



**Regular Meeting Agenda
Planning Commission**

WAYNE TANDA - CHAIR
LIAM DOWNEY - VICE-CHAIR
MOHAMMAD HABIB - PLANNING COMMISSIONER
PAUL LAKE - PLANNING COMMISSIONER
MALISHA KUMAR - PLANNING COMMISSIONER
JAMES WILSON - PLANNING COMMISSIONER
JOSEPH MUELLER - PLANNING COMMISSIONER

Tuesday, August 22, 2023 7:00 PM

**Council Chamber Building
17555 Peak Avenue, Morgan Hill, CA 95037**

Morgan Hill Planning Commission meetings are held in person with the option for the public to attend by teleconference/video conference. Information on how the public may observe and participate in the meeting is located below.

MEETING PARTICIPATION AND PUBLIC COMMENT

Planning Commission meetings will be live-streamed on Channel 17, on the City's website, and on the City's Facebook page.

Those members of the community that would like to participate in the meetings remotely may do so by joining the virtual meeting at: <https://bit.ly/PlanningCommissionMtg> or by calling: (669) 900-9128, then enter the webinar ID#: 862 0324 6251#. Public comment may be provided in the following ways:

- Provide public comment in-person
- Join the Planning Commission meeting virtually via the link above. When public comment is opened, raise your virtual hand and be called upon to speak for up to 3 minutes (YOU MUST BE RUNNING THE MOST CURRENT VERSION OF ZOOM TO BE UNMUTED)
- Join virtually by calling the number above, dial *9 to raise your hand, and be called upon to speak for up to 3 minutes

- Public comment in writing may be submitted to pcpubliccomment@morganhill.ca.gov or by mail to the Planning Division at 17575 Peak Avenue, Morgan Hill, CA 95037. Please email your comments to the Planning Division no later than 3:00 p.m. on Monday (the day before the Planning Commission meeting) for your comments to be submitted to the members of the Planning Commission with sufficient time to review the comments. You may continue to provide written comments up to noon on Tuesday (the day of the meeting) although Planning Commission Members may not have sufficient time to review them before the meeting. Public comments submitted to the Planning Division after 12:00 p.m. the day of the meeting will be provided to the City Council as time allows.
- Written comments WILL NOT be read aloud during the Planning Commission Meeting. Please note that written comments are posted on the City's website, so do not include any personal information you do not want to be posted on the web.

CALL TO ORDER

ROLL CALL ATTENDANCE

DECLARATION OF POSTING

Pursuant to Government Code Section 54954.2

PLEDGE OF ALLEGIANCE

PUBLIC COMMENT

Members of the public are entitled to address the Planning Commission concerning any item within the Morgan Hill Planning Commission's subject matter jurisdiction. Public comments are limited to no more than three minutes. Except for certain specific exceptions, the Commission is prohibited from discussing or taking action on any item not appearing on the posted agenda. (See additional noticing at the end of this agenda)

ORDERS OF THE DAY

PUBLIC HEARINGS

1. **SD2022-0001/EA2022-0001: Edes - Alcini (TTLC Morgan Hill) REQUEST FOR A TENTATIVE SUBDIVISION MAP AND ENVIRONMENTAL ASSESSMENT TO DEVELOP A 7-LOT SUBDIVISION FOR THE DEVELOPMENT OF 21 TOWNHOME-STYLE CONDOMINIUMS AND ASSOCIATED IMPROVEMENTS - CONTINUATION**

Recommendation:

1. Open and Close Public Hearing;

2. Continue to the September 12, 2023 Planning Commission Meeting

2. UP2022-0007/SR2022-0024 SUTTER-CHICK-FIL-A CONDITIONAL USE PERMIT AND DESIGN PERMIT FOR AN APPROXIMATELY 5,000 SQUARE FOOT RESTAURANT WITH DRIVE-THROUGH ON A 1.82 ACRE SITE.

Recommendation:

1. Open/close public hearing; and
2. Adopt a Resolution approving a Conditional Use Permit for an approximately 5,000 square foot restaurant with a drive-through.
3. Adopt a Resolution approving a Design Permit for an approximately 5,000 square foot restaurant with a drive-through

DIRECTOR'S REPORT/ANNOUNCEMENTS

ADJOURNMENT

NOTICE

Any documents produced by the City and distributed to the majority of the Planning Commission less than 72 hours prior to an open meeting, will be made available for public inspection at the front counter at City Hall located at 17575 Peak Avenue, Morgan Hill, CA, 95037 and at the Morgan Hill Public Library located at 660 West Main Avenue, Morgan Hill, California, 95037 during normal business hours. (Pursuant to Government Code 54957.5)

PUBLIC COMMENT

Members of the Public are entitled to directly address the Planning Commission concerning any item that is described in the notice of this meeting, before or during consideration of that item. If you wish to address the Planning Commission on any issue that is on this agenda, please complete a speaker request card located in the foyer of the Council Chambers and deliver it to the Minutes Clerk prior to discussion of the item. You are not required to give your name on the speaker card in order to speak to the Planning Commission, but it is very helpful. When you are called, proceed to the podium and the Chair will recognize you. If you wish to address the Planning Commission on any other item of interest to the public, you may do so during the public comment portion of the meeting following the same procedure described above. Please limit your comments to three (3) minutes or less.

Please submit written correspondence to the Minutes Clerk, who will distribute correspondence to the Planning Commission.

Persons interested in proposing an item for the Planning Commission agenda should contact a member of the Commission who may plan an item on the agenda for a future Commission meeting. Should your comments require Planning's action, your request may be placed on the next appropriate agenda. Planning Commission discussion or action may not be taken until your item appears on an agenda. This procedure is in compliance with the California Public Meeting Law (Brown Act) Government Code §54950.

City Council Policies and Procedures (CP 03-01) outlines the procedure for the conduct of public hearings. Notice is given, pursuant to Government Code Section 65009, that any challenge of Public Hearing Agenda items in court, may be limited to raising only those issues raised by you or on your behalf at the Public Hearing described in this notice, or in written correspondence delivered to the Commission at, or prior to the Public Hearing on these matters.

August 22, 2023

The time within which judicial review must be sought of the action by the Commission, which acted upon any matter appearing on this agenda is governed by the provisions of Section 1094.6 of the California Code of Civil Procedure.

For a copy of Commission Policies and Procedures CP 97-01, please contact the City Clerk's office (408) 779-7259, (408) 779-3117 (fax) or by email cityclerk@morganhill.ca.gov.

AMERICANS WITH DISABILITIES ACT (ADA)

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact the City Clerk's Office at (408)779-7259, (408)779-3117 (fax) or by email cityclerk@morganhill.ca.gov. Requests must be made as early as possible and at least two-full business days before the start of the meeting.

PLANNING COMMISSION STAFF REPORT

MEETING DATE: August 22, 2023

PREPARED BY:

Jennifer Carman, Development Services Director

APPROVED BY: Jennifer Carman

SD2022-0001/EA2022-0001: EDES - ALCINI (TTLC MORGAN HILL) REQUEST FOR A TENTATIVE SUBDIVISION MAP AND ENVIRONMENTAL ASSESSMENT TO DEVELOP A 7-LOT SUBDIVISION FOR THE DEVELOPMENT OF 21 TOWNHOME-STYLE CONDOMINIUMS AND ASSOCIATED IMPROVEMENTS - CONTINUATION

RECOMMENDATION(S)

1. Open and Close Public Hearing;
2. Continue to the September 12, 2023 Planning Commission Meeting

ATTACHMENTS:

None

PLANNING COMMISSION STAFF REPORT

MEETING DATE: August 22, 2023

PREPARED BY:
Rich Buikema, Contract Planner
APPROVED BY: Jennifer Carman

UP2022-0007/SR2022-0024 SUTTER-CHICK-FIL-A CONDITIONAL USE PERMIT AND DESIGN PERMIT FOR AN APPROXIMATELY 5,000 SQUARE FOOT RESTAURANT WITH DRIVE-THROUGH ON A 1.82 ACRE SITE.

RECOMMENDATION(S)

1. Open/close public hearing; and
2. Adopt a Resolution approving a Conditional Use Permit for an approximately 5,000 square foot restaurant with a drive-through.
3. Adopt a Resolution approving a Design Permit for an approximately 5,000 square foot restaurant with a drive-through

LOCATION MAP/PROJECT INFORMATION:



1. Location: Southwest corner of Sutter Blvd. and Cochrane Road (APN 726-32-002, 726-32-022)
2. Site Area: 1.82 acres

3. General Plan: Commercial
4. Zoning: PUD - CG (Morgan Hill Ranch Business Park)
5. Request: Request for a Conditional Use Permit and Design Permit to construct an approximately 5,000 square foot drive-through restaurant (Chick-fil-a) on the site of an existing 6,900 square foot sitdown restaurant proposed for demolition.



BACKGROUND:

A Conditional Use Permit and Design Permit is requested to construct an approximately 5,000 square-foot drive-through restaurant on a 1.63-acre property presently developed with a vacant 6,900 square foot restaurant building (formerly Marie Callender's & Forbes Grill). The existing building is proposed to be demolished (photo below).



The project includes an additional approximately .19-acre area for landscaping and sidewalk improvements within an existing ingress/egress easement on the adjoining property to the south at

18525 Sutter Blvd for a total project area of 1.82 acres.

Drive-through uses may be conditionally allowed in the CG General Commercial district (as referenced in the Morgan Hill Ranch Business Park (PUD) Attachment 4), with the approval of a Conditional Use Permit by the Planning Commission. A Design Permit is proposed concurrently that will ensure that the proposed use and site design are compatible with their surroundings. The Development Services Director elevated the Design Permit to the Planning Commission for review and final decision.

PROJECT DESCRIPTION:

Site Description

The site is on the southwesterly corner of Cochrane Road and Sutter Blvd and was originally developed in 1990 with a 6,000 square foot sit-down restaurant and an associated surface parking lot that is currently vacant. The site does not have direct street access to either Sutter Blvd or Cochrane Road. Access from Sutter Blvd is taken through an existing 60' wide easement on the adjacent parcel to the south that is also utilized for access by the Evergreen Village Commercial Center. There is an existing Landscape and Public Service Easement across the entire project frontage that is 40 feet wide on the Cochrane Road frontage and 20' on the Sutter Blvd. frontage that must remain free of buildings. The existing Morgan Hill Ranch sign structure is proposed to remain.

Surrounding Uses

	General Plan Land Use	Zoning	Existing Use
North	Industrial	II - Light Industrial	Office (Cochrane Business Ranch)
South	Commercial	PUD (Morgan Hill Business Park)	Office
East	General Commercial	PUD (Morgan Hill Business Park)	Retail (Cochrane Plaza)
West	Commercial	PD (Evergreen Village)	Commercial/Retail (Evergreen Village)

Surrounding existing land uses include commercial and light industrial uses to the north, and a business park to the northwest, across Cochrane Road; a shopping center to the east, across Sutter Boulevard; medical offices to the southeast; and the 20-acre Evergreen Village Commercial Center to the west (Attachment 13).

Existing drive-through uses in the Evergreen Village Commercial Center include a Starbucks and a 7/11 Gas Station/Convenience Store with a Car Wash. The Design Permit has been approved for a Taco Bell but building permits are still pending. A hotel (Holiday Inn Express) has been approved on the portion of the Evergreen Village directly adjacent to the proposed site that has not yet obtained Building Permits.

A Conditional Use Permit and Design Permit are currently pending for a Raising Cane's drive-through restaurant in the Evergreen Village Commercial Center on the southeast corner of Cochrane Road and Butterfield Blvd. The PD requires a conditional use permit for any additional drive-through uses above three - Raising Cane's would be the fourth drive-through use in the Evergreen Village Commercial Center.

Other drive-through restaurants in the area include McDonald's in the Cochrane Plaza Shopping Center on the southwest corner of Cochrane Road and Madrone Parkway and an In-N-Out Burger on the northeast corner.

Operations

As described in the Project Description/Statement of Operations (Attachment 3), the proposed Chick-fil-a restaurant would operate from 6 a.m. to 10 p.m., Monday through Saturday, and would be closed on Sundays. The restaurant would include a meal fulfillment area, dining area, kitchen, team member room, office, and restrooms. Customers would either order inside the restaurant building, online, or from their vehicles using the dual drive-thru lane. The restaurant will have approximately 75 seats, indoors and an outdoor patio area with approximately 25 seats.

Site Plan and Circulation

As indicated on the site plan (attachment 15), the main restaurant building is proposed to be set back 112' feet from the Cochrane Road right-of-way and 56' from the Sutter Blvd right-of-way. Canopy structures are proposed on the front and side of the building over the ordering and pickup portions of the drive-through lanes that are setback 60' from Cochrane Road and 20' from Sutter Blvd. The building is setback 75' (canopy 50') from the interior property line. A pergola is proposed over the outdoor dining area on the south side of the building.

The large setbacks are due to the existing Landscape/Public Service easement and the development standards of the Morgan Hill Ranch Business Park (Attachment 2). As shown in the plans, the setback areas will be used for landscaping, stormwater treatment/detention, and flood control measures. A low wall is proposed along the outside edge of the drive-through lane to screen the visibility of the drive-thru lane from the street.

Primary access to the project site would be provided from a 35-foot-wide driveway in the southern corner of the project site, which would connect to the existing easement north of the medical office and allow vehicles to both enter and exit the project site. A second 22-foot-wide entrance-only driveway would be provided from Cochrane Road, at the northwest corner of the site. According to the Traffic Operation Analysis, providing egress from the Cochrane Road driveway was not recommended due to the following:

- Adequate outbound access from the project site onto eastbound Cochrane Road would be provided via Sutter Boulevard and Skipper Lane.
- Outbound vehicles would turn onto a right-turn-only lane along Cochrane Road and would need to merge into the adjacent travel lane to continue eastbound along Cochrane Road.
- An existing bike lane merges with the right-turn lane at the location of the proposed driveway.

The northwest driveway would connect to a one-way internal roadway before merging into the main parking area. The two proposed drive-through lanes will have a capacity of 48 vehicles. Each lane would have a maximum queue capacity of 24 vehicles per lane, assuming 20 feet per car and full utilization of each lane. During normal operations, customers would merge into a single lane as they proceed past the ordering area; during periods of higher operational tempo, customers would remain in a two-lane configuration as employees would deliver food to customers in the outside lane.

The use of the existing ingress/egress easement for the purposes of accessing the proposed project is in dispute as indicated in the attached correspondence from Joanne Conca (property owner 18525 Sutter Blvd.) and Basil S. Shiber an attorney representing Chick-fil-A, Inc. (Attachments 10 & 11). As this is a civil issue between the two parties, the City is not taking a position on this matter and is

proceeding with the processing of these applications. Resolution of the dispute will be required as a condition of approval, prior to issuing Building Permits.

PROJECT ANALYSIS AND FINDINGS: ANALYSIS

The proposed project was analyzed with respect to conformance with: 1) Morgan Hill 2035 General Plan; 2) Zoning Ordinance; and 3) California Environmental Quality Act :

1. Morgan Hill 2035 General Plan

The proposed project is consistent with the Commercial General Plan land use designation that is primarily located along arterial roadways west of Highway 101 and along the eastern freeway frontage. This designation is intended to allow a wide range of retail businesses, administrative and executive office uses, and professional services, either in stand-alone buildings or as part of shopping centers.

The proposed project aligns with the following General Plan Goals and Policies that are relevant to the proposed Use Permit.

Policy CNF- 4.9 Orderly Growth

Urban growth should occur in an orderly and contiguous pattern, within the designated Urban Service Area, encouraging infill of vacant urban land.

The proposed project is infill development within the City's Urban Service area that is served by existing roads, infrastructure and services.

Policy CNF-8.1 Require all development to feature high quality design that enhances the visual character of Morgan Hill.

The redevelopment of the existing restaurant will enhance the project site with a new restaurant building and updated landscaping that is complementary to the surrounding commercial development.

Policy ED–2.2. Economic Development to Manage Fiscal Impacts. Encourage economic development that addresses community needs and minimizes negative impacts on services, including impacts on water, stormwater, and wastewater.

The City of Morgan Hill will benefit from increased tax revenue generated by a Chick-fil-A restaurant. This revenue can be used to fund public services and infrastructure projects that contribute to economic development. A Chick-Fil-A has very little impact on local water, stormwater or wastewater.

GOAL ED-7 Thriving stores, restaurants, and shopping centers that meet local resident shopping needs and also attract regional shoppers and tourists.

Policy ED 7.1 Shopping Center and Other Commercial Development. Support the development of retail facilities to meet local demand and regional market opportunities, including the overlap between visitor and resident serving uses, by encouraging retail goods and services that serve both market segments.

Chick-fil-A restaurants can attract customers from nearby areas, leading to increased foot traffic in shopping centers or commercial districts. This can indirectly benefit other local businesses by exposing them to potential customers.

Policy ED 7.2 Regional Retail Facilities. Support the development of regional retail facilities that are visible and accessible from the City's freeway exits, to provide easy access by local residents as well as shoppers traveling from outside the City.

Chick-Fil-A is a well-known, sought-after brand that has been expanding in neighboring cities. If approved, this location will provide Morgan Hill residents with improved access to a restaurant that has demonstrated a regional draw.

Policy ED – 7.3 Commercial Center Revitalization and Reuse. Support actions and projects that facilitate the revitalization of existing shopping centers and, when appropriate, reuse them.

The proposed site for the new Chick-Fil-A restaurant has been vacant since 2021. As time goes by, the sight is likely to become more blighted and subject to vandalism. Revitalization of this site will significantly improve the vitality and aesthetics of the existing site.

Chick-fil-A restaurants can attract customers from nearby areas, leading to increased foot traffic in shopping centers or commercial districts. This can indirectly benefit other local businesses by exposing them to potential customers.

Policy TR-3.4 Level of Service Standards. The Level of Service (LOS) policy and design criteria for roadway improvements, use a Tiered LOS Standard.

According to the City of Morgan Hill level of service guidelines, development is said to create a significant adverse effect on traffic conditions at a signalized intersection if for either peak hour:

1. The level of service at the intersection degrades from an acceptable level (LOS D or LOS E as identified above) under no project conditions to an unacceptable level (LOS E or F) under project conditions, or
2. The level of service at the intersection is an unacceptable level (LOS E or F as identified above) under no project conditions and the addition of project trips causes the average critical delay to increase by four (4) or more seconds and the volume-to-capacity ratio (V/C) to increase by 0.01.

