Gotchet, Principal Consultant

April 18, 2022

BOLLARD
Acoustical Consultants

Introduction

The proposed project consists of the construction and operation of a Dutch Bros. Coffee restaurant that would include a drive-through, outdoor patio seating area, and on-site parking stalls. The project is located at 7255 Freeport Boulevard in the City of Sacramento, California (APN: 047-0290-009). Existing land uses in the immediate project vicinity include commercial to the north, and residential in all other directions. The project area and nearby land uses is shown on Figure 1. The proposed project site plan is presented as Figure 2.

Due to the proximity of the proposed project to existing noise-sensitive uses (residential), Bollard Acoustical Consultants, Inc. (BAC) was retained by the project applicant to prepare this acoustical assessment. Specifically, the purposes of this assessment are to quantify noise levels associated with the proposed drive-through restaurant (i.e., drive-through lane vehicle idling/passbys, on-site vehicle circulation, parking lot movements, patrons in outdoor seating area, and vehicle stereo systems) project, to assess the state of compliance of those noise levels with applicable City of Sacramento noise standards, and if necessary, to recommend measures to reduce those noise levels to acceptable limits at the nearest noise-sensitive uses.

Noise Fundamentals and 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 thus are called sound. 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 allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in levels (dB) correspond closely to human perception of relative loudness. Appendix A contains definitions of Acoustical Terminology. Figure 3 shows common noise levels associated with various sources.

The perceived loudness of sounds 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-weighing 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 in decibels.

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, DNL or L_{dn}, and shows very good correlation with community response to noise.

Legend

- Project Border (Approximate)
- Long-Term Noise Measurement Sites
- Residential Receivers

N

Scale (Feet)

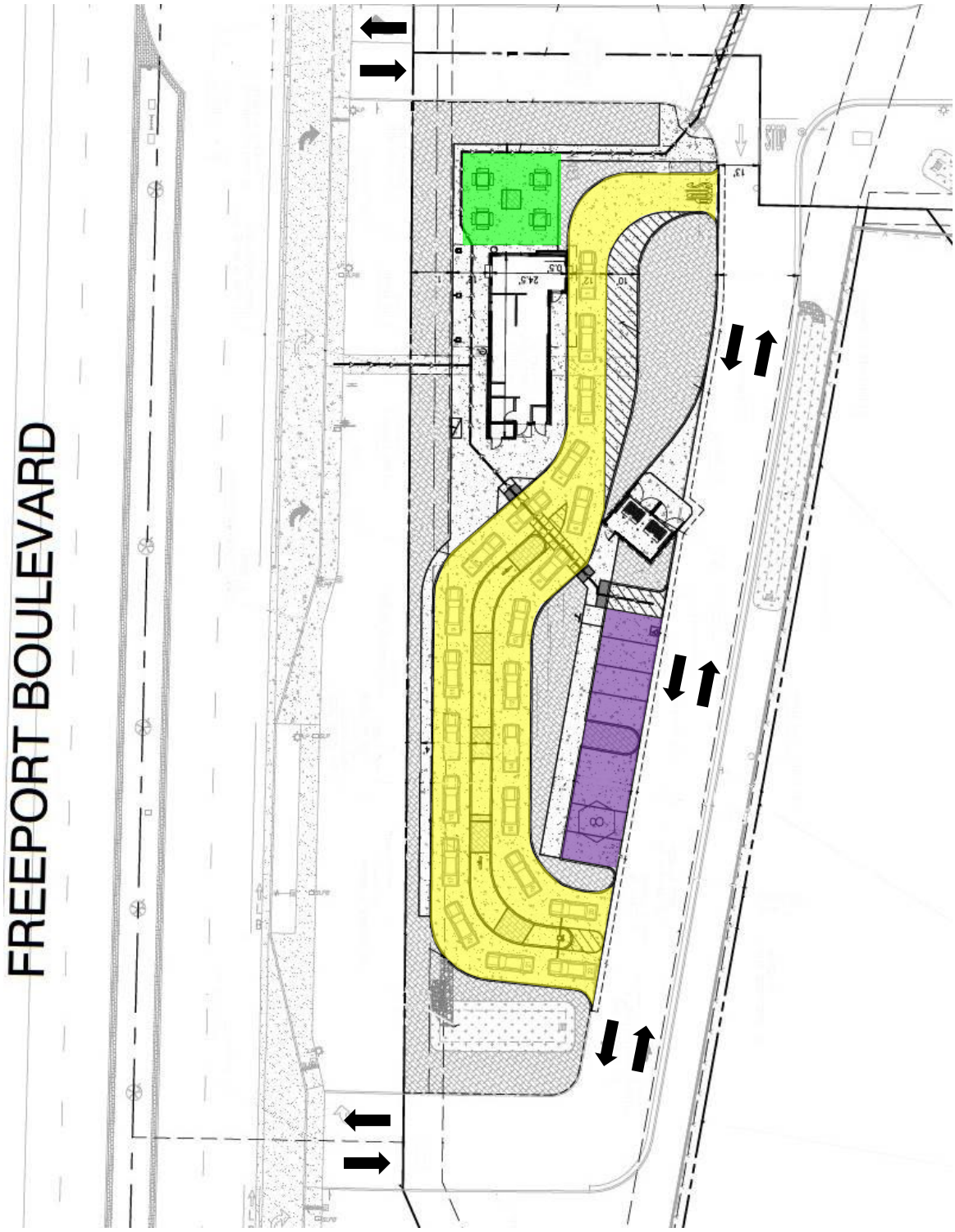
0 50 100

Dutch Bros. Coffee Drive-Through
Sacramento, California

Project Area

Figure 1

BOLLARD Acoustical Consultants



Legend

- Drive-Through Lanes
- Parking Area
- Outdoor Seating Area (Patio)

N

Scale (Feet)