Project Trip Generation

As indicated in the Trip Generation and Operations Analysis (Attachment 6), the trip generation rates were determined utilizing vehicular counts at three existing Chick-fil-A restaurants (Pittsburg (CA), Milpitas, and Daly City) that have two drive-through lanes and are of comparable square footage to the proposed project. The project is estimated to generate 911 primary vehicle trips per day, with 51 primary vehicle trips (26 inbound and 25 outbound) in the AM peak hour and 100 primary vehicle trips (52 inbound and 48 outbound) in the PM peak hour. This assumes that 50% of vehicles will be pass-by trips which are trips made by drivers who already pass-by the site enroute to another destination. Including the pass-by trips, the project is estimated to produce 1,822 daily vehicle trips with 101 AM peak-hour trips (52 inbound and 49 outbound) and 201 PM peak-hour trips (101 inbound and 97 outbound) before any reductions. Because the existing commercial building on the project site is currently vacant, no trip credits were applied for the existing commercial space.

The Trip Generation and Operations Analysis indicates that the studied intersections currently operate at an acceptable LOS D or better conditions under existing conditions and that the project is consistent with the General Plan Level of Service Policy as the addition of project traffic would not result in the degradation of the studied intersections to an unacceptable level of service (LOS E or F) during the AM and PM peak hours under existing plus project conditions.

Off-site Improvements

The Trip Generation and Operations Analysis also indicated that operations could be improved at the Sutter Boulevard and Cochrane Plaza intersection by restricting left-turns and through movements from each of the driveways at the intersection (east and west legs) by closing the median gap along Sutter Boulevard.

As indicated below, a median could be constructed to maintain left turns from Sutter Boulevard to each of the driveways. The median gap closure would restrict turn movements from the Sutter Boulevard driveway to right-turns only and require project trips that are bound for northbound Sutter Boulevard and Cochrane Road to utilize Skipper Lane through the adjacent Evergreen Village center rather than Sutter Boulevard. This improvement is included as a condition of approval of the Design Permit.



2. Zoning Ordinance and Morgan Hill Business Park Planned Development

The site is designated for General Commercial use within the Morgan Hill Ranch Business Park Planned Unit Development zoning district (Ordinance #979, adopted June 1990) (Attachment 7).

The zoning references the allowed uses of the GC general commercial district as amended which would correspond to the current General Commercial (GC) Zoning district. Drive-through uses are conditional uses in the General Commercial (GC) district and require a Conditional Use Permit. Development standards for the General Commercial designation shall be the same as those established for the Non-Manufacturing Business designation of the Morgan Hill Business Park. The proposal is consistent with all provisions in the Zoning Code and the MHRBP Planned Development as demonstrated in the consistency tables provided below.

Standard	Requirement (MHBD PUD)	Proposed	Consistent
Setbacks			
Front (Cochrane Rd.)	40'	112' (Bldg.) 60' (Canopy)	Yes
Front (Sutter Blvd)	30'	56'	Yes
Interior Side	0	75' (Bldg.) 50' (Canopy)	Yes
Max. Height	50'	23'-5"	Yes
Bldg. Coverage	50%	7.1%	Yes
Parking	1 per 60 feet of public accommodation (1,998 sq. ft.) plus one space for every 250 sq. ft. gross floor area remaining (3,030 sq. ft) (5,028 sq. ft. total) 46 stalls required	46 stalls provided	Yes

Additionally, drive-through facilities are subject to the supplemental standards contained in Chapter 18.92.040. As discussed in the Trip Generation and Operations Analysis (Attachment 6), the proposed project exceeds the minimum requirements for a drive-through use below:

1. Drive-through lanes for fast food restaurants shall have a capacity for at least eight vehicles, at 20 feet per vehicle.

The project has a capacity of 48 vehicles, which exceeds this requirement.

2. The drive-through lanes are separate from the drive aisles, serving the project's surface parking lot.

The proposed drive-through lanes are separated from the parking lot and would not interfere with the ingress and egress of vehicles to/from the project site.

3. Pedestrian access routes shall not cross a drive-through lane within the minimum stacking space distance (8 vehicles).

As shown on the site plan, pedestrian access routes will be located across the drive-through exits (past the drive-through window) and across both lanes, approximately 17 car lengths back from the drive-through exits. Thus, the location of the proposed pedestrian access routes would meet minimum requirements.

4. Vehicular entrance or exit to a drive-through establishment shall be setback from the nearest public street intersection.

The proposed Cochrane Road driveway entrance-only would be located approximately 190 feet east of an existing right-in/right-out only driveway and 190 feet west of Sutter Boulevard. This meets the

required separation of at least 115 feet for roadways with a posted speed limit of 45 mph without a median opening. The existing Sutter Boulevard driveway is located approximately 340 feet south of Cochrane Road and 340 feet north of Jarvis Drive. This meets the required separation of at least 150 feet for roadways with a posted speed limit of 35 mph with a median opening.

According to the Traffic Operation Analysis, vehicle queues were observed at three Chick-fil-A restaurants with two drive-through lanes during the weekday AM and PM peak-hours, as well as the Saturday lunchtime period, to confirm that the proposed drive-through storage would meet demand. The maximum queue observed during weekdays was a total of 29 vehicles across two drive-through lanes during the PM peak-hour, while the maximum queue observed during the Saturday lunchtime period was 38 vehicles. Thus, the proposed drive-through with a total capacity of up to 52 vehicles is expected to have adequate capacity to accommodate expected queues during peak periods and not expected to spill over onto Sutter Boulevard or Cochrane Road. However, it is recommended Chick-Fil-A develop a queue management plan that can be implemented during high demand periods to prevent the potential for the drive-through queues to inhibit circulation within the project parking lot and block access to adjacent properties. The preparation of a queue management plan is recommended by staff as a condition of approval of the Conditional Use Permit and Design Permit.

Noise

The proposed project is required to comply with the noise limitations in Municipal Code Section 18.76.090, which limits noise as measured at the lot line adjacent to commercial uses to 65 dBA. As discussed in the Initial Study, and as documented in the Environmental Noise & Vibration Assessment (Appendix C) (Attachment 8), operations associated with the proposed project would generate noise associated with parking lot movements, drive-through operations (vehicle passages and amplified menu speaker board), on-site vehicle circulation, outdoor patio noise (patrons conversing), delivery truck circulation and delivery activities, and non-transportation sources, such as landscaping, maintenance, and heating ventilation and air conditioning (HVAC) equipment.

As indicated in the Noise assessment, none of the foregoing noise generation sources would substantially increase noise levels from what currently exists in the project area. As such, the project will not expose persons to or generate noise levels that would exceed applicable noise criteria in the Morgan Hill General Plan or Morgan Hill Municipal Code.

3. Conditional Use Permit Findings

In reviewing the application for a Conditional Use Permit, the Planning Commission shall consider the following:

1. The proposed use is allowed in the applicable district.

Drive-through facilities are identified as a "Conditional Use" in the CG General Commercial Zoning District as referenced in the Morgan Hill Ranch Business Park Planned Unit Development Zoning

2. The proposed use is consistent with the General Plan, Zoning Code, and any applicable specific plan or area plan adopted by the City Council.

The proposed use is considered a commercial use that is consistent with the Commercial General Plan designation on the site. As previously indicated, the project is consistent with the CG zoning on the property. The proposed site plan conforms with the Development Standards of the Morgan Hill Business Park Planned Unit Development zoning district and the Design Review Handbook for commercial uses.

3. The site is suitable and adequate for the proposed use.

The site is appropriately zoned and of adequate size to accommodate the proposed use. The project

as proposed conforms with the supplemental standards for drive-through facilities in MHMC Chapter 18.92.040 including drive-through lane capacity and intersection separation requirements.

4. The location, size, design, and operating characteristics of the proposed use will be compatible with the existing and future land uses in the vicinity of the property.

The proposed restaurant is located within a primarily commercial area and is similar in size, design and operating characteristics with similar existing and planned drive-through uses within the adjacent Evergreen Village Commercial Center and in the Cochrane Plaza to the east on Cochrane Road.

A Noise analysis was performed to demonstrate that the office use on the adjoining property to the south on Sutter Blvd. would not be impacted by noise from the new restaurant operations.

5. The proposed use will not be detrimental to the public health, safety, and welfare of persons residing or working in the surrounding areas.

The project's operations would not adversely affect public health, safety, or welfare as it conforms with the applicable Zoning code, Morgan Hill Business Ranch development standards, and Municipal code performance standards for drive-through uses. A Noise analysis was performed to demonstrate that the surrounding uses would not be impacted by noise from the new restaurant operations. The project will comply with stormwater and building code requirements.

6. The proposed use would not have a substantial adverse effect in traffic circulation and on the planned capacity of the street system.

An intersection level of service analysis was performed in conjunction with the attached Trip Generation and Operations Analysis that shows that intersections in the vicinity currently operate at an acceptable LOS D or better conditions under existing conditions, and the addition of project traffic would not result in the degradation of the study intersections' levels of service during the AM and PM peak hours under existing plus project conditions. The planned median closure on Sutter Blvd will also improve traffic operations.

7. The proposed use is properly located within the city and adequately served by existing or planned services and infrastructure.

The proposed project is a redevelopment of an existing restaurant site and is located within a developed area that is adequately served by existing or planned services and infrastructure.

4. Design Permit

A Design Permit is a discretionary action that enables the City to ensure that proposed development has high quality design consistent with the General Plan and any other applicable specific plan or area plan adopted by the City Council. The Design Permit process is also intended to ensure that new development and uses are compatible with their surroundings and minimize negative impacts on neighboring properties.

The Design Permit does not consider or permit the use of a building – it considers the design of the building and the site the building is located upon.

In accordance with Section 18.108.040.B (Reviewing Authority), the Community Development Director (Development Services Director) is the reviewing body to act on all Design Permit applications unless the Director finds that project to be significant. However, the Director may refer any Design Permit application to the Planning Commission for review and final decision. When

considering the Design Permit, the City shall evaluate applications to ensure that they satisfy the following criteria: conform to the policies of the General Plan, and any applicable specific plan, and are consistent with any other policies or guidelines the City Council may have adopted.

To approve a Design Permit, the reviewing authority shall make the following findings:

1. The proposed project is consistent with the General Plan and any applicable specific plan, area plan, or other design policies and regulations adopted by the City Council.

The site has a Commercial General Plan designation in the Morgan Hill 2035 General Plan. The General Plan specifies a maximum floor area ratio of 0.60 percent. The proposed commercial development of the site is consistent with General Plan policies that encourage additional job opportunities for residents.

Policy CNF-8.1 High Quality Design. Require all development to feature high quality design that enhances the visual character of Morgan Hill.

The proposed building is a unique design (Attachment 12) that is appropriate for this prominent location. The building design utilizes a variety of materials using stucco, glass, steel, and wood composite panels on all sides to create visual interest, lessen the mass of the building, and add visual appeal in accordance with the Morgan Hill Architectural Review Handbook. Landscaping is designed to complement the building design, providing additional visual interest and screening.

Policy CNF-8.4 Architectural Quality. Optimize architectural quality by encouraging the use of quality materials, particularly accents and authentic detailing, such as balconies and window trims.

The proposed development features an architectural style that is compatible with the surrounding developments including the adjacent Evergreen Village shopping center and Morgan Hill Business Ranch.

Policy CNF-8.5 Building Façade. On all sides of buildings, require the incorporation of quality architectural design elements for all building facades and stepping back upper floors in order to reduce bulk and mass and to break up monotonous wall lines.

Quality materials and elements are included on all four sides of the building. Building façade articulation is included to break up monotonous wall lines.

Policy CNF-8.7 Design Sensitivity. Ensure that new development is sensitive to the character of adjacent structures and the immediate neighborhood.

The proposed architecture complements the adjacent commercial development. The proposed design is in keeping with that of the new development in the adjacent Evergreen Village Center including the proposed hotel on the adjacent property.

3. The proposed project substantially complies with all applicable design standards and guidelines contained in the Design Review Handbook.

The proposed project substantially complies with all applicable design standards and guidelines contained in the Design Review Handbook including;

- Architectural Elements to break up long horizontal rooflines.
- Roof lines that screen roof-mounted equipment
- Consistent design with surrounding development and character

- Does not utilize "chain" architecture
 - Screening of drive-through lanes
4. The proposed project has been reviewed in compliance with the California Environmental Quality Act (CEQA).

An initial Study was prepared that supports a determination that the proposed project qualifies for an exemption under CEQA Guidelines Section 15332, Class 32 for infill developments.

5. The proposed project development will not be detrimental to the public health, safety, or welfare or materially injurious to the properties or improvements in the vicinity.

The project's operations would not adversely affect public health, safety, or welfare as it conforms with the applicable Zoning code and Morgan Hill Business Ranch development standards and Municipal code performance standards for drive-through uses. A Noise analysis was performed to demonstrate that the surrounding uses would not be impacted by noise from the new restaurant operations. The project will comply with stormwater and building code requirements.

6. The proposed project complies with all Design Review criteria in subsection H. of Section 18.108.040 of the municipal code.

The project as proposed complies with all criteria in subsection H of Section 18.108.040 (Design Review Criteria) of the Morgan Hill Municipal Code.

1. **Community Character.** The proposed development is compatible with and preserves the character and distinctive sense of place for Morgan Hill. The building design utilizes a variety of materials using stucco, glass, steel, and wood composite panels on all sides to create visual interest, lessen the mass of the building, and add visual appeal in accordance with the Morgan Hill Architectural Review Handbook. Landscaping is designed to complement the building design providing additional visual interest and screening.

2. **Neighborhood Compatibility.** The proposed development incorporates appropriate height, massing and intensity compatible with adjacent buildings. The project height, massing and intensity is consistent and compatible with the adjacent properties.

3. **Pedestrian Environment.** The proposed development incorporates sidewalks, connections to public ways and an outdoor dining to support an active public realm and an inviting pedestrian environment.

4. **Privacy.** The proposed development locates buildings and building entrances, windows and doors with an adequate buffer including landscaping for privacy from adjacent properties and for project occupants.

5. **Safety.** The proposed development promotes safety and minimizes opportunities for crime by locating main entrances visible from adjacent main roads.

6. **Massing and Scale.** The proposed development architecture complements and respects the neighboring structures. Large volumes are divided into small components with varying wall planes, material, color, and vertical articulation. Building sizes and scale are comparable with other buildings in the MHRBP.

7. **Architectural Style.** The proposed development features an architectural style that is

compatible with the surrounding developments and natural features with a design that is original.

8. **Articulation and Visual Interest.** The proposed development uses vertical and horizontal articulation appropriately to add visual interest, distinctiveness and human scale. Doors, windows, canopies and building projections are integrated with the design to relate to human scale. Storefront trim, banding, mullion design and canopies contribute to the visual interest of the building.

9. **Materials.** The building facades include a mix of materials including stucco, glass, steel and wood and appropriately designed for this architectural style and compatible with the surrounding development.

10. **Parking and Access.** Primary access to the project site would be provided from a 35-foot-wide driveway in the southern corner of the project site, which would connect to the existing easement north of the medical office and allow vehicles to both enter and exit the project site. A second 22-foot-wide entrance-only driveway would be provided from Cochrane Road, at the northwest corner of the site.

11. **Landscaping.** The proposed landscape planting provides new trees, screen planting, and shrubs that will enhance the surrounding area and are appropriate to the site.

12. **Open Space and Public Places.** The proposed development provides a covered outdoor seating area in addition to the indoor seating provided.

13. **Signs.** The proposed address signage is appropriate and compatible with the project design and surrounding context. A separate sign application will be submitted for project signage.

14. **Lighting.** The proposed exterior lighting is designed and located to minimize illumination of the sky and adjacent properties.

15. **Accessory Structures.** The proposed development provides for enclosed trash collection. These accessory structures utilize the same material, color and design as the primary structure.

16. **Mechanical Equipment, Trash Receptacles, and Utilities.** The proposed development provides enclosures for trash receptacles and utilities are screened by landscaping.

CONCLUSION:

Staff recommends approval of the proposed Conditional Use Permit and Design Permit.

CEQA (California Environmental Quality Act):

An Initial Study was prepared (Attachment 5) that supports a determination that the proposed project qualifies for an exemption under CEQA Guidelines Section 15332, Class 32 for infill developments that meet the following criteria:

1. The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.
2. The proposed development is within the city limits on a project site of no more than five acres substantially surrounded by urban uses.
3. The project site has no value as habitat for endangered, rare, or threatened species.
4. Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.
5. The site can be adequately served by all required utilities and public services.

The following additional studies were conducted as a part of the Initial Study to further support the CEQA exemption determination:

Appendix A: *Trip Generation and Operations Analysis*: It was determined that the addition of project traffic would not result in the degradation of the nearby intersections' LOS (Level of Service) during the AM and PM peak hours under both existing plus Project Conditions and Year 2030 Cumulative with Project Conditions. (Attachment 6)

Appendix B: *Air Quality and Greenhouse Gas Modeling*: It was determined that the proposed project would result in maximum construction and operational criteria air pollutant emissions that are below the applicable thresholds. (Attachment 7)

Appendix C: *Environmental Noise and Vibration Assessment* (Attachment 8) – None of the noise generation sources including those listed below would substantially increase noise levels from what currently exists in the project area;

- Parking lot movements
- Drive-through operations (vehicle passages and amplified menu speaker board)
- On-site vehicle circulation
- Outdoor patio noise (patrons conversing)
- Delivery truck circulation and delivery activities
- Non-transportation sources, such as landscaping, maintenance, and heating ventilation and air conditioning (HVAC) equipment.

Appendix D: *Vehicle Miles Traveled (VMT) Assessment*: The proposed project would not result in an impact on the transportation system based on OPR's recommended VMT impact criteria. (Attachment 9)

COMMUNITY ENGAGEMENT:

The proposed project was publicly noticed (mailing to property owners within 300 feet of the project and newspaper legal noticing) for the minimum 10-day period. A sign was also posted on the site regarding the pending project.

The following correspondence have been received:

Email correspondence dated 2/9/23 from Joanne Conca (owner of adjacent property 18525 Sutter Blvd.) in opposition to the Conditional Use Permit. (Attachment 10)

Memorandum dated March 20, 2023 from Basil S. Shiber, attorney representing Chick-fil-a, regarding Access Easement issue. (Attachment 11)

ATTACHMENTS:

1. Planning Commission Resolution No. 23-08 Use Permit
2. Planning Commission Resolution No. 23-09 Design Permit
3. Statement of Operations
4. MHRBP PUD Ordinance
5. Initial Study
6. IS Appendix A - Trip Generation and Operations Analysis
7. IS Appendix B - Air Quality and Greenhouse Gas
8. IS Appendix C - Noise and Vibration Assessment
9. IS Appendix D - Vehicle-Miles Traveled (VMT) Assessment - April 24, 2023
10. Email from Joanne Conca

11. Memorandum re Access Easement
12. Building Elevations
13. Evergreen Village Plan
14. Design Review Final Plans
15. Use Permit Final Plans

RESOLUTION NO. 23-08

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORGAN HILL APPROVING A CONDITIONAL USE PERMIT (UP2022-0007), TO CONSTRUCT AN APPROXIMATELY 5,000 SQUARE FOOT DRIVE-THROUGH RESTAURANT LOCATED ON THE SOUTHWEST CORNER OF COCHRANE RD. AND SUTTER BLVD (APNS 726-32-002, 022)

WHEREAS, on December 7, 2022 an application was submitted by 4G Development on behalf of Chick-fil-a for the request of a conditional use permit to allow an approx. 5,000 square foot drive-through restaurant including the demolition of the existing building.