0 20 40

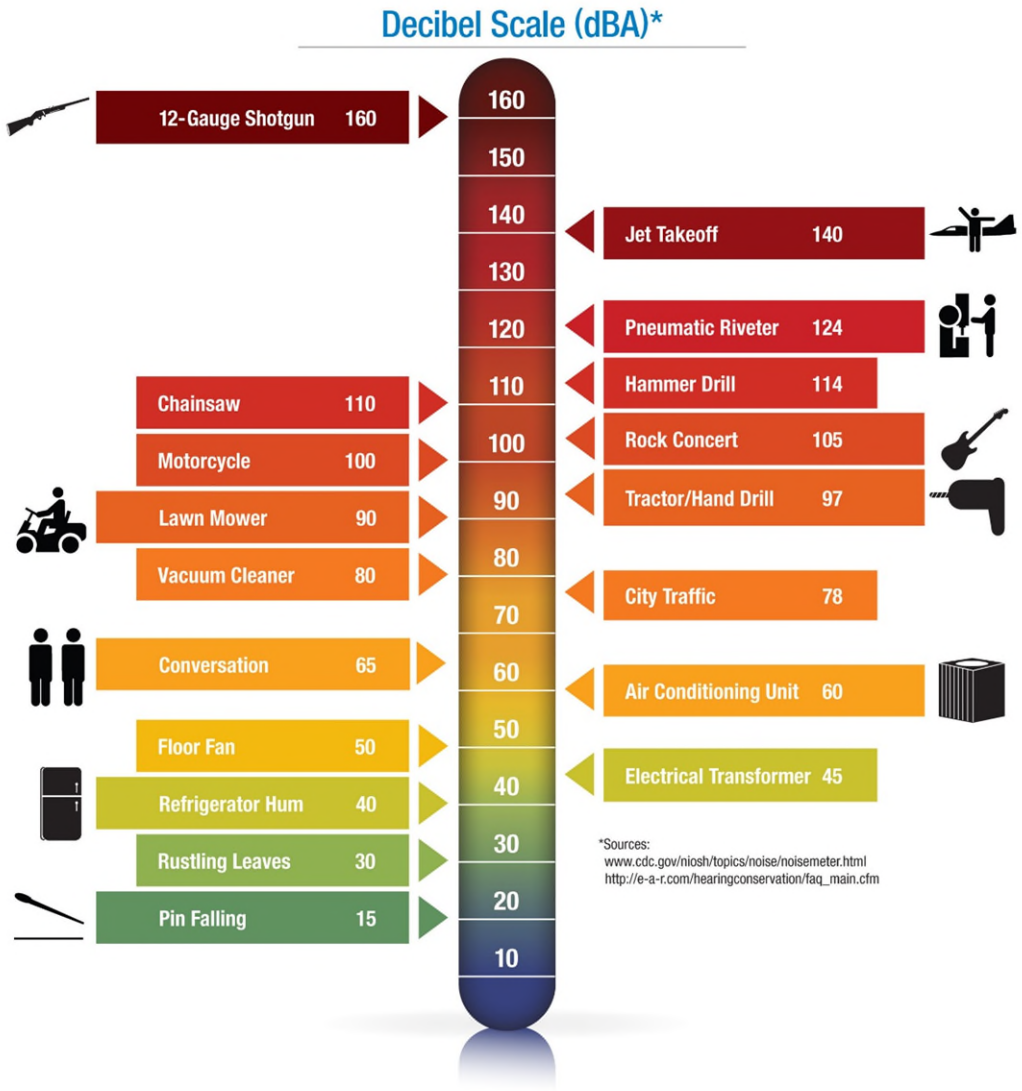
Dutch Bros. Coffee Drive-Through
Sacramento, California

Project Site Plan

Figure 2

BOLLARD Acoustical Consultants

Figure 3
Typical A-Weighted Sound Levels of Common Noise Sources



The Day-Night Average Level (DNL or L_{dn}) is based upon the average noise level over a 24-hour day, with a +10-decibel weighting applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because DNL represents a 24-hour average, it tends to disguise short-term variations in the noise environment. DNL-based noise standards are commonly used to assess noise impacts associated with traffic, railroad, and aircraft noise sources.

Existing Ambient Noise Environment within the Project Vicinity

The existing ambient noise environment within the immediate project vicinity is defined primarily by traffic on Freeport Boulevard, and to a lesser extent by adjacent commercial activities. To generally quantify the existing ambient noise environment within the project vicinity, BAC conducted long-term (48-hour) ambient noise level surveys at two (2) locations February 1-2, 2022. The long-term ambient noise survey locations are shown on Figure 1. Photographs of the noise survey locations are provided in Appendix B.

Larson Davis Laboratories (LDL) Models 820 precision integrating sound level meters were used to complete the long-term ambient noise level survey. The meters were calibrated immediately before and after use with an LDL Model CA200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all specifications of the American National Standards Institute requirements for Type 1 sound level meters (ANSI S1.4).

The results from the long-term ambient noise level survey are summarized in Table 1. The detailed results of the noise survey are contained in Appendix C in tabular format and graphically in Appendix D.

Table 1
Summary of Long-Term Ambient Noise Survey Results[1]

			Average Measured Hourly Noise Levels (dB)			
			Daytime[3]		Nighttime[4]	
Site Description[2]	Date	DNL (dB)	L_{50}	L_{max}	L_{50}	L_{max}
Site 1: Near northeastern project boundary at residential property line	February 1, 2022	64	60	79	53	71
	February 2, 2022	64	60	76	53	71
Site 2: Near southeastern project boundary at residential property line	February 1, 2022	64	60	78	51	70
	February 2, 2022	63	60	76	52	70

[1] Detailed summaries of the noise monitoring results are provided in Appendices C and D.
[2] Long-term noise survey locations are shown on Figure 1.
[3] Daytime hours: 7:00 a.m. to 10:00 p.m.
[4] Nighttime hours: 10:00 p.m. to 7:00 a.m.
Source: Bollard Acoustical Consultants, Inc. (2022)

The Table 1 data indicate that average measured hourly noise levels were very consistent at the measurement sites throughout the monitoring period. It should be noted that noise measurement sites 1 and 2 were selected to be representative of the existing ambient noise level environments at the nearest residences to the project site (located to the east). The significance of the measured ambient noise levels at the nearest residential uses is discussed in the following section.

Criteria for Acceptable Noise Exposure

Sacramento City Code

For residential uses affected by non-transportation (stationary or operational) noise sources (i.e., proposed on-site equipment and operations), Section 8.68.060 of the City Code (Noise Ordinance) establishes exterior noise level standards as presented in Table 2. Each of the noise level standards specified in Table 2 shall be reduced by 5 dB for impulsive or simple tone noises, or for noises consisting of speech or music. In the event the measured ambient noise level exceeds the applicable noise level standard in any category shown in Table 2, the applicable standard shall be adjusted by increasing the standards in 5 dB increments to encompass the ambient noise level. The standards are to be applied at the property line of the receiving use.