WHEREAS, such a request was considered by the Planning Commission at its regular meeting of August 22, 2023; and

WHEREAS, pursuant to the Morgan Hill Municipal Code Section 18.136.050.A, the Director of Development Services determined the project exempt from the California Environmental Quality Act (CEQA) as it meets the criteria for the Infill Development Project Exemption (Guidelines Section 15332).

WHEREAS, testimony was received at the duly noticed public hearing, along with exhibits and drawings and other materials on August 22, 2023.

WHEREAS, the City of Morgan Hill is the lead agency on the Project, and the Planning Commission is the decision-making body for the proposed Project; and

NOW, THEREFORE, THE MORGAN HILL PLANNING COMMISSION DOES RESOLVE AS FOLLOWS:

SECTION 1. The Project approved pursuant hereto is exempt from the California Environmental Quality Act (CEQA) as the environmental checklist provides substantial evidence that the proposed project can be considered exempt from the California Environmental Quality Act on the basis that it meets the criteria for the Infill Development Project Exemption (Guidelines Section 15332) and does not meet any of the exceptions for exemptions (Guidelines Section 15300.2).

SECTION 2. The approved Conditional Use Permit has been found consistent with the Findings of approval contained in Section 18.108.030 of the Zoning Code and hereby adopted:

- a. The proposed use is allowed in the applicable district.**

Drive-through facilities are identified as a "Conditional Use" in the CG General Commercial Zoning District as referenced in the Morgan Hill Ranch Business Park Planned Unit Development Zoning.

b. The proposed use is consistent with the General Plan, Zoning Code, and any applicable specific plan or area plan adopted by the City Council.

The proposed use is considered a commercial use that is consistent with the Commercial General Plan designation on the site. The project is consistent with the CG zoning on the property. The proposed site plan conforms with the Development Standards of the Morgan Hill Business Park Planned Unit Development zoning district and the Design Review Handbook for commercial uses. The proposed project enhances the existing use by redeveloping the site, and if approved, will construct the facility to meet all the development standards within the zoning district.

c. The site is suitable and adequate for the proposed use.

The site is appropriately zoned and of adequate size to accommodate the proposed use. The project as proposed conforms with the supplemental standards for drive-through facilities in MHMC Chapter 18.92.040 including drive-through lane capacity and intersection separation requirements.

d. The location, size, design, and operating characteristics of the proposed use will be compatible with the existing and future land uses in the vicinity of the property.

The proposed restaurant is located within a primarily commercial area and is similar in size, design and operating characteristics with similar existing and planned drive-through uses within the adjacent Evergreen Village shopping center and in the Cochrane Plaza to the east on Cochrane Road.

e. The proposed use will not be detrimental to the public health, safety, and welfare.

The project's operations would not adversely affect public health, safety, or welfare as it conforms with the applicable Zoning code, Morgan Hill Business Ranch development standards, and Municipal code performance standards for drive-through uses. Noise analysis was performed to demonstrate that the surrounding uses would not be impacted by noise from the new restaurant operations. The project will comply with stormwater and building code requirements.

- f. The proposed use would not have a substantial adverse effect in traffic circulation and on the planned capacity of the street system.**

An intersection level of service analysis was performed that shows that intersections in the vicinity currently operate at an acceptable LOS D or better conditions under existing conditions, and the addition of project traffic would not result in the degradation of the study intersections' levels of service during the AM and PM peak hours under existing plus project conditions. The planned median closure on Sutter Blvd will also improve traffic operations as discussed within the staff report.

- g. The proposed use is properly located within the city and adequately served by existing or planned services and infrastructure.**

The proposed project is a redevelopment of an existing restaurant site and is located within a developed area, and within the Urban Service Area that is adequately served by existing or planned services and infrastructure.

SECTION 4. The Planning Commission hereby approves the Conditional Use Permit subject to the conditions set forth in Exhibit A attached hereto and incorporated herein this reference. Any expansion, intensification, or changes to the use approved under this conditional use permit deemed major by the Development Services Director shall be permitted only upon amendment of this Conditional Use Permit or approval of a separate Conditional Use Permit application.

PASSED AND ADOPTED THIS 22nd DAY OF AUGUST 2023, AT A REGULAR MEETING OF THE PLANNING COMMISSION BY THE FOLLOWING VOTE:

AYES: COMMISSIONERS:

NOES: COMMISSIONERS:

ABSTAIN: COMMISSIONERS:

ABSENT: COMMISSIONERS:

ATTEST:

APPROVED:

JENNA LUNA, Deputy City Clerk

WAYNE TANDA, Chair

EXHIBIT "A"
STANDARD CONDITIONS

APPLICATION NO: UP2021-0002/EA2021-0001

THE FOLLOWING APPROVAL REQUIREMENTS AND ANY SPECIAL CONDITIONS SHALL BE APPLIED THROUGH THE DEVELOPMENT APPROVAL PROCESS.

Legend

MHMC= Morgan Hill Municipal Code

MHARH= Morgan Hill Architectural Review Handbook

CMH= City of Morgan Hill

CFC= California Fire Code

I. PROJECT DESCRIPTION

The proposed project includes a Conditional Use Perm to allow an approximately 5,000 square foot drive-through restaurant on a 1.63-acre property, presently developed with a vacant 6,900 square foot restaurant building (formerly Marie Callender's & Forbes Grill) that is proposed to be demolished.

II. PROJECT CONDITIONS OF APPROVAL

It shall be the responsibility of the Owner to ensure that any changes or modifications to the Project is in compliance with the original City Conditions of Approval of the Project, which are hereby incorporated herein as set forth in full.

PLANNING DIVISION

- A. **Conditional Use Permit.** This Conditional Use Permit approval is limited to the Project Description above and the plan set on file (UP2022-0007) with the Development Services Department. The proposal will require approval of a Design Permit prior to submittal of a building permit. The approved building plans and landscape plans must be in substantial conformance with the approved Use Permit and future Design Permit plans as determined by the Development Services Director.

- B. **Time Limits:** The conditional use permit approval granted pursuant to this Resolution shall remain in effect for two years from approval date. Failure to exercise this use within this term shall result in termination of approval unless an extension of time is granted with a showing of just cause prior to the expiration date. **(MHMC 18.108.040 and 18.104.210)**
- C. A Queue management plan is required prior to issuance of a building permit.
- D. Access shall be continually maintained to Sutter Blvd.
- E. The Conditional Use Permit is approved solely for the operation of a drive-through restaurant as described in the applicant's proposed statement of operations on file with the Planning Division and as explained in the staff report. Any expansion, intensification, or changes to the uses approved under this Conditional Use Permit shall be permitted only upon amendment of this Conditional Use Permit or approval of a separate Conditional Use Permit.
- F. **Defense and Indemnity.** As part of, and in connection, with this application to the City of Morgan Hill, Applicant agrees to defend, indemnify, and hold harmless the City of Morgan Hill, its officers, agents, employees, officials and representatives (Indemnitees) from and against any and all claims, actions, or proceedings arising from any suit for damages or for equitable or injunctive relief which is filed against City to attack, set aside, void or annul its approval of this application or any related decision, or the adoption of any environmental documents which relates to said approval. The City shall promptly notify the Applicant of any such claim, action or proceeding and the City shall cooperate fully in the defense thereof. In the event that Applicant is required to defend Indemnitees in connection with the proceeding, Indemnitees shall retain the right to approve (a) the counsel to so defend Indemnitees; (b) all significant decisions concerning the manner in which the defense is conducted; and (c) any and all settlements, which approval shall not be unreasonably withheld. This indemnification shall include but is not limited to, (a) all pre-tender litigation costs incurred on behalf of the City, including City's attorney's fees and all other litigation costs and expenses, including expert witnesses, required to defend against any lawsuit brought as a result of City's approval or approvals; (b) reasonable internal City administrative costs, including but not limited to staff time and expense spent on the litigation, after tender is accepted; and (c) all damages, costs, expenses, attorney fees or expert witness fees that may be awarded to the prevailing party arising out of or in connection with the approval of the application or related decision. City may, in its sole discretion, participate in the defense of such action; but such participation shall not relieve Applicant of its obligations under this condition. The undersigned hereby represents that they are the Applicant or are fully empowered by the Applicant their agent to agree to provide the indemnification, defense and hold harmless obligations, and the signature below represents the unconditional agreement by Applicant to be bound by such conditions.

ENGINEERING DIVISION

- A. The Design Permit will be reviewed for compliance with the Municipal Code including but not limited to the on- and off-site improvements and storm water control plan.
- B. Project will be subject to impact fees prior to issuance of any future building permit.

BUILDING DIVISION

- A. The following items need to be incorporated into the design and will be verified at Building Permit application plan review:
 - 1. Project shall be designed to comply with the current edition of the California Codes of Regulations as amended by the Morgan Hill Municipal Code Title 15.
 - 2. Project shall comply with the Morgan Hill Municipal Code (MHMC) including but not limited to:
 - MHMC 15.65 Sustainable Building Regulations.
 - MHMC 15.40 Building Security
 - MHMC 15.38 Wage Theft Preventions
 - MHMC 18.148 Water Conservation
 - MHMC 15.63 Prohibition of Natural Gas Infrastructure in New Buildings
 - 3. A separate Building Permit will be required for demolition of existing structures. Demolition of existing tank requires Santa Clara Environmental Health Hazardous Materials approval.
 - 4. A separate submittal, fee and permit is required to Santa Clara County Environmental Health for food preparation.

FIRE DIVISION

- A. **Preliminary Review Only:** The requirements and conditions stated in this review are preliminary and are intended to be used for the purposes of project planning. An official Fire Department review of the project will be conducted upon receipt of a complete plan submittal application that clearly shows all intended grading, demolition, construction or building modifications.
- B. **Fire Apparatus (Engine) Access Roads Required:** Prior to the commencement of combustible construction, an access roadway with a paved all-weather surface and a minimum unobstructed width of 20 feet, vertical clearance of 13 feet, 6 inches shall be provided, with minimum circulating turning radius of 36 feet outside and 23 feet inside, and a maximum slope of 15%, unless otherwise approved in

writing by the Fire Marshal. Installations shall conform to the City of Morgan Hill Standard Details and Specifications 11-B. **(CFC Section 503 as amended by MHMC 15.44.140)**

- C. Review of the conceptual plans does not release the developer, architect, or contractor of the responsibility for the corrections of mistakes, errors or omissions contained therein.

POLICE DEPARTMENT

- A. **Safety and Security Plan.** The Police Department shall review and approve a safety and security plan for the facility including a security camera plan prior to the issuance of a building permit.
- B. **Camera Access.** The Police department will require access to camera feed and camera recordings to be able to view real time and recorded footage if/when required.

RESOLUTION NO. 23-09

**A RESOLUTION OF THE PLANNING COMMISSION OF
THE CITY OF MORGAN HILL APPROVING A DESIGN
PERMIT TO ALLOW FOR THE CONSTRUCTION OF AN
APPROXIMATELY 5,000 SQUARE FOOT DRIVE
THROUGH RESTAURANT LOCATED ON THE
SOUTHWEST CORNER OF COCHRANE RD. AND
SUTTER BLVD (APNS 726-32-002, 022)**

WHEREAS, 4G Development and Consulting applied for a Design Permit on behalf of Chick-fil-a to construct an approx. 5,000 square foot drive through restaurant (SR2022-0024: Sutter – Chick-fil-a); and

WHEREAS, such request was considered by the Planning Commission at its regular meeting on August 22, 2023; and

WHEREAS, testimony received at a duly noticed public hearing, along with exhibits and drawings and other materials have been considered in the review process; and

WHEREAS, an Initial Study was prepared that supports a determination that the proposed project qualifies for an exemption under CEQA Guidelines Section 15332, Class 32 for infill developments; and

WHEREAS, this project is located within the Morgan Hill Ranch Business Park PUD and is consistent with the development projections analyzed in the EIR for the project site. The Project also is designed to be consistent with the development standards in the General Plan and Zoning Code.

**NOW, THEREFORE, THE MORGAN HILL PLANNING COMMISSION DOES
RESOLVE AS FOLLOWS:**

SECTION 1. The project is consistent with the Morgan Hill Ranch Business Park Planned Development, Zoning Ordinance, and General Plan.

SECTION 2. The Design Review has been found consistent with the criteria for Design Review permit approval contained in Section 18.108.040 of the Morgan Hill Municipal Code. The proposed project is in compliance with all applicable design standards and guidelines contained in the Design Review Handbook.

SECTION 3. The Planning Commission approves SR2022-0024. The design shall be expressly conditioned in conformance with conditions incorporated herein

and as attached as Exhibit "A". Minor deviations to the site review permit may be approved by the Community Development Director when consistent with the overall intent of the project.

SECTION 4. Notice is hereby given that, pursuant to the Mitigation Fee Act, the City of Morgan Hill charges certain fees (as such term is defined in Government Code Section 66000) in connection with approval of your use for the purpose of defraying all or a portion of the cost of public facilities related to your development project (Mitigation Fee Act Fees). These fees do not include fees for processing applications for governmental regulatory actions or approvals, or fees collected (a) under development agreements, (b) pursuant to agreements with the Morgan Hill Redevelopment Agency or (c) as a part of your application for development allocations under the City's Residential Development Control System. The Mitigation Fee Act Fees applying to your project are listed in the schedule of fees provide. Notice is also hereby given that you have the opportunity to protest the imposition of the Mitigation Fee Act Fees within 90 days of the approval of the approval or conditional approval of your development project and that the 90-day approval period in which you may protest has begun. This right to protest does not apply to voluntary Residential Development Control System fees.

PASSED AND ADOPTED THIS 22ndDAY OF AUGUST 2023, AT A REGULAR MEETING OF THE PLANNING COMISSION BY THE FOLLOWING VOTE:

AYES: COMMISSIONERS:

NOES: COMMISSIONERS:

ABSTAIN: COMMISSIONERS:

ABSENT: COMMISSIONERS:

ATTEST:

APPROVED:

JENNA LUNA, Deputy City Clerk

WAYNE TANDA, Chair

EXHIBIT "A" STANDARD CONDITIONS

APPLICATION NO: SR2022-0024

THE FOLLOWING APPROVAL REQUIREMENTS AND ANY SPECIAL CONDITIONS SHALL BE APPLIED THROUGH THE DEVELOPMENT APPROVAL PROCESS.

Legend

MHMC= Morgan Hill Municipal Code
MHARH= Morgan Hill Architectural Review Handbook
CMH= City of Morgan Hill
CFC= California Fire Code

I. PROJECT DESCRIPTION

A Design Permit is requested to construct an approximately 5,000 square foot drive-through restaurant on a 1.63-acre property, presently developed with a vacant 6,000 square foot restaurant (formerly Marie Callender's) that is proposed to be demolished. The project includes an additional approximately 8 400 square feet area for landscaping and sidewalk improvements within the easement on the adjoining property to the south at 18525 Sutter Blvd.

The project shall comply with all requirements of related project approvals granted by the City, including all of the following:

II. PROJECT CONDITIONS OF APPROVAL

This Design Permit approval is limited to the plan set on file (SR2022-0024) with the Development Services Department with the Development Services Department. The approved building plans and landscape plans must be in substantial conformance with the Design Review plans as determined by the Development Services Director. These documents show the location and dimensions of all buildings and elevations with colors and materials, amenities and square footage for all common areas, and vehicle and pedestrian circulation ways (ingress/egress), common areas, and other easement areas.

It shall be the responsibility of the Owner to ensure that any changes or modifications to the Project or any Unit are in compliance with the original City Conditions of Approval of the Project, which are incorporated herein.

PLANNING DIVISION

DEFENSE AND INDEMNITY

- A. As part of, and in connection, with this application to the City of Morgan Hill, Applicant agrees to defend, indemnify, and hold harmless the City of Morgan Hill, its officers, agents, employees, officials and representatives (Indemnitees) from and against any and all claims, actions, or proceedings arising from any suit for damages or for equitable or injunctive relief which is filed against City to attack, set aside, void or annul its approval of this application or any related decision, or the adoption of any environmental documents which relates to said approval. The City shall promptly notify the Applicant of any such claim, action or proceeding and the City shall cooperate fully in the defense thereof. In the event that Applicant is required to defend Indemnitees in connection with the proceeding, Indemnitees shall retain the right to approve (a) the counsel to so defend Indemnitees; (b) all significant decisions concerning the manner in which the defense is conducted; and (c) any and all settlements, which approval shall not be unreasonably withheld. This indemnification shall include, but is not limited to, (a) all pre-tender litigation costs incurred on behalf of the City, including City's attorney's fees and all other litigation costs and expenses, including expert witnesses, required to defend against any lawsuit brought as a result of City's approval or approvals; (b) reasonable internal City administrative costs, including but not limited to staff time and expense spent on the litigation, after tender is accepted; and (c) all damages, costs, expenses, attorney fees or expert witness fees that may be awarded to the prevailing party arising out of or in connection with the approval of the application or related decision. City may, in its sole discretion, participate in the defense of such action; but such participation shall not relieve Applicant of its obligations under this condition. The undersigned hereby represents that they are the Applicant or are fully empowered by the Applicant as their agent to agree to provide the indemnification, defense and hold harmless obligations, and the signature below represents the unconditional agreement by Applicant to be bound by such conditions.

TIME LIMITS

- A. **Term:** The Design Review approval granted pursuant to this Resolution shall remain in effect for two years to August 22, 2024. Failure to obtain building permits within this term shall result in termination of approval unless an extension of time is granted with a showing of just cause prior to expiration date. **(MHMC 18.108.040)**

SITE DEVELOPMENT

- A. **Final Site Development Plans:** Final site development plans shall be reviewed for conformance with Design Permit SR2022-0024 and in accordance with

Morgan Hill Municipal Code Section 18.108.040 (Design Permit) and approved by the Development Services Department prior to issuance of a building permit. All such plans shall include:

1. Detail depicting all concrete curbs as full formed.
 2. Exterior lighting of the building and site shall be designed so that lighting is not directed onto adjacent properties and light source is shielded from direct off-site viewing.
 3. Ramps, special parking spaces, signing and other physical features for the disabled, shall be provided throughout the site for all publicly used facilities.
 4. All mechanical equipment, including electrical and gas meters, post indicator valve, backflow prevention devices, etc., shall be architecturally screened from view or located interior to the building. All ground mounted utility appurtenances such as transformers shall not be visible from any public right-of-way and shall be adequately screened through the use or combination of concrete or masonry walls, berming, and landscaping. **(MHARH p.20, 45, 79)** For additional screening, backflow preventers shall be painted dark green, except the fire connection which shall be painted yellow.
 5. All existing on-site overhead utilities shall be placed underground in an approved conduit from the service connection at the street or at the property line to the service connection at the building as detailed in engineering conditions within this document.
 6. To the extent acceptable to end users, implement good faith Transportation Demand Management Plan measures to promote alternate means of transportation and reduce single occupancy vehicle trips to and from the Project.
- B. **Prohibition of Natural Gas Infrastructure in New Buildings.** In accordance with Chapter 15.63 of the Municipal Code, future tenants will be required to demonstrate the need for gas service for manufacturing and other business uses. Natural gas shall not be used for heating and cooling of the building.

BUILDING DESIGN

- A. **Roof Mounted Mechanical Equipment:** All roof mounted mechanical equipment shall be placed within a screened roof top enclosure depicted on the elevation

drawings or located below the parapet level and shall not be visible from the ground at any distance from the building. Cross section roof drawings shall be provided at the building permit stage indicating the relative height of the screen wall or parapet. Minimum screen height or parapet depth shall be 5 feet or greater to match the height of any proposed equipment. **(MHARH p.48, 65, 87, 106)**

- B. **Building Mounted Lighting:** Lighting fixtures shall not project above the fascia or roofline of the building. Any ground mounted lighting projecting onto the building or site shall be subject to the review and approval of the Development Services Director. Adjustment to the lighting intensity may be required after the commencement of the use. **(MHARH p. 67, 109)**

PARKING, VEHICULAR ACCESS AND LANDSCAPING

- A. **Parking Lot Landscaping:** All landscaping within parking lots shall comply with the requirements of Chapter 18.72 (Landscaping) in addition to the standards within this section.

1. **Interior Landscaping.** All areas within a parking lot not utilized for parking spaces or access/circulation shall be landscaped. For parking lots with more than fifteen spaces, the minimum amount of interior landscaping is specified in Table 18.72-6. Interior landscaping is defined as any landscaped area surrounded on at least two sides by parking spaces or drive aisles, and excluding areas around the perimeter of the parcel or development site.
2. **Shade Trees.**
 - a. One shade tree shall be provided for every five parking spaces in a parking lot.
 - b. Shade trees shall be a minimum twenty-four-inch box in size and shall provide a minimum thirty-foot canopy at maturity.
 - c. Shade trees shall be of a type that can reach maturity within fifteen years of planting and shall be selected from a city-recommended list of canopy tree species.
 - d. Shade trees shall be arranged in a parking lot to provide maximum shade coverage (based on a thirty-foot canopy) on August 21. The arrangement should approximate nearly fifty percent shade coverage.
3. **Concrete Curbs.**
 - a. All landscape areas shall be separated from parking spaces, drive aisles and driveways by a continuous, raised concrete curb. Raised

concrete curbs shall be a minimum of six inches high by four inches deep.

- b. The city may approve alternatives to raised concrete curbs as needed to comply with any mandatory stormwater drainage standards.
4. **Parking Space Landscaping.** A maximum of two feet at the front end of a parking space may be landscaped with low shrubs or ground cover in which a vehicle could extend over in lieu of paving surface. This landscaping may not count toward minimum required parking lot landscaped area.
5. **Timing.** Adjacent parking lot landscaping shall be installed prior to the city's authorization to occupy any buildings served by the parking area, or prior to the final inspection for the parking lot.
6. **Exterior Parking Lot Lighting:** For projects with more than six parking spaces, detailed lighting information is provided in compliance with Section 18.72.060.G of the Morgan Hill Municipal Code. Lights shall use cut-off shields and be downward directed.
- B. **Planting and Irrigation Working Drawings:** Detailed landscape planting and irrigation working drawings shall be submitted to the Development Services Director for approval prior to issuance of building permits. Landscape plans for streets and landscape easements shall be part of the improvement plan submittal.
- C. **Lighting:** Walkways and pedestrian pathways in landscaped areas or common areas not considered building entrances or a part of parking lot areas shall be illuminated with a minimum of one (1) foot-candle to ensure safe nighttime conditions. **(MHARH p.30, 67, 108)**
- D. **Maintenance of Landscaping:** The landscaping installed and accepted with this project shall be maintained on the site as stated within the approved plans. Any alteration or modification to the landscaping shall not be permitted unless otherwise approved by the Development Services Director.
- E. **Water Conserving Landscaping Ordinance:** The landscape plans shall be in conformance with the City's Water Conserving Landscape Ordinance that was developed in accordance with California law. This Ordinance restricts landscaping turf to certain areas, specifies plant selection, requires certain types of irrigation equipment, and calls for the development of comprehensive water use calculations as an aspect of the submitted landscape plans. **(MHMC 18.64)**

SIGNS

- A. **Separate Application Required for Sign Approval:** Signs proposed for this development shall be designed in conformance with the Morgan Hill Business Park Sign program and shall require separate application and approval by the Planning Division prior to installation of any signs.

HABITAT PLAN

- A. **Fees:** The approved project is covered pursuant to the Santa Clara Valley Habitat Plan (Habitat Plan) and subject to fees and conditions contained in the Habitat Plan.
- B. **Application Package:** Prior to issuance of a grading permit, the project shall complete and submit a Habitat Plan Application Package. All fees shall be paid prior to issuance of a grading permit. **(MHMC 18.132)**
- C. **Conditions:** Any additional conditions or mitigations required by the Habitat Plan shall be clearly stated on all plans that involve any ground disturbing activity (i.e. grading plans, improvement plans, paving plans, demolition plans or other plans for site clearing or temporary stockpile of dirt). **(MHMC 18.132)**

AIR QUALITY

- A. **Dust, Noise, Vibration and Materials Management Plan:**
A management plan detailing strategies for control of noise, dust and vibration, and storage of hazardous materials during construction of the project shall be submitted for review prior issuance of a grading permit and requirements shall be included on all site development and grading plans. The intent of this condition is to minimize construction related disturbance of residents of the nearby or adjacent properties. **(MHMC 18.76)**
1. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
 2. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.

3. Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
4. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
5. The simultaneous occurrence of excavation, grading, and ground disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
6. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
7. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12-inch compacted layer of wood chips, mulch, or gravel.
8. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
9. Minimizing the idling time of diesel-powered construction equipment to two minutes.
10. The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOX reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
11. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
12. Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM.

13. Requiring all contractors use equipment that meets CARB's most recent certification standard for off-road heavy-duty diesel engines.

CULTURAL RESOURCES

- A. **Significant Historic or Archaeological Materials:** This project has been determined not to be in a site identified as archaeologically sensitive by the City's adopted archaeological sensitivity map, but nonetheless could adversely impact undocumented human remains or unintentionally discover significant historic or archaeological materials. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply and should be provided as standard conditions on the building permit, grading permit, or improvement plans. If human remains are discovered, it is probable they are the remains of Native Americans.
 1. If human remains are encountered they shall be treated with dignity and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern. Information about such a discovery shall be held in confidence by all project personnel on a need to know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld. Remains should not be held by human hands. Surgical gloves should be worn if remains need to be handled. Surgical mask should also be worn to prevent exposure to pathogens that may be associated with the remains.
 2. In the event that known or suspected Native American remains are encountered or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped. Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, groundstone mortars and pestles), culturally altered ash-stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials, and historic structure remains such as stone-lined building foundations, wells or privy pits. Ground-disturbing project activities may continue in other areas that are outside the discovery locale.
 3. An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the Contractor Foreman or authorized representative, or party who made the discovery and initiated these

protocols, or if on-site at the time of discovery, by the Monitoring Archaeologist (typically 25-50ft for single burial or archaeological find).

4. The discovery locale shall be secured (e.g., 24-hour surveillance) as directed by the City or County if considered prudent to avoid further disturbances.
5. The Contractor Foreman or authorized representative, or party who made the discovery and initiated these protocols shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition:
 - The City of Morgan Hill Development Services Director (408) 779-7247
 - The Contractor's Point(s) of Contact
 - The Coroner of the County of Santa Clara (if human remains found) (408) 793-1900
 - The Native American Heritage Commission (NAHC) in Sacramento (916) 653-4082
 - The Amah Mutsun Tribal Band (916) 481-5785 (H) or (916) 743-5833 (C)
6. The Coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American the Coroner has 24 hours to notify the NAHC.
7. The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD) from the Amah Mutsun Tribal Band. (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)
8. Within 24 hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose.
9. Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's Development Services Director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the Amah Mutsun Tribal Band may be considered and carried out.

10. If the MLD recommendation is rejected by the City of Morgan Hill the parties will attempt to mediate the disagreement with the NAHC. If mediation fails then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.

GENERAL

- A. **Mitigation Fee Act:** Notice is hereby given that, pursuant to the Mitigation Fee Act, the City of Morgan Hill charges certain fees (as such term is defined in Government Code Section 66000) in connection with approval of this development project for the purpose of defraying all or a portion of the cost of public facilities related to this development project (Mitigation Fee Act Fees). These fees do not include fees for processing applications for governmental regulatory actions or approvals, fees collected as part of development agreements, or as a part of the application for the City's Residential Development Control System. The Mitigation Fee Act Fees applying to this project are listed in the schedule of fees to be provided at building permit stage. Notice is also hereby given that the Developer has an opportunity to protest the imposition of the Mitigation Fee Act Fees within 90 days of the approval or conditional approval of this development project and that the 90-day protest period has begun.
- B. **Signed Copies of Resolution with Conditions:** Submit two (2) signed copies of the resolution with conditions to the Planning Division prior to issuance of a building permit.

ENGINEERING DIVISION

I. General:

- A. Easements:
 1. The new private bioretention facility near the Cochrane Road frontage is allowed to be located within the existing 40' Landscape & Public Service Easement. The width of this bioretention facility shown on the plans for Design Permit approval is the width approved by the City Engineer.
 2. The project is also proposing a new public sidewalk adjacent to Sutter Boulevard frontage. The entire length of the new public sidewalk shall be located either within the existing 20' Landscape & Public Service Easement or within the Sutter Boulevard right-of-way.
 3. The project is proposing new landscape improvements and grading/pavement work over an existing drive aisle, with a 60' ingress/egress easement, shared

with the adjacent southerly parcel with medical office building and with APN: 726-32-022. At building permit/improvement plan stage, provide written confirmation from the owner of the adjacent parcel that the project's proposed improvements and grading over the existing ingress/egress easement area is allowed.

II. Traffic:

- A. A Trip Generation & Operations Analysis dated June 23, 2023 was prepared for the project by Hexagon Transportation Consultants, Inc. The analysis included a recommendation to restrict left-turns and through movements from the project's driveway access at Sutter Boulevard and at the existing driveway across the street serving Cochrane Plaza/existing Walmart store. This recommended improvement will improve the traffic operations at the unsignalized Sutter Boulevard/Cochrane Plaza intersection.
 - 1. At building permit/improvement plan stage, revise the plans to show the closure of the median gap along Sutter Boulevard across the project site but maintain the left-turns from Sutter Boulevard to the project's driveway and Cochrane Plaza driveway.
 - 2. Install right-turn only sign(s) at the project's Sutter Boulevard driveway as a result of the median gap closure at Sutter Boulevard.
- B. A one-way, inbound driveway access is required at the project's Cochrane Road frontage.

III. Stormwater: The project shall comply with the California Regional Water Quality Control Board Central Coast Region Resolution No. R3-2013-0032 as documented by the Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements. A copy of the guidance manual can be obtained through the following link: <https://www.morgan-hill.ca.gov/DocumentCenter/View/12671/Storm-Water-Management-Guidance-Manual?bidId=>.

- A. At building permit/improvement plan stage, revise the project's Stormwater Control Plan Report and Civil plans to address the following:
 - 1. Show proposed self-retaining areas that comply with the design criteria stated in the Stormwater Guidance Manual. Also add a self-retaining area detail.
 - 2. Show the new DMA for the new detached sidewalk improvements along the project's Cochrane Road frontage and provide treatment for this new DMA.
 - 3. Add a paragraph in the Stormwater Control Plan Report describing how the treatment square footage is taken out of the pervious area quantities in the Excel Sizing Calculator tool.
 - 4. Attach documentation in the Stormwater Control Plan Report that shows where the infiltration rates for the project site were obtained.

5. Revise the Stormwater Control Plan Report to include the pre-development peak flow calculations for the 2- and 10-year storm events and compare it to the post development peak flow 2- and 10-year storm events to show compliance with Performance Requirement 4, Peak Management.
- B. The project is proposing a land use that is considered a priority by the City to implement trash full capture. At improvement plan/building permit stage, the project shall include the installation of a trash full capture system(s) from a list of certified trash full capture systems by the State Water Resources Control Board. The list of certified trash full capture systems can be viewed from the Water Board's webpage at:
https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/trash_implementation/2022/fullcptre-availabletopublic10-11.pdf

IV. Grading, Drainage & Flood Control:

- A. The City's regional detention pond, Fisher Basin, is downstream of the project site. There are existing flooding problems within the Fisher Creek watershed and there are also additional capacity needs in the Fisher Basin. Although the project's peak flow rate during the 25-year storm event is less than the pre-project 25-year peak flow rate, the City is requiring the project to provide minor detention.
 1. The project is required to detain a portion of the 25-year, 24-hour rainfall event using a 24-hour rainfall depth of 0.45 inches. The 0.45-inch rainfall depth is the difference between the 25-year, 24-hour rainfall depth of 5.24 inches stated in the 2018 Storm Master Plan and the 25-year, 24-hour rainfall depth of 4.79 inches stated in the City's Storm Design Standards. Show compliance with this flood control design criteria at building permit/improvement plan stage.
- B. At building permit/improvement plan stage, add a typical site cross-section through the project's westerly and easterly property lines, and show sufficient adjoining area.

V. Street Improvements:

- A. Public Sidewalks:
 1. Cochrane Road Frontage: Provide a detached sidewalk with a park strip per City standards to match the sidewalk and park strip along the Evergreen Village development located west of the project site.
 2. Sutter Boulevard Frontage: Provide a meandering sidewalk per City standards. Locate the sidewalk within the existing 20' wide Landscape and Public Service Easement.

- B. Curb Ramps: Upgrade to ADA/City standards the existing curb ramps located at the southwest corner of the Cochrane Road & Sutter Boulevard intersection, and at the northwest corner of the project site's Sutter Boulevard driveway.
- C. A sanitary sewer test manhole shall be provided and shall be accessible to the Pretreatment Inspector. The sanitary sewer test manhole shall be located within private property but adjacent to the street right-of-way or as approved by the City Engineer in conjunction with Pretreatment Inspector review.
- D. At building permit/improvement plan stage, revise the plans to address the following:
 - 1. Move the proposed decorative paving at the project's Cochrane Road driveway entrance to be located outside the public right-of-way.
 - 2. Show any existing, unused water and sewer laterals and note that these will be abandoned at the main pursuant to City Standards.
 - 3. Show the screening of all above-ground utilities, including the backflow preventers for the project's domestic and irrigation services, to the satisfaction of the Development Services Director.
- E. Pavement restoration at the proposed utility cuts at Cochrane Road will be determined at building permit/improvement plan stage.
- F. Install new street trees along the park strip of the project's Cochrane Road frontage. The species and tree spacing of the street trees shall comply with Zone 1 in the City's Master Street Tree Plan and will be reviewed at building permit/improvement plan stage.
- G. Other frontage improvements along Cochrane Road and Sutter Boulevard will be reviewed and approved at building permit/improvement plan stage.
- H. At building permit/improvement plan stage, provide an engineer's estimate of the proposed public improvements for City's use in calculating the engineering & inspection fees due for this project.

LAND DEVELOPMENT ENGINEERING - STANDARD CONDITIONS

I. GENERAL

- A. **Public and Private Improvements:** The applicant shall cause the construction of all public and private improvements in accordance with the latest City Standard Drawings and Specifications. **(MHMC 12.02.090 A; 17.32.010 A)**

- B. **Encroachment Permit:** Obtain an encroachment permit from the City of Morgan Hill and provide guarantee covering off-site improvements. **(MHMC 12.08.040 A; 12.08.090)**
- C. **Improvement Agreement:** Enter into an Improvement Agreement with the City of Morgan Hill to cover required improvements. **(MHMC 12.02.150; 17.32.010 B; 17.32.160)**
- D. **Impact Fees & Fee Increase:** The City of Morgan Hill, pursuant to City Code Chapter 3.56 has established impact fees to finance the cost of improvements required by new development. City Code Chapter 3.56.050 provides for automatic annual (July 1st) adjustment of those fees in existence utilizing the Engineering News Record Index for the preceding twelve months. The City maintains historical records on the Engineering News Record Index. These records are available for inspection during normal business hours. **(MHMC 3.56.010; 3.56.030; 3.56.050)**
 - 1. The developer shall pay all applicable impact fees and other engineering review fees prior to building permit issuance. The fees shall be based on the Public Works Fee Schedule prepared by Land Development Engineering.
 - 2. The project will be subject to the updated Water Capacity fees, which become effective May 15, 2023. Information related to the City's impact and development fees are available on the City's Finance Department webpage at: <https://www.morganhill.ca.gov/1572/Fee-Schedules>.