Table 2
Sacramento City Code – Exterior Noise Standards

Duration (min.)	Statistical Descriptor	Noise Level (dB)	
		Daytime (7 a.m.-10 p.m.)	Nighttime (10 p.m.-7 a.m.)
30 or more	L_{50}	55	50
15-30	L_{25}	60	55
5-15	L_{8}	65	60
up to 5	L_{2}	70	65
Any	L_{max}	75	70

Source: Sacramento City Code, Section 8.68.060

Noise Level Criteria Applied to the Project

It is the understanding of BAC that the project proposes operations during the hours of 5:00 a.m. to 12:00 a.m. Based on this information, project on-site operations noise would be subject to the Sacramento City Code's daytime and nighttime noise level criteria provided in Table 2. In addition, the City Code states that the exterior noise level standards in Table 2 shall be increased in 5 dB increments to encompass the ambient in cases where ambient noise levels already exceed the established standards.

Based on the results from the BAC ambient noise level survey (Table 1), the proposed hours of operation, and pursuant adjustment criteria contained in Section 8.68.060, the following noise level limits shown in Table 3 were applied to project on-site operations and assessed at the nearest residential uses (east of the project). The nearest residential uses are identified as receivers 1-4 on Figure 1. Satisfaction of the City's noise level limits at the nearest residential uses would ensure compliance with the City's noise level limits at residential uses located farther away.

Table 3
City Code Exterior Noise Level Standards Applied to the Project

Average Measured Hourly Noise Levels (dB)[1]				Unadjusted Noise Standards (dB)[2]				Ambient Exceed Standards?[3]				City Standards Applied to Project (dB)[4]			
Daytime		Nighttime		Daytime		Nighttime		Daytime		Nighttime		Daytime		Nighttime	
L_{50}	L_{max}	L_{50}	L_{max}	L_{50}	L_{max}	L_{50}	L_{max}	L_{50}	L_{max}	L_{50}	L_{max}	L_{50}	L_{max}	L_{50}	L_{max}
60	77	52	70	55	75	50	70	Yes	Yes	Yes	No	*60*	*80*	*55*	70

[1] Average measured hourly noise levels at the nearest residential uses to east (Table 1).
[2] Unadjusted Sacramento City Code exterior noise level limits (Table 2).
[3] Determination based on a comparison of measured ambient noise level data and the City's noise standards.
[4] Adjusted noise standards (in italics) pursuant to Sacramento City Code Section 8.68.060.
Source: BAC, Sacramento City Code Section 8.68.060

It should be noted that Section 8.68.060 of the Sacramento City Code also states that exterior noise level standards shall be reduced by 5 dB if the noise source in question contains impulsive or simple tone noises, or noises consisting of *speech or music* (emphasis added). This criterion would be applicable to patron speech within the proposed outdoor seating area and on-site vehicle stereo system usage noise sources (it is our understanding that drive-through menu speaker boards are not proposed). The City's downward adjustment of noise level limits for speech is discussed later in this report.

Evaluation of Project On-Site Operations Noise Levels

Drive-Through Vehicle Noise Generation

The project proposes to include a wrap-around drive-through lane, which is shown on Figure 2. To quantify the noise emissions of vehicles associated with the proposed drive-through lane, BAC conducted noise level measurements at an existing similarly configured Dutch Bros. Coffee drive-through restaurant on April 22, 2020. Specifically, the noise level measurements were taken at the Dutch Bros. Coffee restaurant located at 3450 Sunset Boulevard in Rocklin, California. According to the measurement data, idling and revving vehicle noise levels in the drive-through lane were measured to have median (L_{50}) and maximum (L_{max}) noise levels of approximately 61 dB L_{50} and 67 dB L_{max} at a distance of 15 feet. The measurement data obtained at the Dutch Bros. Coffee restaurant on April 22, 2020, is consistent with BAC measurement data obtained at other drive-through restaurants in previous years.

Using the BAC drive-through noise measurement data above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), data were projected from the proposed restaurant drive-through lane to the property lines of the nearest residential uses (receivers 1-4 on Figure 1). The results of those projections relative to the City's noise level standards are provided in Table 4.

Table 4
Predicted Drive-Through Vehicle Noise Levels at Nearest Residential Uses

Receiver[1]	Distance from Nearest Drive-Through Lane(ft)[2]	Predicted Noise Levels (dB)	
		L_{50}	L_{max}
1	80	46	52
2	75	47	53
3	55	50	56
4	70	48	54
Applied City Daytime Noise Standards (dB)[3]		**60**	**80**
Applied City Nighttime Noise Standards (dB)[3]		**55**	**70**

[1] Receiver locations are identified on Figure 1.
[2] Distances scaled from nearest drive-through lane to property lines of residential uses using provided site plans.
[3] Applied City noise limits based on results from BAC ambient noise survey and City Code Section 8.68.060.
Source: Bollard Acoustical Consultants, Inc. (2022)

As shown in Table 4, project drive-through lane vehicle noise levels are predicted to comply with the (applied) Sacramento City Code daytime and nighttime median (L_{50}) and maximum (L_{max}) noise level standards at the property lines of the nearest residential uses (receivers 1-4). As a result, no further consideration of drive-through vehicle noise mitigation measures would be warranted for the project.

On-Site Vehicle Circulation Noise Generation

According to the project site plan, the project site will be accessed off Freeport Boulevard. The project proposes access points at both the north and south ends of the development. The on-site circulation route is illustrated on Figure 2.

To generally quantify project on-site traffic circulation noise exposure, BAC utilized the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA-RD-77-108). The FHWA Model was developed to predict hourly L_{eq} values for free-flowing traffic conditions and is considered to be accurate within 1.5 dB in most situations. According to information obtained from the project traffic impact memorandum prepared by Fehr & Peers (dated April 1, 2022), the project could be expected to generate a total of 124 AM Peak Hour and 117 PM Peak Hours trips. As indicated in the traffic memorandum, the project peak hour trip estimates were calculated (averaged) from data provided for six existing Dutch Bros. Coffee restaurants within the Sacramento Region. Based on 124 vehicles trips in *any* given worst-case hour (conservatively), and assuming an on-site vehicle speed of less than 25 mph, on-site traffic circulation noise exposure was predicted at the property lines of the nearest residential uses (receivers 1-4). The results of those predictions relative to the City's noise level standards are provided in Table 5.