II. STREET IMPROVEMENTS

- A. **Public and Private Streets:** The applicant shall cause the design and construction of all new public and private streets serving the project. The design of all new public and private streets shall be consistent with the General Plan Land Use and Circulation Element as well as the Street Standard Details as contained within the Public Works Standards Details. The construction of the streets shall be undertaken to the lines and grades and in a manner satisfactory to the City Engineer. All street improvements shall be constructed to the satisfaction of the City Engineer. The timing of the improvements will be determined by the City. **(MHMC 12.02.010; 12.02.090; 17.32.060 B; CMH General Plan; CMH Design Standards and Standard Details for Construction)**
- B. **Underground Existing Utilities:** All existing overhead utilities adjacent to any site boundary or along any street frontage of the site shall be placed underground in accordance with City standards and affected utility company guidelines. **(MHMC 12.02.090 B; 17.32.020 E.1)**

III. STORM DRAIN SYSTEM

- A. **Storm Drainage Study:** A complete storm drainage study of the proposed development must be submitted showing amount of run-off, and existing and proposed drainage structure capacities. This study shall be subject to review and approval by the City Engineer. All needed improvements will be made by the applicant. No overloading of the existing system will be permitted. **(MHMC 17.32.020 B; 17.32.090; CMH Design Standards and Standard Details for Construction)**
- B. **Storm Drainage Design:** The applicant shall cause the design and construction to be undertaken for a storm drainage collection system shown on the Tentative Map/Design Review plans. All storm drain improvements shall be constructed to the satisfaction of the City Engineer. **(MHMC 17.32.020 A & B)**
- C. **Storm Drainage Capacity:** Collection system shall be designed to be capable of handling a 10-year storm without local flooding. On-site detention facilities shall be designed to a 25-year storm capacity. Streets shall be designed to carry 100-year storm. Items of construction shall include, but not be limited to installation of storm line extension on proposed public street(s), surface and subsurface storm drain facilities, manholes with manhole frames and covers, catch basins and laterals. Note: the project may be required to **retain** stormwater runoff as part of resolution R3-2013-0032 prior to releasing discharge rates at pre-development flows. **(MHMC 17.32.020 B; 18.74.440; CMH Design Standards and Standard Details for Construction; CMH Storm Drainage System Master Plan)**
- D. **Storm Drainage General Requirements:** Prior to issuance of a grading permit, the applicant shall complete the following to the satisfaction of the City Engineer.
1. Storm drain calculations to determine detention/retention pond sizing and operations.
 2. Plan describing how material excavated during construction will be controlled to prevent this material from entering the storm drain system.
 3. Water Pollution Control Drawings (WPCD) for Sediment and Erosion Control.
- (CMH Design Standards and Standard Details for Construction)**
- E. **NPDES Construction Activity General Permit/SWPPP Requirements:** As required by the State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ, construction activity resulting in a land disturbance of one (1) acre or more of soil, or whose projects are part of a larger common plan of development that in total disturbs more than one (1) acre, are required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated with Construction Activity (General Permit). To be permitted with the SWRCB under the General Permit, owners must file a complete Notice of Intent (NOI) ONLINE at: <http://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp> and develop a Storm Water Pollution Prevention Plan (SWPPP) Manual in accordance with the General Permit. The SWPPP Manual shall follow the CASQA SWPPP

template/format at <https://www.casqa.org/store/products/tabid/154/p-167-construction-handbookportal-initial-subscription.aspx> and shall be approved by Public Works Engineering. A Waste Discharger Identification (WDID) number to be issued to the construction site after the SWRCB receives and verifies the submitted ONLINE NOI information. The WDID number and approved SWPPP Manual shall be provided to Public Works and the Building Department prior to any approval of grading activities (**SWRCB NPDES General Permit CA000002**).

F. NPDES General Permit Site SWPPP Inspections and Compliance:

1. ALL project onsite and offsite construction activity shall have the site inspected by a **qualified third party SWPPP Inspector (QSD or QSP or RCE)**.
2. SWPPP Inspections shall occur weekly during the rainy season (September 15th thru May 1st).
3. SWPPP Inspections shall occur bi-weekly during the non-rainy season.
4. 48 hours prior to and following a forecasted rain event, SWPPP Inspections shall occur in addition to those of items 2 or 3 above.
5. Per each of the inspection conditions 2, 3, or 4, SWPPP inspection reports, and when applicable, Rain Event Action Plans (REAPS) shall be e-mailed to: sw.construction@morganhill.ca.gov no later than 12:00 PM each Monday for the previous week's inspections with a brief statement whether the site is in compliance or non-compliant.
6. Prior to rain events, BMPs not in compliance will need to be corrected immediately.
7. Illicit discharges per the NPDES General Permit, non-compliance of tracking control, and inlet protection within the public right-of-way shall be addressed immediately.
8. Other non-compliance issues need to be addressed within a 24-hour period.
9. Non-compliance issues which have been corrected shall be verified by NPDES SWPPP Inspector by a follow-up inspection.
10. BMP maintenance/inspections shall include tree protection, if applicable.

IV. WATER SYSTEM

- A. **Water Meters:** Provide water services and meters for the project. These are to be installed by the developer. (**MHMC 17.32.020 D**)

V. OTHER CONDITIONS

- A. **Easement Dedications:** The owner shall dedicate all necessary utility easements. (**MHMC 12.02.080 D; 17.28.010 A**)
- B. **Undergrounding New Utilities:** The applicant shall cause the design and construction required to underground all electric, gas, Cable TV and communication lines within the development. Such design and construction shall

be to the satisfaction of the affected utilities and the City Engineer. **(MHMC 17.32.020 E.1)**

- C. **Final Landscape Plans:** Final landscape plans shall be submitted with and included as part of the improvement plans for the project. **(MHMC 17.08.090)**
- D. **Pre-construction Meeting:** Prior to the approval of any Building Permit for grading activity, the developer shall schedule a pre-construction meeting with the Public Works Inspection Division with the following project team members:
1. Civil Engineer of record
 2. Geotechnical Engineer of record
 3. Third Party QSD/QSP SWPPP Inspector
 4. General Contractor
 5. Sub-Contractors
- E. **As-Built Submittal Standards:** The developer shall submit digital as-builts of the project's Final Map, Grading Plan, and Improvement Plans which adhere to the City's updated GIS/CAD Developer Submittal Standards.

VI. NPDES STORMWATER MANAGEMENT DEVELOPMENT STANDARDS

- A. **Stormwater Post Construction Requirements (PCRs):** Project shall comply with the California Regional Water Quality Control Board Central Coast Region Resolution No. R3-2013-0032 as documented by the **Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements** (developed from Resolution No. R-2013-0032 Attachment 1 and 2 at: http://www.waterboards.ca.gov/centralcoast/water_issues/programs/stormwater/docs/lid/lid_hydromod_charette_index.shtml). A copy of the Guidance Manual can be obtained from the City's Land Development Engineering webpage. Project shall provide Stormwater Runoff Management Plan, Stormwater Control Plan and Checklist, and applicable calculations per the Guidance Manual. Project shall meet the applicable Post-Construction Requirements:
1. Performance Requirement 1: Site Design and Runoff Reduction
 2. Performance Requirement 2: Water Quality Treatment
 3. Performance Requirement 3: Runoff Retention
 4. Performance Requirement 4: Peak Management
- B. **Peak Storm Water Runoff Discharge Rates:** Post-development peak storm water runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak storm water discharge rate will result in increased potential for downstream erosion. Note: the project may be required to **retain** stormwater runoff as part of resolution R3-2013-0032 prior to releasing discharge rates at pre-development flows.

- C. **Storm Drain System Stenciling and Signage:** All storm drain inlets and catch basins within the project area must be stenciled with prohibitive language (such as: "NO DUMPING – DRAINS TO CREEK") and/or graphical icons to discourage illegal dumping. Signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, must be posted at public access points along channels and creeks within the project area. Legibility of stencils and signs must be maintained.
- D. **Trash Enclosure Area:** In addition to compliance with the requirements under Municipal Code Section 18.92.155 (Refuse and Recycling Enclosures), all trash enclosure areas must meet the following Structural or Treatment Control BMP requirements:
1. **Roof Required:** Trash enclosure areas shall have an all-weather noncombustible solid roof to prevent rainwater from mixing with the enclosure's contents.
 2. **Walls Required:** Trash enclosure shall have structural walls to prevent unauthorized off-site transport of trash.
 3. **Doors:** Trash enclosure shall have door(s) which can be secured when closed.
 4. **Grades:** The pad for the enclosure shall be designed to not drain outward, and the grade surrounding the enclosure shall be designed to not drain into the enclosure.
 5. **Drain Inlet:** Within the enclosure, an area drain with an approved (Zurn) vandal proof drain shall be installed and shall be plumbed to the sanitary sewer system with grease trap. Grease trap shall be located within the trash enclosure footprint.
- E. **Design Standards for Structural or Treatment Control BMPs:** The post-construction treatment control BMPs shall incorporate, at a minimum, either a volumetric or flow- based treatment control design standard, or both, as identified below to mitigate (infiltrate, filter or treat) storm water runoff:
1. **Volumetric Treatment Control BMP**
 - a. The 85th percentile 24-hour runoff event determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998); or
 - b. The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (2003); or
 - c. The volume of runoff produced from a historical-record based reference 24-hour rainfall criterion for "treatment" that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event.
 2. **Flow Based Treatment Control BMP**

- a. The flow of runoff produced from a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the area; or
- b. The flow of runoff produced from a rain event that will result in treatment of the same portion of runoff as treated using volumetric standards above.

F. **Stormwater Runoff Management Plan (SWRMP):** The Stormwater Runoff Management Plan shall include sufficient information to evaluate the environmental characteristics of affected areas, the potential impacts of the proposed development on water resources, and the effectiveness and acceptability of measures (post construction BMPs) proposed for managing stormwater runoff.

1. The Stormwater Runoff Management Plan shall be prepared under the direction of a professional civil engineer registered in the State of California. The responsible professional civil engineer shall stamp and sign the approved Stormwater Runoff Management Plan.
2. The developer shall provide a signed certification from the civil engineer responsible for preparing the Stormwater Runoff Management Plan that all stormwater best management practices have been designed to meet the requirements of this chapter.

G. **Stormwater BMP Operation, Maintenance, and Replacement Responsibility**

1. Prior to building final, the property owner shall submit a signed certification (with signature, date & license number/seal) certifying that all post-construction stormwater management/BMP facilities shown on the as-built drawings were inspected by the civil engineer (or by a qualified third party stormwater inspector hired by the permittee/owner) and have been constructed in accordance with the approved plans and specifications.
2. All on-site stormwater management facilities shall be operated and maintained in good condition and promptly repaired/replaced by the property owner(s), an owners' or homeowners' association or other legal entity approved by the City.
3. Any repairs or restoration/replacement and maintenance shall be in accordance with City-approved plans.
4. The property owner(s) shall develop a maintenance schedule for the life of any stormwater management facility and shall describe the maintenance to be completed, the time period for completion, and who shall perform the maintenance. This maintenance schedule shall be included with the approved Stormwater Runoff Management Plan.

H. **Stormwater BMP Operation and Maintenance Agreement (SWBOMA):**

1. Prior to the issuance of any building permit requiring stormwater management BMPs, the owner(s) of the site shall enter into a formal written Stormwater BMP Operation and Maintenance Agreement with the City. The City shall record this agreement, against the property or properties involved, with the County of Santa Clara and it shall be binding on all subsequent owners of land served by the storm water management BMPs. The City standard Stormwater

BMP Operation and Maintenance Agreement will be provided by Land Development Engineering at building permit/improvement plan stage.

I. Stormwater BMP Inspection Responsibility

1. The property owner(s) shall be responsible for having all stormwater management facilities inspected for condition and function by a **certified Qualified Stormwater Practitioner (QSP)**.
2. Unless otherwise required by the City Engineer or designee, stormwater facility inspections shall be done at least twice per year (April 15th and September 15th) by the QSP. Written records shall be kept of all inspections and shall include, at minimum, the following information:
 - a. Site address;
 - b. Date and time of inspection;
 - c. Name of the person conducting the inspection;
 - d. List of stormwater facilities inspected;
 - e. Condition of each stormwater facility inspected;
 - f. Description of any needed maintenance or repairs; and
 - g. As applicable, the need for site re-inspection.
3. Upon completion of each inspection, an inspection report shall be submitted to City's Environmental Services Division.

J. Records of Maintenance and Inspection Activities: On or before April 15th and September 15th of each year, the party responsible for the operation and maintenance of on-site stormwater management facilities under the BMP Operation and Maintenance Agreement shall provide the City Engineer or designee with records of all inspections, maintenance and repairs.

K. Annual Certification of SWRMP: On or before September 30th of each year, a Registered Civil Engineer (RCE) shall provide written certification that the project's stormwater quality design standards are properly maintained and functioning as required by the SWRMP.

BUILDING DIVISION

A. California Code of Regulations: Project shall be designed to comply with the most current California Code of Regulations as amended by Morgan Hill Municipal Code Title 15. Building Permit applications submitted after January 1, 2020 shall be designed to comply with the 2019 California Codes of Regulations.

B. Project shall comply with the Morgan Hill Municipal Code (MHMC) including but not limited to:

- MHMC 15.65 Sustainable Building Regulations. **LEED Silver Required**
- MHMC 18.72.040 C. Electric Vehicle Charging.
- MHMC 15.40 Building Security

- MHMC 15.38 Wage Theft Preventions
- MHMC 18.148 Water Conservation
- MHMC 15.63 Prohibition of Natural Gas Infrastructure in New Buildings

FIRE DIVISION

- A. **Proposal limited to:** Review of this Development proposal is limited to acceptability of site access as they pertain to fire department operations, and shall not be construed as a substitute for formal plan review to determine compliance with adopted model codes. Prior to performing any work, the applicant shall make application to, and receive from, the Building Department all applicable construction permits.
- B. Fire Hydrants. Fire Hydrant spacing shall meet minimum requirements per CFC Appendix C
- C. During Building permit obtain separate approval for:
- a. Fire Sprinklers
 - b. Fire Alarm
 - c. Hood Suppression
 - d. Underground Fire Service



Development & Consulting, Inc

Date 06/06/2023

Project Description

Project Name: 05180 Morgan Hill FSU - Chick-fil-A # 05180

Location/Address: 18599 Sutter Blvd, Morgan Hill, CA

Property Owner: BAT Limited Partnership, Gary Laabs

APN: #726-32-002

Project Summary:

Applicant, Chick-fil-A, Inc., A Georgia Corporation, via its Development Consultant, 4G Development & Consulting, Inc., proposes to construct a new, approximately 5,028 sf quick-service restaurant building, with approximately seventy-four interior dining seats, a small outdoor patio dining area that can accommodate roughly 20 patrons, and two-lane drive-thru service with a queuing capacity of approximately fifty-five vehicles.

Anticipated Discretionary Approvals needed:

- **Conceptual Plan Review**
- **Conditional Use Permit**
- **Design Review**

Days/Hours of Operation: Monday-Saturday: 6:00a – 10:00p
Closed Sunday

Number of Employees and Description of Shifts:

This Chick-fil-A will employ approximately 50-75 full- and part-time employees. The number of employees on site will vary as the operational tempo varies, from four to fifteen employees.

Number of Children/Students: N/A

Number and Type of Security: N/A

Alcohol Service: N/A – Chick-fil-A does not serve alcohol or allow alcohol to be consumed on the premises.

Merchandise or Food Service:

Chick-fil-A is a quick-service restaurant featuring Chicken sandwiches. Food is prepared on site and sold for consumption on the premises, for carryout, curb-side delivery, and drive-through service.

Deliveries: Periodic, regular, daily by local vendors -deliveries are during non-peak hours

Parking Operations or Layout:

Vehicle access to the site will be via a right only entrance driveway from Chochrane Rd.

Ingress and Egress is also available to Sutter Blvd and Evergreen Development via a driveway located at the south side of the site.

Drive-thru operations will consist of two-at-a-time ordering under a covered canopy providing sun and weather protection for customers and crew members. During normal/low operations, customers will



merge into a single lane as they proceed past the ordering queue, proceeding to pick up their order at the drive-thru window. Team members are protected from sun and weather with structural canopies at both the ordering point and meal delivery window. During periods of higher operational tempo, customers will remain in the two-lane configuration as additional crew members are deployed to deliver food to customers in the outside lane (otherwise used as a by-pass lane as needed to efficiently move customers with smaller orders through the drive-through sequence.)

Outdoor Uses:

This Chick-fil-A store will provide a small outdoor patio dining area open to customers only during business hours.

1. Trash/Litter/Graffiti/Site Maintenance, etc. Chick Fil A is committed to this project site and all public streets and spaces within three hundred feet of the site to remain well maintained, clean and free of litter and graffiti.

2. Security and Police Issues.

Security cameras are used strategically throughout the spaces, including facing the front door. All security camera video footage is retained for 30 days in the event that an incident needs review by security personnel or the police.

3. Loitering and Panhandling. Loitering and panhandling is not tolerated and the business operator will maintain a zero-tolerance policy. The Operator will cooperate with the local Police Department for property language and will post “No loitering” signs in conspicuous places containing wording that aligns with local and state law. All loitering and panhandling issues will be dealt with in a swift and consistent manner by notifying local police. No consumption of alcohol or open containers will be permitted on the premises. Signs specifically prohibiting this activity will be placed in conspicuous places in English and Spanish, if required.

4. Addressing Neighborhood Concerns. The project applicant/business operator will engage the community organization, neighborhood, and local leaders, etc. to address neighborhood concerns with any aspect of the business. The project applicant/business operator will be available to meet with concerned parties and endeavor to create a mutually beneficial mitigation plan in accordance with all relevant laws and regulations.

5. Entertainment. There are currently no entertainment uses proposed for this site.

6. Lighting and Windows. All lighting issues, such as inadequate lighting or burned-out lights, will be addressed promptly by our maintenance provider. The business is designed with full-height glass windows to provide a clear and unobstructed view from inside and out. All signage affixed to the windows will not obstruct these views.

7. Noise. The project will conform to all local noise performance standards as required by the Municipal Code. All efforts will be made to limit the amount of noise emanating from the business at all times. No entertainment is proposed for the space. Any music played during normal business operations will be kept to ambient background music.



8. Employee Training. All staff are trained to perform their assigned duties safely and in accordance with best management practices and in full compliance with applicable laws and Health Department Regulations.

ORDINANCE NO. 979, N.S.

AN ORDINANCE OF THE CITY OF MORGAN HILL AMENDING
THE PLANNED UNIT DEVELOPMENT ZONING FOR THE MORGAN
HILL BUSINESS PARK LOCATED ON THE SOUTHERLY SIDE
OF COCHRANE ROAD, WEST OF SUTTER BOULEVARD.

The City Council of the City of Morgan Hill does hereby ordain
as follows:

Section 1. AMENDMENT TO THE DEVELOPMENT PLAN. The original
development plan to the Morgan Hill Business Park PUD as
adopted under Ordinance No. 545, N.S. and subsequently
amended, is hereby amended changing the land use designation
from "Garden Hotel" to "General Commercial" of approximately
24+ acres located on the south side of Cochrane Road, west of
Sutter Boulevard. Said property is described in Exhibit "A"
attached hereto and by this reference incorporated herein.

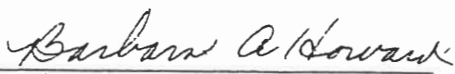
Section 2. USES ALLOWED IN AND DEVELOPMENT STANDARDS FOR
GENERAL COMMERCIAL DESIGNATION. Uses allowed under the
General Commercial designation shall include all those listed
as either permitted or conditionally permitted uses in the CG,
General Commercial zoning district of the Morgan Hill
Municipal Code, in effect, or as it may be amended in the
future. However, grocery stores and supermarkets shall not be
allowed under this designation. Development standards for the
General Commercial designation shall be the same as those
established for the Non-Manufacturing Business designation of
the Morgan Hill Business Park.