Table 5
Predicted Worse-Case On-Site Traffic Noise Levels at Nearest Residential Uses

Receiver[1]	Distance from On-Site Circulation Route(ft)[2]	Predicted Noise Levels (dB)[3,4]	
		L_{50}	L_{max}
1-4	30	40	50
Applied City Daytime Noise Standards (dB)[5]		**60**	**80**
Applied City Nighttime Noise Standards (dB)[5]		**55**	**70**

[1] Receiver locations are identified on Figure 1.
[2] Distances scaled from on-site circulation route to property lines of residential uses using provided site plans.
[3] Median (L50) noise levels would be approximately 5 dB lower than hourly average (Leq) noise levels.
[4] Maximum (Lmax) noise levels were conservatively assumed to be approximately 10 dB higher than L50 values.
[5] Applied City noise limits based on results from BAC ambient noise survey and City Code Section 8.68.060.
Source: Bollard Acoustical Consultants, Inc. (2022)

The Table 5 data indicate that worse-case project on-site vehicle circulation noise levels are predicted to comply with the (applied) Sacramento City Code daytime and nighttime median (L_{50}) and maximum (L_{max}) noise level standards at the property lines of the nearest residential uses (receivers 1-4). As a result, no further consideration of on-site vehicle circulation noise mitigation measures would be warranted for the project.

Parking Lot Noise Generation

As a means of determining potential noise exposure due to project parking lot activities, Bollard Acoustical Consultants, Inc. (BAC) utilized specific parking lot noise level measurements conducted by BAC. Specifically, a series of individual noise measurements were conducted of multiple vehicle types arriving and departing a parking area, including engines starting and stopping, car doors opening and closing, and persons conversing as they entered and exited the vehicles. The results of those measurements revealed that individual parking lot movements generated mean noise levels of approximately 70 dB SEL at a reference distance of 50 feet. The maximum noise level associated with parking lot activity typically did not exceed 65 dB L_{max} at the same reference distance.

According to the project site plan, the project proposes one on-site parking area that will contain a total of 9 parking stalls. The location of the parking area is illustrated on Figure 2. It was assumed for the purposes of this analysis that all of the parking stalls could fill or empty during any given peak hour (worst-case). However, it is likely that parking area activity would be more spread out. Parking area hourly average (L_{eq}) noise levels were determined using the following equation:

$$Peak\ Hour\ L_{eq} = 70+10*log\ (N) - 35.6$$

Where 70 is the mean Sound Exposure Level (SEL) for an automobile parking lot arrival or departure, N is the number of parking lot operations in a given hour, and 35.6 is 10 times the logarithm of the number of seconds in an hour. Median (L_{50}) parking lot noise levels would be approximately 5 dB less than hourly average noise levels.

Using BAC parking lot noise measurement data, the equation provided above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), data were projected from the effective noise center of the proposed parking area to the property lines of the nearest residential uses (receivers 1-4). The results of those predictions relative to the City's noise level standards are provided in Table 6.

Table 6
Predicted Worse-Case Parking Area Noise Levels at Nearest Residential Uses

Receiver[1]	Distance from Parking Area (ft)[2]	Predicted Noise Levels (dB)	
		L_{50}	L_{max}
1	115	32	58
2	50	39	65
3	50	39	65
4	110	32	58
Applied City Daytime Noise Standards (dB)[3]		**60**	**80**
Applied City Nighttime Noise Standards (dB)[3]		**55**	**70**

[1] Receiver locations are identified on Figure 1.
[2] Distances scaled from center of parking area to property lines of residential uses using provided site plans.
[3] Applied City noise limits based on results from BAC ambient noise survey and City Code Section 8.68.060.
Source: Bollard Acoustical Consultants, Inc. (2022)

As shown in Table 6, project worse-case parking area noise levels are predicted to comply with the (applied) Sacramento City Code daytime and nighttime median (L_{50}) and maximum (L_{max}) noise level standards at the property lines of the nearest residential uses (receivers 1-4). As a result, no further consideration of parking area noise mitigation measures would be warranted for the project.

Outdoor Seating Area (Patio) Patron Noise Generation

The project proposes a small outdoor seating area (patio) for patrons on the north side of the restaurant building, as shown in Figure 2. According to the project applicant, the outdoor patio area will have a capacity of approximately 16 people. To quantify outdoor patio area noise levels at the nearest uses, BAC utilized reference file data for persons speaking in normal and raised voices (normal voice = 57 dB per person at 3 feet and raised voice = 64 dB per person at 3 feet).

Based on the restaurant type, it is assumed that patrons would generally occupy the outdoor patio area for a duration of approximately 15 to 30 minutes of an hour. However, for the purposes of this analysis, it was conservatively assumed patrons would occupy the patio area for a minimum of 30 minutes of a given hour. Based on an outdoor patio of 16 people (full capacity, worse-case), the cited BAC file data above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), outdoor seating area patron noise was predicted at the property lines of the nearest residential uses (receivers 1-4). The results of those predictions relative to the City's noise level standards are provided in Table 7.

As noted in the "Criteria for Acceptable Noise Exposure" section of this report, the Sacramento City Code states that the exterior noise level standards in Table 2 shall be reduced by 5 dB if the

noise source in question contains impulsive or simple tone noises, or noises consisting of speech or music. Because noise from patrons within the outdoor patio area would consist primarily of speech, the City's noise level limits contained in Table 3 have been downward adjusted by -5 dB for the purposes of this specific analysis. The downward adjusted noise level limits applicable to patron noise are included in Table 7 below.

Table 7
Predicted Outdoor Seating Area Patron Noise Levels at Nearest Residential Uses

		Predicted Noise Levels (dB)[3]	
Receiver[1]	**Distance from Patio Area (ft)[2]**	**L_{50}**	**L_{max}**
1	115	32	44
2	135	31	43
3	215	22	34
4	300	19	31
Applied City Daytime Noise Standards (dB)[4]		**55**	**75**
Applied City Nighttime Noise Standards (dB)[4]		**50**	**65**

[1] Receiver locations are identified on Figure 1.
[2] Distances scaled from center of patio area to property lines of residential uses using provided site plans.
[3] Predicted noise levels include consideration of screening that would be provided by proposed intervening structures that would break line of sight, where applicable.
[4] Applied City noise limits based on results from BAC ambient noise survey and City Code Section 8.68.060.
Source: Bollard Acoustical Consultants, Inc. (2022)

The Table 7 data indicate that outdoor seating area noise levels are predicted to comply with the (applied) Sacramento City Code daytime and nighttime median (L_{50}) and maximum (L_{max}) noise level standards at the property lines of the nearest residential uses (receivers 1-4). As a result, no further consideration of outdoor seating area noise mitigation measures would be warranted for the project.

Patron Car Stereo Noise Generation

The loudness of a car stereo is highly dependent on variables that include quality of sound system, distance to receiver, volume level, and whether or not the vehicle windows are in the open or closed position during stereo operation. In addition, noise is highly subjective, and is dependent on how it is perceived.

Due to the variability of sound system configurations, it is difficult to quantify car stereo noise levels with reasonable levels of precision. As a result, it is recommended that the restaurant management diligently enforce a restriction on car stereo use on the premises. The restriction of car stereo use on the premises will avoid the potential for an exceedance of the Sacramento City Code noise level limits and will reduce the potential for adverse reaction to car stereo noise at the nearest residential uses.

Conclusions & Recommendations

Noise levels associated with on-site operations at the proposed Dutch Bros. Coffee restaurant are predicted to satisfy the applicable Sacramento City Code daytime and nighttime noise level criteria at the nearest noise-sensitive uses (residential). However, due to the variability of sound systems configurations, it is possible that car stereo noise levels from restaurant patrons could exceed City Code noise level limits at the nearest noise-sensitive uses. Therefore, to avoid the potential for an exceedance of City Code noise level limits, and to reduce the potential for annoyance from restaurant patron car stereos at nearby sensitive uses, the following specific noise abatement measure is recommended for this project:

1. The noise-generation due to patron's usage of amplified music from their vehicles has the potential to exceed Sacramento City Code noise level standards at the nearest residential uses. To avoid the potential for an exceedance of the City's noise level limits, and to minimize the potential for adverse reaction at the nearest residential uses, the following recommendations are offered:

    a) Post signs indicating music is prohibited while vehicles are on-site.

    b) Facility management should diligently enforce a restriction on car stereo usage.

These conclusions are based on the site plan presented in Figure 2, the provided project trip generation data, the results from the BAC ambient noise level survey, and on BAC file data. Deviations from the site design presented in Figure 2 or cited data could cause actual noise levels to differ from those predicted in this assessment.

This concludes BAC's environmental noise assessment for the proposed Dutch Bros. Coffee drive-through restaurant located at 7255 Freeport Boulevard in Sacramento, California. Please contact BAC at (530) 537-2328 or info@bacnoise.com with any questions regarding this assessment.

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.

IIC Impact Insulation Class (IIC): A single-number representation of a floor/ceiling partition's impact generated noise insulation performance. The field-measured version of this number is the FIIC.

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.

RT_{60} The time it takes reverberant sound to decay by 60 dB once the source has been removed.

STC Sound Transmission Class (STC): A single-number representation of a partition's noise insulation performance. This number is based on laboratory-measured, 16-band (1/3-octave) transmission loss (TL) data of the subject partition. The field-measured version of this number is the FSTC.

Legend

A: Facing south towards site 1 along the eastern project boundary
B: Facing north towards site 1 along the eastern project boundary
C: Facing south towards site 2 along the eastern project boundary
D: Existing fence section along eastern project boundary near site 2

Location of sound level meters

Dutch Bros. Coffee Drive-Through
Sacramento, California

Noise Survey Photographs

Appendix B

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Appendix C-1
Long-Term Ambient Noise Monitoring Results - Site 1
Dutch Bros. Coffee Drive-Through - Sacramento, California
Tuesday, February 01, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	54	72	52	49
1:00 AM	56	74	50	47
2:00 AM	52	66	49	47
3:00 AM	52	71	51	48
4:00 AM	55	70	52	49
5:00 AM	57	70	56	53
6:00 AM	60	72	59	56
7:00 AM	63	76	62	58
8:00 AM	64	84	63	60
9:00 AM	62	76	61	58
10:00 AM	63	78	61	59
11:00 AM	62	72	61	59
12:00 PM	63	79	62	59
1:00 PM	62	77	61	58
2:00 PM	65	81	62	59
3:00 PM	63	81	61	58
4:00 PM	63	80	61	58
5:00 PM	63	80	61	58
6:00 PM	61	75	59	57
7:00 PM	60	78	58	55
8:00 PM	61	89	58	55
9:00 PM	59	77	57	55
10:00 PM	57	71	55	52
11:00 PM	57	79	54	51

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	65	59	62	60	52	56
Lmax (Maximum)	89	72	79	79	66	71
L50 (Median)	63	57	60	59	49	53
L90 (Background)	60	55	58	56	47	50

Computed DNL, dB	64
% Daytime Energy	88%
% Nighttime Energy	12%

GPS Coordinates	38°29'37.78"N
	121°30'19.25"W

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Appendix C-2
Long-Term Ambient Noise Monitoring Results - Site 1
Dutch Bros. Coffee Drive-Through - Sacramento, California
Wednesday, February 02, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	54	75	52	49
1:00 AM	51	72	50	47
2:00 AM	51	69	49	46
3:00 AM	52	70	51	48
4:00 AM	54	71	53	51
5:00 AM	57	68	57	54
6:00 AM	61	72	60	58
7:00 AM	64	77	62	60
8:00 AM	62	75	61	59
9:00 AM	61	73	60	58
10:00 AM	61	74	60	58
11:00 AM	62	78	61	58
12:00 PM	63	81	61	58
1:00 PM	64	75	62	59
2:00 PM	64	84	61	58
3:00 PM	62	78	61	58
4:00 PM	61	75	60	58
5:00 PM	62	74	60	58
6:00 PM	61	74	60	57
7:00 PM	60	73	58	56
8:00 PM	60	73	58	56
9:00 PM	61	77	58	56
10:00 PM	57	71	56	53
11:00 PM	56	69	55	52

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	64	60	62	61	51	56
Lmax (Maximum)	84	73	76	75	68	71
L50 (Median)	62	58	60	60	49	53
L90 (Background)	60	56	58	58	46	51

Computed DNL, dB	64
% Daytime Energy	87%
% Nighttime Energy	13%

GPS Coordinates	38°29'37.78"N
	121°30'19.25"W

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Appendix C-3
Long-Term Ambient Noise Monitoring Results - Site 2
Dutch Bros. Coffee Drive-Through - Sacramento, California
Tuesday, February 01, 2022