Section 3. FINDING OF CONSISTENCY WITH THE GENERAL PLAN.
The City Council hereby finds that the amended development
plan established by this ordinance is compatible with the
goals, objectives, policies and land uses designated by the
General Plan for the property in question.

This ordinance was introduced at a meeting of the City
Council of the City of Morgan Hill held on the 6th day of
June, 1990, and was finally adopted at a meeting held on the
20th day of June, 1990, by the following vote:

AYES:	Bunt, Sorci, Wright
NOES:	None
ABSENT:	English
ABSTAINING:	Barke

ATTEST:


Barbara A. Howard, CMC
City Clerk

APPROVED:

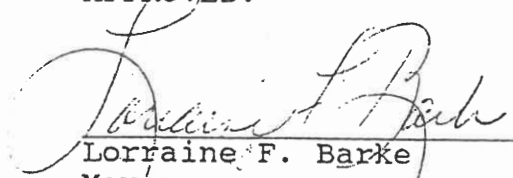

Lorraine F. Barke
Mayor

EXHIBIT "A"

DESCRIPTION FOR REZONING
LANDS OF PARKLAND PROPERTIES COMPANY
TO BE REZONED TO GENERAL COMMERCIAL (C-G)
(MORGAN HILL BUSINESS PARK)

All that certain real property lying within the City of Morgan Hill, State of California described as follows:

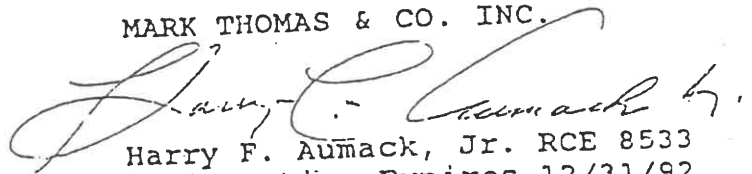
BEGINNING at a point on the Southeasterly line of Cochrane Road at the most Westerly corner of that certain 11.288 more or less acre parcel of land shown as Lot 13 (Revised) on that certain Parcel Map recorded in Book 534 of Maps at pages 11 and 12, Santa Clara County Records; thence leaving said POINT OF BEGINNING and running along the boundaries of said Lot 13 (Revised) North 51 deg. 41 min. 23 sec. East 227.83 feet, Northeasterly along the arc of a tangent curve to the right having a radius of 450.00 feet through a central angle of 7 deg. 31 min. 54 sec. for an arc distance of 59.15 feet, North 59 deg. 13 min. 17 sec. East 32.31 feet, Northeasterly along the arc of a tangent curve to the left having a radius of 450.00 feet through a central angle of 7 deg. 31 min. 54 sec. for an arc distance of 59.15 feet, North 51 deg. 41 min. 23 sec. East 200.00 feet, Northeasterly and Easterly along the arc of a tangent curve to the right having a radius of 40.00 feet through a central angle of 90 deg. 00 min. 00 sec. for an arc distance of 62.83 feet, South 38 deg. 18 min. 37 sec. East 358.05 feet, Southeasterly along the arc of a tangent curve to the left having a radius of 1055.00 feet through a central angle of 12 deg. 25 min. 53 sec. for an arc distance of 228.90 feet, South 50 deg. 44 min. 30 sec. East 72.10 feet, Southeasterly and Southerly along the arc of a tangent curve to the right having a radius of 30.00 feet through a central angle of 90 deg. 00 min. 00 sec. for an arc distance of 47.12 feet, South 39 deg. 15 min. 30 sec. West 140.00 feet, Southwesterly along the arc of a tangent curve to the right having a radius of 560.00 feet through a central angle of 14 deg. 09 min. 44 sec. for an arc distance of 138.42 feet and South 53 deg. 25 min. 14 sec. West 194.00 feet; thence continuing along said boundary and its Southwesterly extension being also along the Northwesterly line of Proposed Jarvis Drive Extension, Southwesterly along the arc of a tangent curve to the left having a radius of 840.00 feet through a central angle of 14 deg. 22 min. 26 sec. for an arc distance of 210.73 feet to a point of reverse curvature; thence continuing along said extension of the Northwesterly line of Proposed Jarvis Drive Extension Southwesterly along the arc of a curve to the right, tangent to the preceding curve, having a radius of 1960.00 feet through a central angle of 12 deg. 38 min. 36 sec. for an arc distance of 432.51 feet and South 51 deg. 41 min. 23 sec. West 190.48 feet; thence leaving said line of Proposed Jarvis Drive Extension North 38 deg. 18 min. 37 sec. West 847.91 feet to a point on said Southeasterly line of Cochrane Road; thence along said

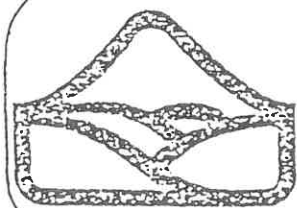
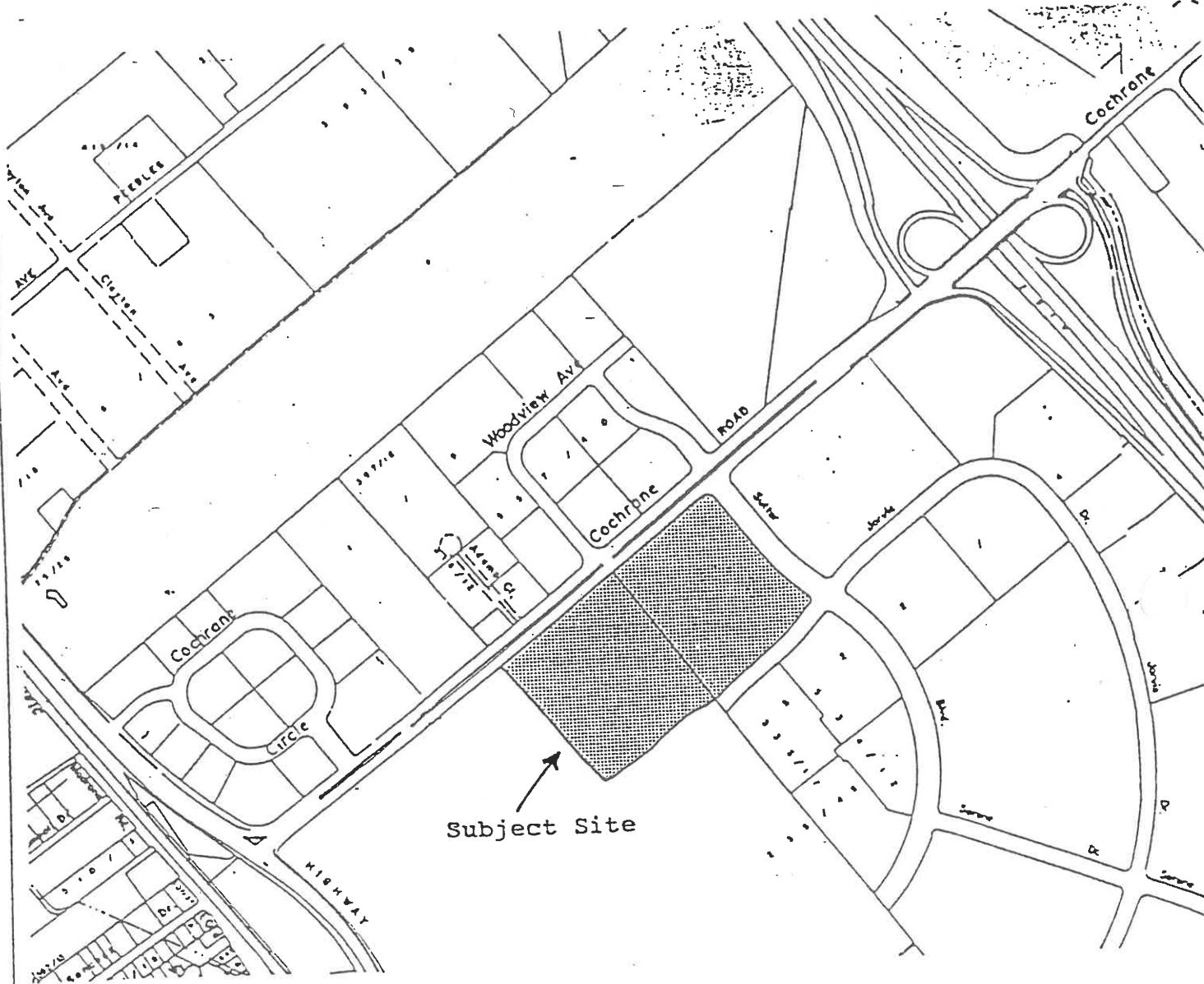
Southeasterly line, Northeasterly along the arc of a curve to the right from a tangent which bears North 50 deg. 37 min. 13 sec. East having a radius of 450.00 feet through a central angle of 1 deg. 04 min. 10 sec. for an arc distance of 8.40 feet and North 51 deg. 41 min. 23 sec. East 653.18 feet to the POINT OF BEGINNING.

Containing 23.751 acres more or less.

Prepared June 21, 1989 by

MARK THOMAS & CO. INC.


Harry F. Aumack, Jr. RCE 8533
Registration Expires 12/31/92



City of
Morgan Hill

VICINITY MAP

ZA 89-17: Cochrane-Parkland Prop.

preservation of views, light and air and those aspects of design not adequately covered by other regulations which may have substantial effects on neighboring land uses;

e) Compliance with Other Regulations. To coordinate compliance with other regulations that affect design such as sign control, the provisions for underground utilities and site and architectural plan approval by the Morgan Hill Architectural Review Board.

B. BUILDING DESIGN AND SITE DEVELOPMENT

1. Site Planning

a) Grading and Drainage. Surface drainage for each site should be engineered to collect all storm water on the site for drainage to the collector system engineered for the Park. Site drainage should not interfere with the drainage of adjacent property.

Parking should be screened as much as possible from the adjoining roadway to improve the overall park appearance. Such screening should be provided by berms and landscaping. Parking located on projects of 1½ acres or more should be depressed as much as possible below the main floor elevations of the buildings so as to improve the overall park appearance. Additional parking areas should be depressed below the ground level of the building wherever the storm drain system of the applicable roadway is of sufficient depth to accommodate this depression of parking area. Lots of less than 1½ acre shall be exempt from this provision, but shall provide additional berming and landscape screening to compensate for not depressing the parking area.

Creative grading is encouraged as a means of screening nuisances, parking and loading areas. Grading can be used to enhance building architecture and to provide privacy from adjacent sites.

b) Setbacks. Adjacent properties should be considered when establishing the building's footprint and orientation. Minimum setback requirements for the Non-Mfg. Business and Garden Hotel components of the Morgan Hill Business Park are as follows:

	<u>Non-Mfg. Business</u>	<u>Garden Hotel</u>
From Cochrane Road	40 ft.	40 ft.
From S. Valley Freeway	50 ft.	50 ft.
Fronting Monterey Road	40 ft.	-
Fronting Physical Fitness Pathway	-	-
Sutter Blvd., Jarvis Dr. or Serene Dr.	30 ft.	30 ft.
Side Setback	-	15 ft.
Rear Setback	-	30 ft.
Setback from adjacent residential areas	-	-

EXHIBIT "B"

THE BUSINESS PARK MORGAN HILL RANCH ARCHITECTURAL REVIEW GUIDELINES

Revision Date - June 25, 1997

A. PURPOSE

1. Overall Objective

The goal in developing Morgan Hill Business Park is to allow diversity in architecture and variety in site design consistent with a high quality business park environment. The Architectural Guidelines that follow expand upon the architectural and design standards recorded in the deed restrictions for Morgan Hill Business Park. To insure consistent high quality of the physical environment, proposed projects will be reviewed to determine that the architectural and site design 1) responds to the characteristics of the site and the overall park environment, 2) is compatible with neighboring sites and 3) reflects a high level of aesthetic value.

MORGAN HILL DEVELOPMENT PARTNERS, L.P. WILL COORDINATE THEIR ARCHITECTURAL REVIEW WITH THAT OF THE CITY OF MORGAN HILL, WITH THE INTENTION THAT THE TWO BE COMPLEMENTARY AND THAT CONFLICTS BE AVOIDED. MORGAN HILL DEVELOPMENT PARTNERS, L.P. WILL ASSIST ALL APPLICANTS WITH THE PROCESSING OF THEIR PRELIMINARY PLANS THROUGH THE MORGAN HILL ARCHITECTURAL AND SITE REVIEW BOARD AND OTHER CITY PROCEDURES.

2. Aspects of Review

The Architectural Review Board in examining applications for building permits, is to consider the various aspects of design with emphasis on these objectives:

- a) Landscape and Environment. To prevent the unnecessary destruction or blighting of the landscape or of the achieved man-made environment;
- b) Relationship of Structures and Open Space. To ascertain that the treatment of built-up and open spaces has been designed so that they relate harmoniously to the terrain and to existing buildings that have a visual relationship to the proposed development;
- c) Circulation. To determine that the proposal facilitates servicing, parking and, when necessary, compliance with other regulations for the handicapped, the very young and the elderly and the Morgan Hill parking ordinance;
- d) Protection of Neighbors. To protect neighboring owners and users by making sure that reasonable provision has been made for such matters as surface water drainage, south and sight buffers, the

Minimum setback requirements for the R&D/Mfg. Component of the Morgan Hill Business Park shall be as follows:

Development Standards for R&D/Manufacturing zone by Parcel Size

	40,000' or less	40,000-4 acres	Greater than 4 acres
Front setback	20'	30'	40'
Sidyard setback	10'; sum of both sides	30' sum of both sides	30'; single side
Rearyard setback	None; except as noted below	None; except as noted below	none; except as noted below
Minimum front landscape buffer	15'	30' except on Technology Drive where it shall be 20' if approved by Morgan Hill Development Partners, L.P and the City of Morgan Hill through the site and architectural review process.	30'

Exceptions:

1. 50 foot setback from adjacent residential areas
2. 50 foot setback from S. Valley Freeway (Hwy 101)

Exceptions to setback requirements:

The following are specifically excluded from the foregoing setback requirements:

- 1) Roof overhang, subject to the specific approval of **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** in writing, provided it does not extend more than 6 feet into setback area.
- 2) Steps and walks.
- 3) Paving and associated curbing except that vehicle parking area shall not be permitted within 30 feet of the property line fronting any public street except on parcels of less than one acre.
- 4) Fences, except that no fence shall be placed within the street setback area unless specific approval is given by **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** in writing.
- 5) Landscaping, including water scape features.
- 6) Planters, not to exceed 3 feet in height, unless specific written approval is given by **MORGAN HILL DEVELOPMENT PARTNERS, L.P.**

7) Gasoline and service stations including all pertinent uses, subject to the specific approval of **MORGAN HILL DEVELOPMENT PARTNERS, L.P.**

8) Signs identifying the Owner, lessee or occupant subject to the specific approval of **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** in writing.

9) Lighting facilities, subject to the specific approval of **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** in writing.

10) Physical fitness pathways.

c) Parking Plan. Parking space requirements vary according to the use on the site.

General Purpose Industrial Buildings including R&D and manufacturing, require one space for each 400 gross square feet of building area. Office uses require one space for each 310 gross square feet of building area.

Non-manufacturing business uses require the following parking:

Financial institutions	1 car/250 sf gross area
Offices	1 car/250 sf gross area
Commercial use	1 car/250 sf gross area
Restaurant	1 car/60 sf of public accommodation and one space for every 250 sf gross floor area remaining
Garden Hotel	1 car/room and 1 car for each 10 rooms
Warehouse	1 car/1000 sf gross area, plus 1 space for each 300 sf of office area
Other uses	As required by City of Morgan Hill code

Parking stalls shall be 9' x 18'. Up to 30% of the required parking spaces may be small (compact) cars, 8' x 16' stalls.

Parking areas should optimally be located to the side and rear of the buildings, however, parking is permitted in front of a building. Parking areas, especially side and front parking areas, should be depressed as far as practicable from building level and consistent with requirements of the Americans with Disabilities Act.

Adequate off-street parking shall be provided to accommodate all parking needs for employees, visitors and company vehicles on the site. The intent of this provision is to eliminate the need for any on-street parking, provided that this provision does not inhibit on-street parking of public transportation vehicles. If parking requirements increase as a result of a change in use of number of employees, additional off-street parking shall be provided to satisfy the intent of this section.

ON SITE: Requires off-street parking shall be provided on the site of the use served or on a contiguous site. Where parking is provided on other than the site concerned, a recorded document shall be filed with **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** and signed by the

Owners or Lessees of the alternate site stipulating to the permanent reservation of the use of the site for said parking.

PAVED AREAS: Parking areas shall be paved per City standards so as to provide dust-free, all-weather surfaces. Each parking space provided shall be delineated by lines made of spaced reflectors, lines painted on the paved surfaces or by other means acceptable to **MORGAN HILL DEVELOPMENT PARTNERS, L.P.**

PARKING PLAN: The number of parking spaces required for each site, and the specific location of the same, shall be designated in plans for each site which have been submitted and approved in the manner set forth herein. The Parking Plan shall, when necessary, provide for easements with adjoining parcels to provide access to and from parking and loading areas, as shown in Appendix C.

LIMITATION: No parking spaces shall be located on, and no parking shall be permitted by **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** within designated setback areas adjacent to any street on parcels greater than two acres. Six inch concrete curbs shall separate all paving from landscaped areas. Paved areas shall not be closer than 5 feet to a property line except where access easement separate the property line as shown in Appendix C. The area between the paved parking area and the property line and landscape openings in the parking area shall be landscaped with a combination of trees, shrubs and ground cover. Planting strips in the parking areas shall be of sufficient size and design so that trees and other plant materials will not be damaged by overhanging vehicle bumpers.

2. Landscape Planning

The area of each site between any street and any building or parking area shall be landscaped and irrigated with an effective combination of trees, ground cover and shrubbery. All other areas fronting on a street that are not utilized for parking or driveways shall be landscaped in a similar manner. All areas of each site not fronting a street and not used for parking or storage shall be landscaped utilizing ground cover and/or shrub and tree materials. Undeveloped areas proposed for future expansion shall be maintained in a weed-free erosion controlled condition, shall be screened from street view and shall be landscaped if required by **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** An underground landscape irrigation system shall be provided by the Owner over all landscaped areas. Areas used for parking shall be landscaped, bermed or fenced in such a manner as to screen said areas from view from adjacent streets and freeways. Such screening shall extend at least 42 inches above the high point of the finished pavement in said parking areas. Plant material used for this purpose shall consist of lineal or grouped masses of shrubs and/or trees.

Ground cover shall conform with the Morgan Hill Business Park master plan details for each site. The landscape plan should include ground cover for the landscape easements on the site already planted with trees. For continuity, property line plantings should be coordinated with any adjacent landscaping.