Hour	Leq	Lmax	L50	L90
12:00 AM	53	68	50	47
1:00 AM	53	67	49	46
2:00 AM	49	63	48	45
3:00 AM	51	67	49	46
4:00 AM	54	72	50	47
5:00 AM	56	68	54	51
6:00 AM	59	71	57	54
7:00 AM	62	75	61	56
8:00 AM	63	79	62	58
9:00 AM	62	79	61	57
10:00 AM	62	71	61	57
11:00 AM	62	73	62	58
12:00 PM	63	74	62	59
1:00 PM	62	72	61	58
2:00 PM	64	84	62	58
3:00 PM	63	83	62	57
4:00 PM	63	82	61	58
5:00 PM	63	77	61	57
6:00 PM	61	82	60	55
7:00 PM	60	74	58	54
8:00 PM	60	82	57	53
9:00 PM	59	77	57	53
10:00 PM	56	72	54	51
11:00 PM	57	83	52	49

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	64	59	62	59	49	55
Lmax (Maximum)	84	71	78	83	63	70
L50 (Median)	62	57	60	57	48	51
L90 (Background)	59	53	57	54	45	49

Computed DNL, dB	64
% Daytime Energy	89%
% Nighttime Energy	11%

GPS Coordinates	38°29'35.31"N
	121°30'19.82"W

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Appendix C-4
Long-Term Ambient Noise Monitoring Results - Site 2
Dutch Bros. Coffee Drive-Through - Sacramento, California
Wednesday, February 02, 2022

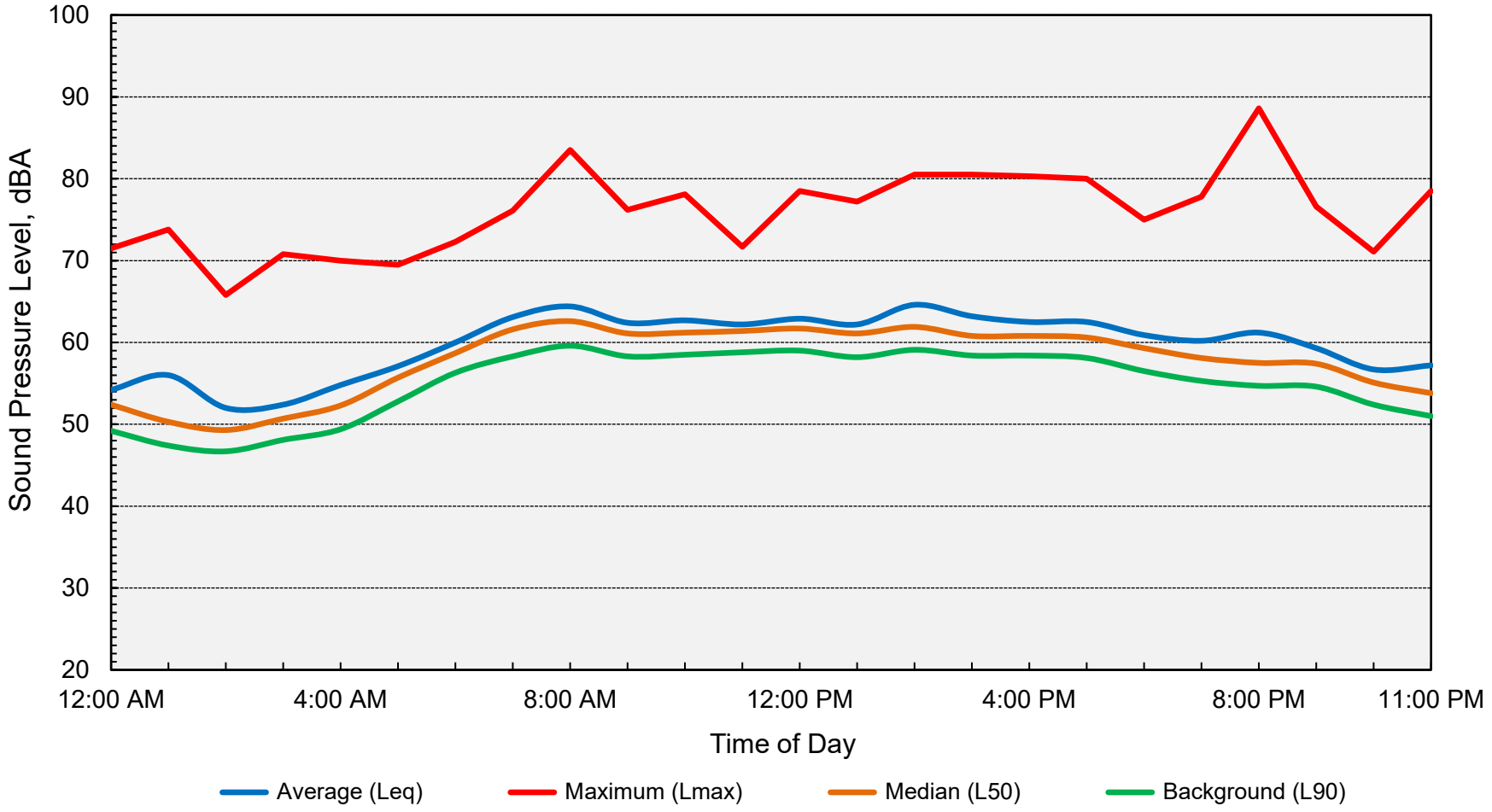
Hour	Leq	Lmax	L50	L90
12:00 AM	53	72	50	48
1:00 AM	51	67	48	45
2:00 AM	49	65	47	44
3:00 AM	51	68	49	46
4:00 AM	53	67	51	49
5:00 AM	56	68	55	52
6:00 AM	60	72	58	56
7:00 AM	63	81	62	58
8:00 AM	62	72	61	57
9:00 AM	61	69	60	56
10:00 AM	61	75	60	56
11:00 AM	61	73	60	56
12:00 PM	61	78	60	56
1:00 PM	62	73	61	57
2:00 PM	64	87	61	58
3:00 PM	62	81	61	57
4:00 PM	62	73	61	56
5:00 PM	62	76	61	57
6:00 PM	61	80	60	56
7:00 PM	60	71	58	55
8:00 PM	60	75	58	54
9:00 PM	60	77	58	54
10:00 PM	57	72	55	51
11:00 PM	57	83	53	50

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	64	60	62	60	49	55
Lmax (Maximum)	87	69	76	83	65	70
L50 (Median)	62	58	60	58	47	52
L90 (Background)	58	54	56	56	44	49

Computed DNL, dB	63
% Daytime Energy	87%
% Nighttime Energy	13%

GPS Coordinates	38°29'35.31"N
	121°30'19.82"W

Appendix D-1
Long-Term Ambient Noise Monitoring Results - Site 1
Dutch Bros. Coffee Drive-Through - Sacramento, California
Tuesday, February 01, 2022



Computed DNL = 64 dB

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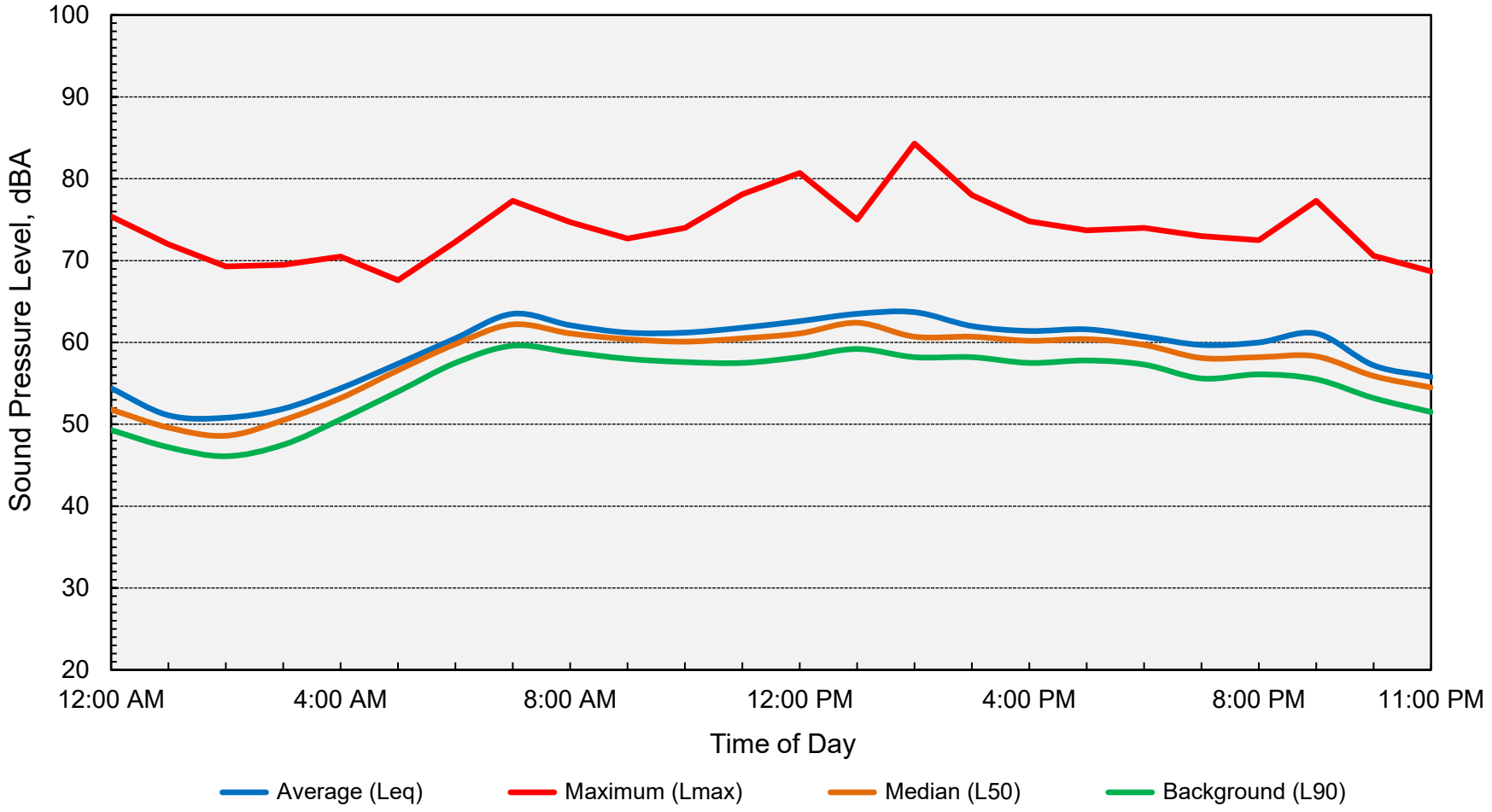
Appendix D-2
Long-Term Ambient Noise Monitoring Results - Site 1
Dutch Bros. Coffee Drive-Through - Sacramento, California
Wednesday, February 02, 2022