In addition to creating a park-like atmosphere, landscaping should supplement air conditioning by providing shade to buildings. Drought tolerant plants and water conserving irrigation techniques

should be considered in the selection of plants and irrigation equipment. Landscaping should also be applied as an effective means of screening mechanical and utility equipment trash enclosures, fences blank walls, loading docks, utility and storage yards.

3. Sign and Lighting Plan

a) Signs. Signs should be of architectural quality compatible with the architectural design of the buildings they identify. Sign materials, finish and colors should be coordinated with the buildings on the site. Sign illumination should be from concealed non-glare sources. Metal can signs with plastic faces will not be approved. Glossy, reflective, flashing or moving signs will not be approved. Signs must meet standards established by the Morgan Hill Sign Ordinance as amended from time to time.

Sign copy is limited to the name, address, business and products of the persons or firm occupying the site. Sign area or height will not be arbitrarily limited, however, only signing that is considered to be in scale with the architectural development will be approved.

Building-mounted signs should not extend above the eave or parapet line. Roof-mounted or pole-mounted signs will not be approved. Lessees are encouraged to incorporate signing into the architecture of their facilities rather than applying it after the structures have been designed.

Freestanding signs of a monument design, appearing to sit on a grade, are encouraged. Freestanding signs should be located in a landscaped planting area. The use of landscaping is encouraged for the enhancement of the sign from all sides. Freestanding signs are subject to the setback requirements in Section B1b of these guidelines. A freestanding sign may be placed within a setback area with written approval of **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** Freestanding signs shall not be permitted within fifteen feet of a roadway for lots of 40,000 square feet or greater.

Directional and parking lot signs should be uniform in style and materials. Directional signs shall be only as indicated on the standards in Appendix B. **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** may approve variations in size if properly justified. Directional sign copy is limited to the guidance of vehicle or pedestrian traffic or the functional description of activities on the site. The proposed location and description of directional signs should be included in an applicant's sign and lighting plan.

b) Site Lighting. Lighting should enhance the aesthetics of the site and the architectural character of the buildings on the site. In most cases, a moderate to low illumination intensity will be preferred. The purpose of lighting on the site is to enhance operational efficiency and provide security consistent with energy conservation and aesthetic consideration.

Lights shall be of a height not greater than Morgan Hill Business Park street lights. Lighting shall be spaced so as not to be wasteful of electricity. Direct glare of lighting from any source on the site should not be visible from off-site.

4. Architectural Style

Since the Business Park will be developing over a period of many years, it will be impossible and undesirable to try to create a static architectural theme reflecting some particular period. Rather, it is expected that the architecture will be enriched and influenced by new building materials and methods and by the imaginations of architects building upon the existing setting. By not clinging to a rigid theme, the Business Park will have the best chance to be a vibrant influence in the community. Of course, the architecture should be compatible with the environmental setting, the surrounding community and the neighboring structures. Having several suggested thematic design elements to work with can be helpful to architects designing buildings as long as the suggestions do not become absolute design criteria which would serve to reduce the creativity desired from architects for the park.

The primary responsibility for style and design of buildings, movements and landscaping of specific sites rests with the owners' architects, and they will be permitted the latitude necessary in choosing their own building style.

It is anticipated that many tenants for the Morgan Hill Business Park will be engaged in the high technology industries for which Santa Clara Valley has become known. As a visual representation of these firms and their technology, the buildings constructed to house them should reflect the latest developments in construction materials and "state-of-the-art" architecture. The highest quality architectural design is desired and imagination and creativity is to be encouraged.

Because these restrictions require that all buildings in this development be designed by licensed architects, it is recognized that projects with better than usual aesthetic values will result. There shall be no attempt by the Architectural Review Committee to prescribe materials, colors or architectural style on an individual basis or area wide except on parcels of less than one acre that, because of their closer proximity, require greater site design and architectural harmony. The architecture of buildings in their project should be harmonious with each other and their settings.

Building elevations submitted for architectural review shall show the color scheme, textures and materials to be used. No mechanical equipment (including utility meters) is to be exposed on the wall surface of a building. Industrial type metal buildings with corrugated siding are not permitted unless they are designed so as not to have the appearance of a metal building.

5. Fencing

Chain link fencing should be black vinyl-coated. Chain link or other non -architectural fencing should be screened with vines or shrubs. Fencing within the front setback will not be permitted. Fences in areas considered to be visually important will be required to be of architectural design.

6. Utilities

All utilities shall be underground. The need for meter vaults, valve boxes, pad-mounted transformers and other utility connections should be integrated into the site plan. Screening of above-ground utility equipment as seen from on or off-site is required. TV antennas are to be hidden from view

as other mechanical equipment. Special purpose antennas shall be as inconspicuous as possible and will require approval by **MORGAN HILL DEVELOPMENT PARTNERS, L.P.**

7. Mechanical Equipment

Roof-mounted air conditioners, ductwork and other equipment should be concealed with low-profile screening that is integrated with the architecture of the building. Large mechanical systems such as storage tanks, generators and compressors should be located in mechanical equipment rooms completely within the buildings or screened out of the sight line from the principle access street. All mechanical equipment shall conform to acceptable noise standards in accordance with state and local codes.

The placement of exterior support equipment should be integrated in the buildings' architecture so as not to appear to be added arbitrarily.

8. Storage and Loading Areas

Loading docks and storage areas should typically be located at the side or rear of the buildings where they can function efficiently without detracting from the aesthetics of a high-quality business park environment. The Parking Plan shall, when necessary, provide for easements with adjoining parcels to provide access to and from parking and loading areas, as shown in Appendix C.

Unless specifically approved by **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** in writing, no materials, supplies or equipment (including company owned or operated trucks and motor vehicles) shall be stored in any area on the site except inside a closed building or behind a visual barrier screening such areas so that they are not visible from the neighboring properties or public streets. Any storage areas screened by visual barriers shall be located on the rear portions of the site unless approved by **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** in writing. No storage areas shall extend into setback lines as established herein unless approved by **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** in writing.

All provisions for vehicle loading shall be provided on the site with on-street vehicle loading not permitted.

No loading dock, trucking or railroad activity shall be permitted between the structure and any street on parcels 20,000 square feet or greater, and no loading area shall encroach into setback areas unless specifically approved by **MORGAN HILL DEVELOPMENT PARTNERS, L.P.**

Loading dock areas shall be set back and screened so as not to be visible from neighboring properties and streets but, in any event, the docks shall not be closer than 75 feet from a property line fronting any street unless specifically approved by **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** in writing. On parcels where front loading is permitted, loading bays or doors facing the street shall be recessed a minimum of 20 feet from the front face of the building and shall require additional architectural treatment, to obscure their appearance. Loading doors shall be located at grade (no raised docks) and shall be painted or otherwise surfaced with materials designed to match or be harmonious with the adjacent exterior of the building. No more than one loading bay or door may

be permitted to face the street on each building. Other loading bays or doors may be permitted on the side or rear elevation of the building.

9. Refuse Collection Areas

All outdoor refuse collection areas shall be visually screened so as not to be visible from streets, freeways or neighboring property. Refuse collection areas will not be permitted between a street and the front of a building. Refuse collection areas should be located to minimize noise and odor impacts on neighboring property.

C. PLAN REVIEW PROCEDURES

Final plans and specifications for proposed construction must be prepared by a licensed architect and landscape architect. Preliminary plans shall be submitted in duplicate over the authorized signature of the owner, lessee, licensee or other occupant of the site or his authorized agent. Such plans shall be in such form and shall contain such information as may be required by **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** and the City of Morgan hill but, in any event, they shall included:

1. A site development plan showing the layout, grading scheme, paving materials and locations (with respect to the particular lot): proposed front, rear and side setback lines; all structures and the dimensions thereof (with reference to structures on adjoining portions of the property and property lines): proposed phasing; and the number and location of all parking spaces and driveways on the lot;
2. A landscaping plan for the particular lot;
3. A signing and lighting plan;
4. Building elevations showing dimensions, materials and exterior color scheme in no less detail than required by the appropriate governmental authority for the issuance of a site development permit. Changes in approved plans which materially affect building size, placement or external appearance must be similarly submitted to and approved by **MORGAN HILL DEVELOPMENT PARTNERS, L.P.**;
5. A statement of estimated daily water usage and sanitary sewage flow;
6. Payment of an architectural review fee of \$500 plus \$.01 per square foot of gross developed space (the Architectural review fee is payable to **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** at such time as plans are submitted for approval); payment of site review fees and other fees as my be applicable to the City of Morgan Hill.

Upon approval by **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** of the plans submitted for architectural review, a copy of such plans as approved shall be retained for permanent record by **MORGAN HILL DEVELOPMENT PARTNERS, L.P.** A copy of such plans including written approval shall be returned to the applicant.

City of Morgan Hill
Development Services Department



Chick-fil-A at 18599 Sutter Boulevard Project
Initial Study

July 2023

Prepared by



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- Appendix A: Trip Generation and Operations Analysis
- Appendix B: Air Quality and Greenhouse Gas Modeling Results
- Appendix C: Environmental Noise and Vibration Assessment
- Appendix D: VMT Assessment

INITIAL STUDY

July 2023

A. BACKGROUND

1. Project Title: Chick-fil-A at 18599 Sutter Boulevard Project
2. Lead Agency Name and Address: City of Morgan Hill
Development Services Department
Morgan Hill, CA
17575 Peak Avenue
Morgan Hill, CA 95037
3. Contact Person and Phone Number: Rich Buikema
Contract Planner
(408) 778-6480
4. Project Location: 18599 Sutter Boulevard
Morgan Hill, CA 95037
APN: 736-32-002
5. Project Sponsor's Name and Address: Chick-fil-A
5200 Buffington Road
Atlanta, GA 30349-2998
6. Existing General Plan Designation: Commercial
7. Existing Zoning Designation: General Commercial – Planned Unit Development
(CG-PUD)
8. Required Approvals from Other Public Agencies: None Required
9. Surrounding Land Uses and Setting:

The project site consists of an approximately 1.82-acre parcel located at 18599 Sutter Boulevard in the City of Morgan Hill, California. The site is identified by Assessor's Parcel Number (APN) 726-32-002. The City of Morgan Hill General Plan land use designation for the project site is Commercial, and the zoning designation for the site is General Commercial – Planned Unit Development (CG-PUD). The project site is currently developed with an unoccupied, single-story, 6,900-square foot (sf) restaurant and an associated surface parking lot, as well as multiple trees located along the edges of the project site.

Surrounding existing land uses include commercial and light industrial uses to the north, and a business park to the northwest, across Cochrane Road; a shopping center to the east, across Sutter Boulevard; medical offices to the southeast; and the 20-acre Evergreen Village, which will include commercial uses such as a Holiday Inn Express and an assisted living facility, to the southwest.

10. Project Description Summary:

The Chick-fil-A at 18599 Sutter Boulevard Project (proposed project) would include the demolition of the existing on-site building and subsequent development of a 5,028-sf Chick-fil-A restaurant with 74 indoor seats, outdoor patio seating, and dual drive-thru lanes. The restaurant would include a meal fulfillment area, dining area, kitchen, team member room, office, and restrooms. A total of 48 parking stalls would be provided throughout the project site, including two Americans with Disabilities Act (ADA)-compliant parking stalls. Primary site access would be from an entrance-only driveway off of Cochrane Road, as well as a second driveway to the south, which would connect to the existing internal roadway north of the medical office building and would allow vehicles to enter and exit the project site.

The project would require the approval of a Conditional Use Permit and Design Review.

B. SOURCES

The following documents are referenced information sources used within this analysis:

1. Andi Borowski, Environmental Services Assistant, Morgan Hill Environmental Services Department. Personal communication [email] with Jesse Fahrney, Associate, Raney Planning and Management, Inc. July 26, 2022.
2. Association of Bay Area Governments. *Dam Failure Inundation Hazard Map for Morgan Hill*. 1995. Available at: http://www.mhcert.com/prepare/dam_failure.shtml. Accessed April 2023.
3. Association of Bay Area Governments. *Resilience Program*. Available at: <https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8>. Accessed April 2023.
4. Bay Area Air Quality Management District. *2022 California Environmental Quality Act Guidelines*. April 2023.
5. Bay Area Air Quality Management District. *2022 California Environmental Quality Act Guidelines*. April 2023.
6. Bollard Acoustical Consultants, Inc. *Environmental Noise and Vibration Assessment: Chick-fil-A Restaurant*. May 1, 2023.
7. California Building Standards Commission. *California Green Building Standards Code*. 2022.
8. California Department of Conservation. *California Important Farmland Finder*. Available at: <https://maps.conservation.ca.gov/dlrp/ciff/>. Accessed April 2023.
9. California Department of Conservation. *Earthquake Zones of Required Investigation*. Available at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>. Accessed April 2023.
10. California Department of Forestry and Fire Protection. *Morgan Hill, Very High Fire Hazard Severity Zones in LRA*. Available at: https://osfm.fire.ca.gov/media/5934/morgan_hill.pdf. Accessed April 2023.
11. California Department of Resources Recycling and Recovery (CalRecycle). *Facility/Site Summary Details: Monterey Peninsula Landfill (27-AA-0010)*. Available at: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2642?siteID=1976>. Accessed April 2023.

12. California Department of Transportation. *Scenic Highways*. Available at: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed April 2023.
13. California Energy Commission. *Title 24 2019 Building Energy Efficiency Standards FAQ*. November 2018.
14. California Water Boards. *Central Coast Post-Construction Stormwater Requirements*. Available at: https://www.waterboards.ca.gov/centralcoast/water_issues/programs/stormwater/docs/lid/hydromod_lid_docs/2013_0032_attach1_post_construction_requirements.pdf. Accessed April 2023.
15. Caltrans. *California State Scenic Highway System Map*. Available at: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>. Accessed April 2023.
16. City of Morgan Hill. *2020 Urban Water Management Plan*. October 2021.
17. City of Morgan Hill. *2035 General Plan, City of Morgan Hill*. Adopted July 2016.
18. City of Morgan Hill. *City Council Staff Report 2163, Accept Report Regarding Wastewater System Needs and Rate Study Schedule*. February 6, 2019.
19. City of Morgan Hill. *City of Morgan Hill Wildland Urban Interface Map*. March 2009.
20. City of Morgan Hill. *Emergency Operations Plan*. January 11, 2018.
21. City of Morgan Hill. *Morgan Hill 2035 Draft Environmental Impact Report*. January 2016.
22. City of Morgan Hill. *Morgan Hill 2035 Final Environmental Impact Report*. Adopted July 2016.
23. City of Morgan Hill. *Morgan Hill 2021 Climate Action Plan*. December 15, 2021.
24. City of Morgan Hill. *Stormwater and Urban Runoff Management*. Available at: <https://www.morgan-hill.ca.gov/737/Phase-II-General-Stormwater-Permit>. Accessed April 2023.
25. Department of Toxic Substances Control. *Hazardous Waste and Substances Site List*. Available at: <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=18599+Sutter+Boulevard%2C+Morgan+Hill%2C+CA>. Accessed April 2023.
26. Dwight Good, Assistant Chief Cooperative Fire Protection, Morgan Hill Fire Department. Personal communication [phone] with Nick Pappani, Vice President, Raney Planning and Management, Inc. June 1, 2021.
27. Federal Emergency Management Agency. *National Flood Hazard Layer FIRMette No. 06085C0444H*. Available at: <https://msc.fema.gov/portal/search?AddressQuery=17090%20Peak%20Avenue%2C%20Morgan%20Hill%2C%20CA#searchresultsanchor>. Accessed April 2023.
28. Hexagon Transportation Consultants, Inc. *Subject: Trip Generation and Operations Analysis for the Proposed 18599 Sutter Boulevard Chick-Fil-A in Morgan Hill, California*. June 23, 2023.
29. Hexagon Transportation Consultants, Inc. *VMT Assessment for the Proposed 18599 Sutter Boulevard Chick-Fil-A in Morgan Hill, California*. April 24, 2023.
30. Santa Clara County. *Comprehensive Land Use Plan, Santa Clara County, South County Airport*. Amended November 16, 2016.
31. Santa Clara Valley Habitat Agency. *Final Santa Clara Valley Habitat Plan*. August 2012.
32. Santa Clara Valley Habitat Agency. *Geobrowser*. Available at: <http://www.hcpmaps.com/habitat/>. Accessed April 2023.

33. Santa Clara Valley Transportation Authority. *2021 Congestion Management Program Document*. December 2021.
34. Santa Clara Valley Water District. *2021 Groundwater Management Plan, Santa Clara and Llagas Subbasins*. November 2021.
35. Santa Clara Valley Water District. *C1: Anderson Dam Seismic Retrofit*. Available at: <https://www.valleywater.org/project-updates/2012-c1-anderson-dam-seismic-retrofit>. Accessed June 2023.
36. State Water Resources Control Board. *GeoTracker*. Available at: <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=morgan+hill>. Accessed April 2023.
37. Stephen L. Kostka and Michael H. Zischke. *Practice Under the California Environmental Quality Act, Second Edition*. March 2019 Update.
38. United States Department of Agriculture. *Web Soil Survey*. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed April 2023.

C. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

As indicated by the checklist on the following pages, the proposed project would not result in significant impacts to any of the environmental factors listed below, and mitigation would not be required.

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

D. DETERMINATION

On the basis of this initial study:

- ☒ I find that this environmental checklist provides substantial evidence that the proposed project can be considered exempt from the California Environmental Quality Act on the basis that it meets the criteria for the Infill Development Project Exemption (Guidelines Section 15332) and does not meet any of the exceptions for exemptions (Guidelines Section 15300.2).
- ☐ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Richard Buikema

Signature

August 15, 2023

Date

Rich Buikema, Contract Planner

Printed Name

City of Morgan Hill

For

E. BACKGROUND AND INTRODUCTION

In July 2016, the City of Morgan Hill adopted the 2035 General Plan,¹ as well as an associated Environmental Impact Report (EIR) for the updated General Plan.² The General Plan EIR is a program EIR, prepared pursuant to Section 15168 of the California Environmental Quality Act (CEQA) Guidelines (Title 14, California Code of Regulations [CCR], Sections 15000 *et seq.*). The General Plan EIR analyzed full implementation of the General Plan and identified measures to mitigate the significant adverse impacts associated with the General Plan.

The purpose of this Initial Study is to evaluate whether the proposed project is exempt from review pursuant to CEQA. Secondly, this Initial Study evaluates whether the proposed project meets any of the exceptions or exemptions listed in Section 15300.2 of the CEQA Guidelines. The summary of the analysis contained in this Initial Study and the relevant findings related to the above key inquiries is presented in the following sections.