Computed DNL = 64 dB

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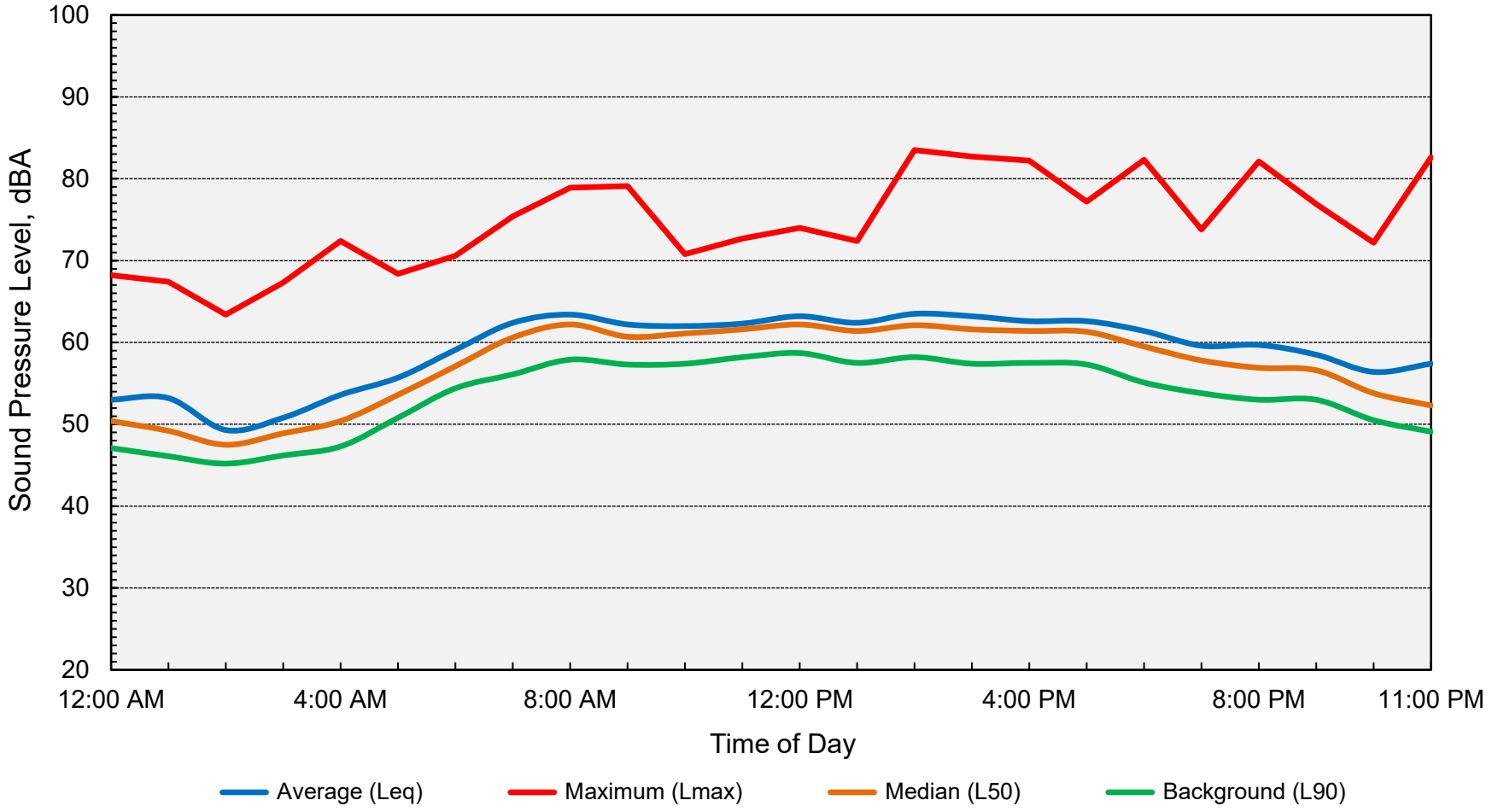
Appendix D-3
Long-Term Ambient Noise Monitoring Results - Site 2
Dutch Bros. Coffee Drive-Through - Sacramento, California
Tuesday, February 01, 2022



Computed DNL = 64 dB

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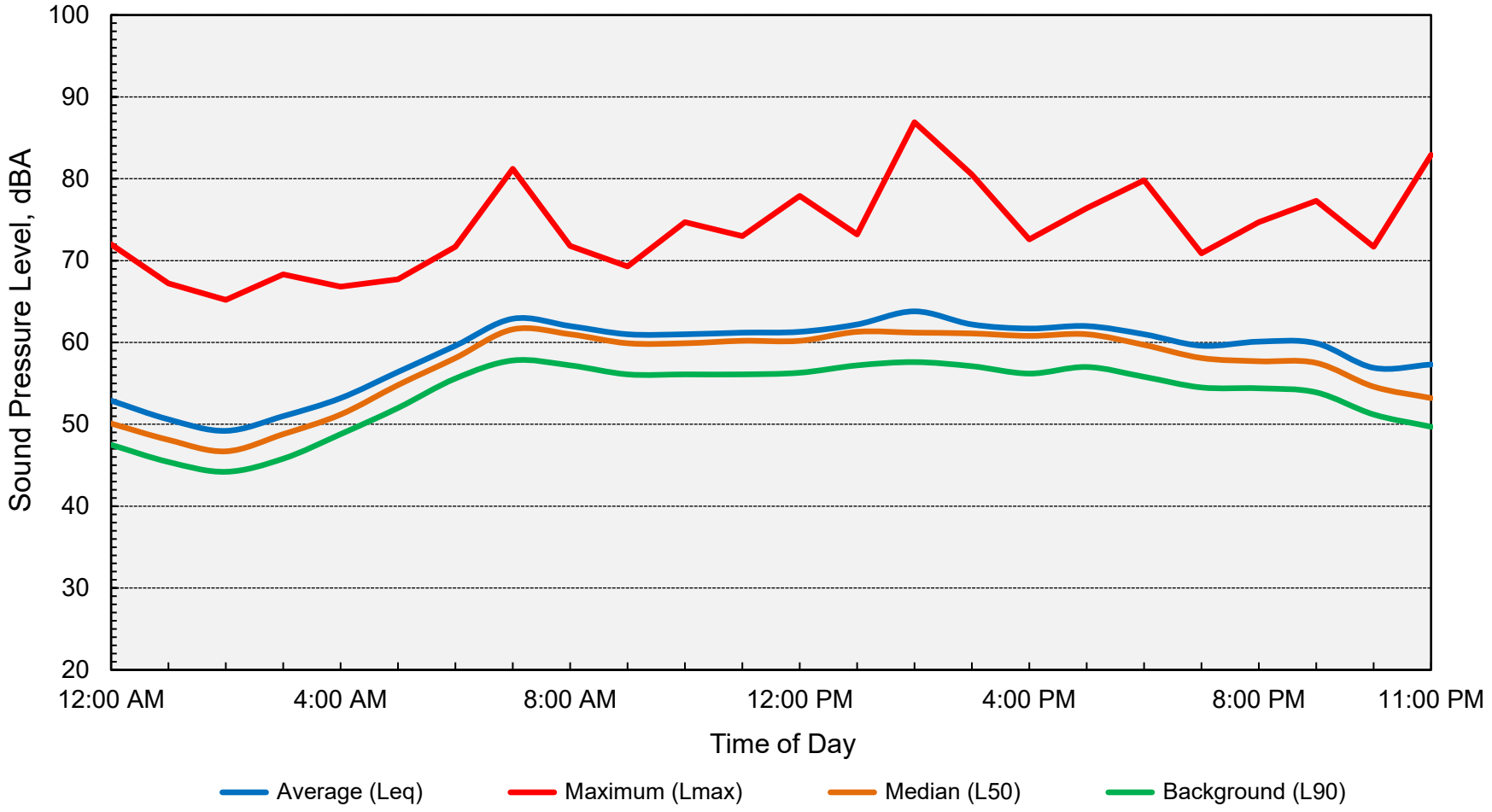
Appendix D-4
Long-Term Ambient Noise Monitoring Results - Site 2
Dutch Bros. Coffee Drive-Through - Sacramento, California
Wednesday, February 02, 2022



Computed DNL = 63 dB

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