A further point is noteworthy before proceeding with the analysis. The relevant questions a lead agency must consider when determining if a particular project is exempt from CEQA are focused on the specific criteria for exemptions and the list of exceptions to an exemption within the CEQA Guidelines. Thus, for this project, the City of Morgan Hill could have focused this analysis on the criteria for the Infill Exemption in CEQA Guidelines Section 15332 and the list of exceptions in Section 15300.2. For this particular project, the City elected to prepare a full Initial Study checklist to provide the substantial evidence supporting its determination as to whether the project can be considered exempt from CEQA. For an overview of the focused list of criteria pursuant to Sections 15332 and 15300.2, see Section G of this Initial Study.

F. PROJECT DESCRIPTION

The following provides a description of the project site's location and setting, as well as the proposed project components and required discretionary actions.

Project Location and Setting

The project site, identified by APN 726-32-002, consists of a 1.82-acre parcel located at 18599 Sutter Boulevard in the City of Morgan Hill, California (see Figure 1 and Figure 2). The City's General Plan land use designation for the site is Commercial, and the City's zoning designation for the site is CG-PUD.

The site is currently developed with an unoccupied, single-story, 6,900-sf restaurant and an associated surface parking lot, as well as multiple trees located along the edges of the project site. The project site is bound by Cochrane Road to the northwest and Sutter Boulevard to the northeast. Surrounding existing land uses include commercial and light industrial uses to the north, and a business park to the northwest, across Cochrane Road; a shopping center to the east, across Sutter Boulevard; medical offices to the southeast; and the 20-acre Evergreen Village, which will include commercial uses such as a Holiday Inn Express and an assisted living facility, to the southwest.

Project Components

The proposed project would include the demolition of the existing on-site building and subsequent development of a 5,028-sf Chick-fil-A restaurant with dual drive-thru lanes and outdoor patio seating.

¹ City of Morgan Hill. *2035 General Plan, City of Morgan Hill*. Adopted July 2016.

² City of Morgan Hill. *Morgan Hill 2035 Final Environmental Impact Report*. Adopted July 2016.

Figure 1 Regional Project Location

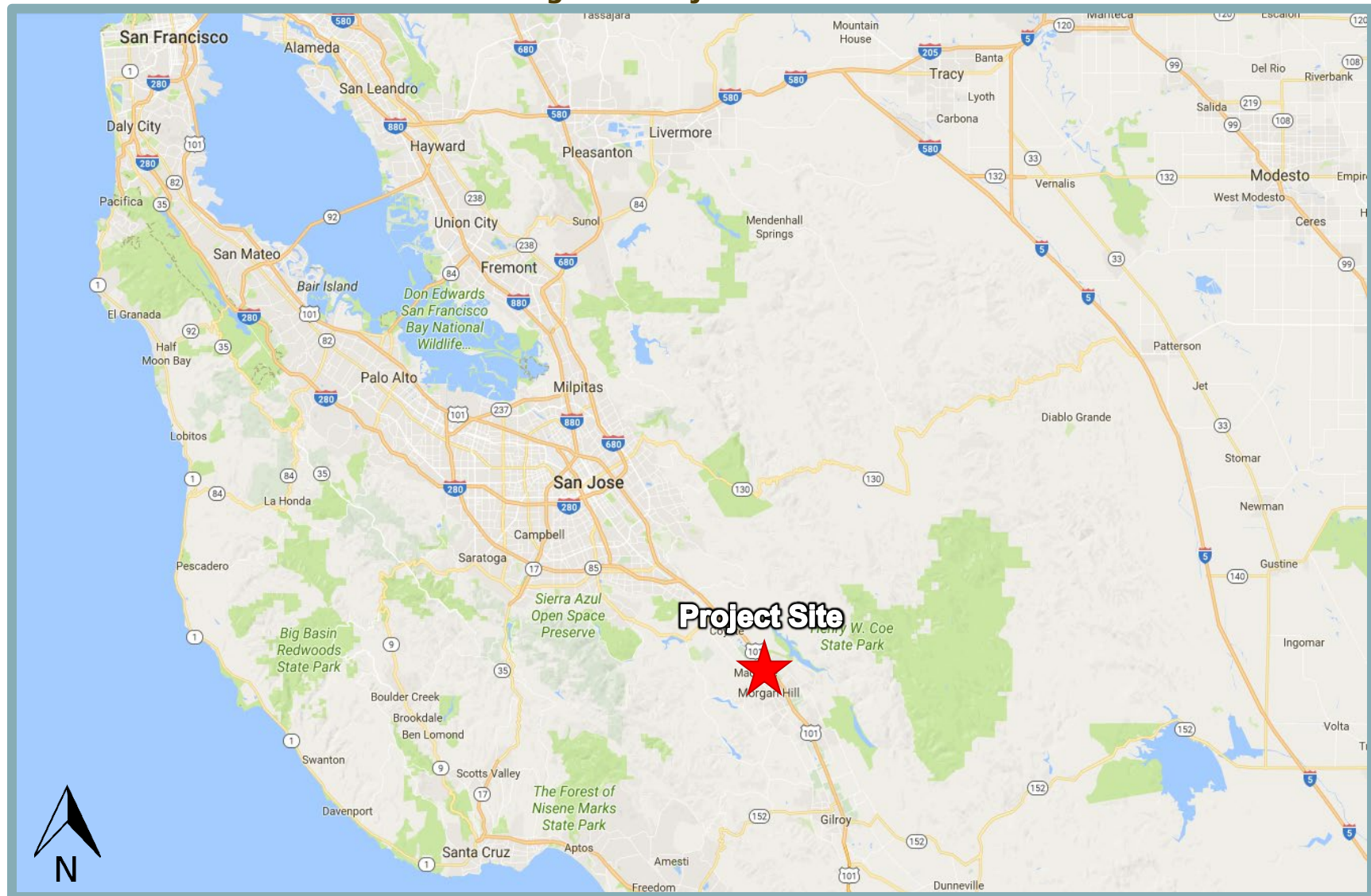


Figure 2
Project Vicinity Map



The following sections present additional details related to the proposed restaurant, project operations, site access and circulation, landscaping, utilities, and requested entitlements.

Proposed Restaurant

The proposed project would require the demolition of the existing on-site 6,900-sf unoccupied restaurant building, which was constructed in 1990, and subsequent construction of a 5,028-sf Chick-fil-A restaurant (see Figure 3). The interior of the restaurant would include approximately 2,657 sf of work space, including a kitchen, office, and break area. The restaurant would include approximately 1,354 sf of public area, including a queue area and a dining area, which would contain 74 seats. An outdoor patio located southeast of the restaurant would provide additional seating for approximately 25 people. The restaurant would also include three bathrooms, two of which would be available to the public; one bathroom would be reserved for employees.

Public ingress and egress to the restaurant would be provided by one entry vestibule on the southeastern side of the building and an exit vestibule on the northeastern side of the building. Two private entrances would be included on the northwestern side of the building, and one additional private entrance would be included on the southeastern side of the building.

Project Operations

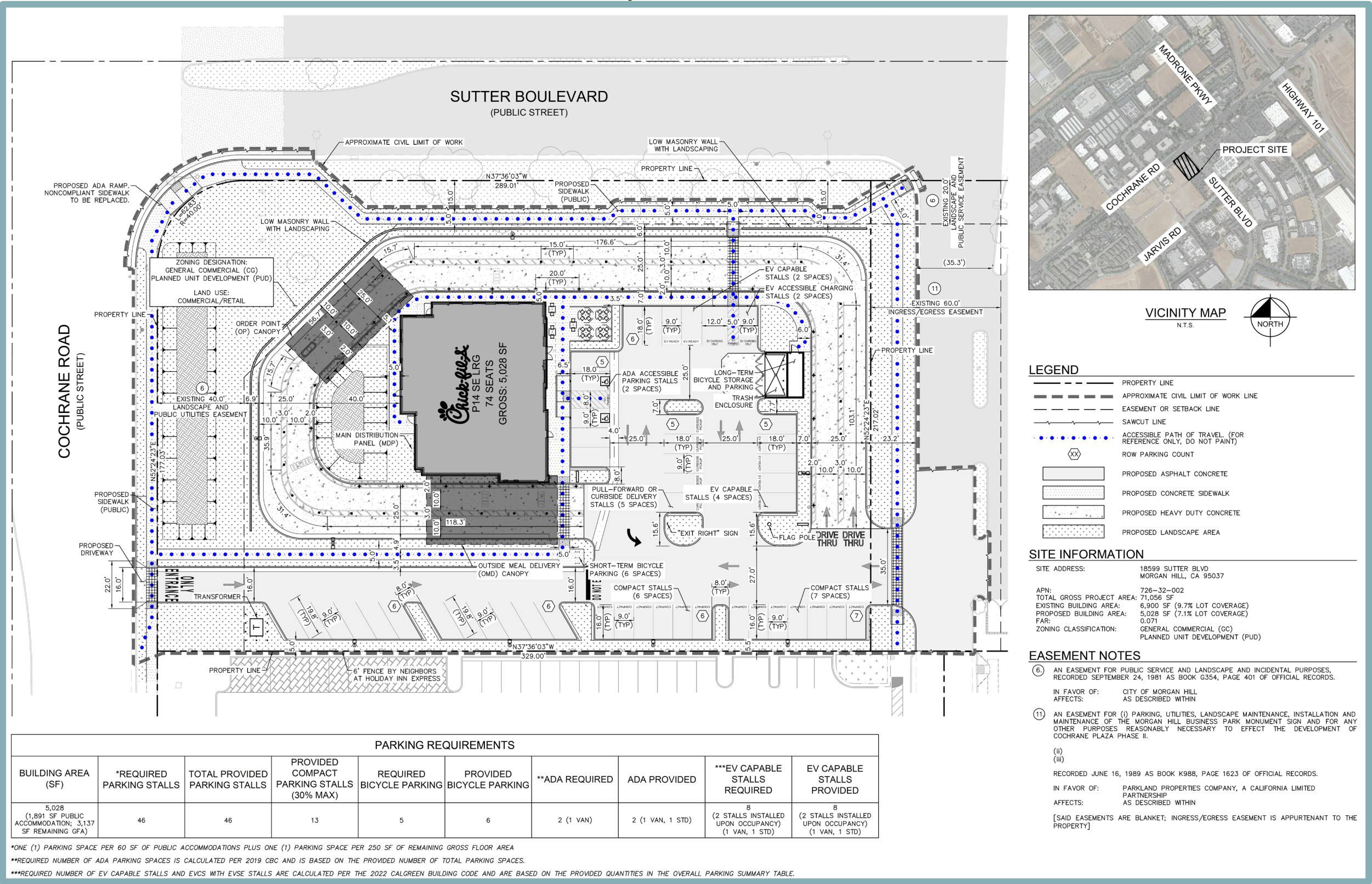
The proposed restaurant would typically operate from 6:00 AM to 10:00 PM, Monday through Saturday, and would be closed on Sundays. The proposed project would employ a total of approximately 50 to 75 full- and part-time employees, with between four and 15 employees present on-site during operational hours. Customers would either order inside the restaurant building or from their vehicles using the dual drive-thru lane, which is described in greater detail below. Customers would either eat meals on-site, either within the internal 74-seat dining area or in the outdoor patio area, or would take their meals off-site.

The proposed project would include the development of a dual drive-through lane, which would consist of two parallel 10-foot-wide travel lanes separated by a three-foot divider. Each lane would have a maximum queue capacity of 24 vehicles per lane, assuming 20 feet per car and full utilization of each lane. Entrance to the dual drive-through lane is proposed adjacent to the southern entrance driveway. The drive-through lanes would extend past the eastern side of the proposed restaurant to the northern corner, where orders would be taken through two amplified menu speaker posts. The proposed speaker posts would have the ability to incorporate automatic volume control (AVC), which adjusts outbound volume based on the ambient noise level environment. The drive-through lanes would then extend to the other side of the building, where orders would be received. During normal operations, customers would merge to a single lane as they proceeded past the ordering area; during periods of higher operational tempo, customers would remain in two-lane configuration as employees would deliver food to customers in the outside lane.

Site Access and Circulation

Primary access to the project site would be provided from a 35-foot-wide driveway in the southern corner of the project site, which would connect to the existing internal roadway north of the medical office and allow vehicles to both enter and exit the project site. A second 22-foot-wide entrance-only driveway would be provided from Cochrane Road, at the northwest corner of the site. The northwest driveway would connect to a one-way internal roadway before merging into the main parking area.

Figure 3
Proposed Site Plan



The proposed project would also include the development of a sidewalk along the north and eastern frontages of the project site. Additional pedestrian walkways would be installed throughout the project site, especially surrounding the proposed building.

In addition, the proposed project would include 46 on-site surface parking spaces and six bicycle parking spaces. Of the 46 parking spaces, two parking spaces would be ADA-compliant, eight would be electrical vehicle (EV) charging spaces, 13 would be compact parking stalls, and the remaining 23 would be standard parking spaces.

Landscaping

The proposed project would require the removal of the existing on-site trees. However, pursuant to Section 18.64.050 of the City's Municipal Code, landscaping would be provided throughout the site in accordance with the City's Standard Details for Construction. The proposed project would include the planting of various trees, shrubs, and ground cover along the site perimeter, and within the proposed parking area. In addition, a low masonry wall would be installed along the outer perimeter of the dual drive-thru lane.

Utilities

Water and sewer service for the proposed development would be provided through connections to existing City infrastructure located in the site vicinity. The proposed project would include installation of a new two-inch water line from the proposed building to an existing water main within Cochrane Road. A new four-inch sanitary sewer line would be routed from the proposed building to a new six-inch sanitary sewer line, which would connect to the existing sanitary sewer line within Sutter Boulevard. In addition, a new four-inch grease waste line would run from the trash enclosure drain through a 1,500-gallon grease interceptor before joining with the new six-inch sanitary sewer line. The proposed project would include the installation of new electric lines to connect to the existing on-site electrical lines.

Two storm drain inlets would be installed in the proposed parking area which would capture stormwater from the impervious surfaces on-site. The proposed project would include the installation of storm drain lines which would transport flows into the two bioretention areas located north of the proposed restaurant building. From there, flows would be directed to the existing storm drain inlet located at the westernmost corner of the project site.

Design Review

Pursuant to Section 18.108.040 of the City's Municipal Code, the proposed project would be subject to Design Review. Specifically, the site plan would be analyzed based on elements of design, development location, arrangement of all structures, and design in harmony with surrounding facilities. The purpose of Design Review is to allow the City to review all development, signs, buildings, structures, and other facilities in order to further enhance the City's appearance, and the livability and usefulness of properties.

Conditional Use Permit

Pursuant to Section 18.24.020 of the City's Municipal Code, drive-through facilities are a permitted use in the CG-PUD zoning designation, subject to approval of a Conditional Use Permit. Therefore, the proposed project would require approval of a Conditional Use Permit.

Required Approvals

The proposed project would require the City's approval of the following:

- Design Review; and
- Conditional Use Permit.

G. SUMMARY

The following section contains a summary showing that the proposed project can be considered exempt from CEQA and is not subject to any of the exceptions set forth in Section 15300.2 of the CEQA Guidelines. As demonstrated throughout this Initial Study, the proposed project qualifies for exemption under CEQA Guidelines Section 15332, Class 32.

In-Fill Development Project Exemption

Article 19 of the CEQA Guidelines, Sections 15300 through 15333, includes a list of classes of projects that have been determined not to have a significant effect on the environment, and are therefore exempt from CEQA. Section 15332 of the CEQA Guidelines provides a categorical exemption for infill development projects that meet the following criteria:

- (a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.
- (b) The proposed development occurs within the city limits on a project site of no more than five acres substantially surrounded by urban uses.
- (c) The project site has no value as habitat for endangered, rare or threatened species.
- (d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.
- (e) The site can be adequately served by all required utilities and public services.

The applicability of the above criteria to the proposed project is summarized in the following sections.

Criterion 15332(a): General Plan and Zoning Consistency

The below discussion demonstrates the project's consistency with the General Plan designation and applicable General Plan policies, as well as the zoning designation and regulations.

The City's General Plan designates the site Commercial and the site is zoned CG-PUD. The Commercial land use designation allows for a wide range of retail businesses, administrative and executive office uses, and professional services, either in stand-alone buildings or as part of shopping centers. Additionally, a drive-through facility is allowed within the CG-PUD district with approval of a Conditional Use Permit. Therefore, the proposed project would not conflict with the site's zoning or land use designation.

Furthermore, the proposed project would comply with applicable General Plan policies and zoning regulations adopted for the purpose of avoiding and/or mitigating adverse environmental effects. For example, Section 18.76.060 (Glare) of the Morgan Hill Municipal Code includes such requirements as cut-off lenses to direct light downward and minimum lighting standards for walkways to ensure safe nighttime conditions. The proposed project would be required to adhere to the applicable policies and standards listed in the City's General Plan and Municipal Code.

General Plan Policy TR-3.4 sets forth the level of service (LOS) standards for the City of Morgan Hill intersections. While Section 15064.3 of the CEQA Guidelines provides that analysis of vehicle miles travelled (VMT) attributable to a project is the most appropriate measure of transportation impacts (see Section XVII of the following checklist for analysis of VMT), the project must still comply with applicable General Plan policies such as the LOS standards set forth by Policy TR-3.4. The LOS standard for City of Morgan Hill intersections is LOS D, with limited exceptions that

do not apply to the two study intersections. A Trip Generation and Operations Analysis was prepared for the proposed project by Hexagon Transportation Consultants, Inc. (see Appendix A), which included evaluation of the LOS at the following intersections under existing and 2025 cumulative traffic conditions both with and without project traffic:³

1. Monterey Road and Cochrane Road;
2. Butterfield Boulevard and Cochrane Road;
3. Woodview Avenue/Evergreen Village and Cochrane Road;
4. Sutter Boulevard and Cochrane Road;
5. Madrone Parkway/Cochrane Plaza and Cochrane Road;
6. US 101 Southbound Ramps and Cochrane Road;
7. US 101 Northbound Ramps and Cochrane Road; and
8. Sutter Boulevard and Cochrane Plaza.

According to the Trip Generation and Operations Analysis, the foregoing intersections currently operate at LOS D or better conditions under Existing (No Project) Conditions. In addition, the Trip Generation and Operations Analysis determined that the addition of project traffic would not result in the degradation of the study intersections' LOS during the AM and PM peak hours under both Existing Plus Project Conditions and Year 2030 Cumulative with Project Conditions. Therefore, the addition of project traffic would not result in the degradation of the study intersections' LOS during the AM and PM peak hours, and, thus, the proposed project would not conflict with General Plan Policy TR-3.4.

In addition, the proposed project would be consistent with the noise standards established in the City's General Plan and the Municipal Code. See Section XIII, Noise, of this Initial Study, for more information.

Based on the above, the project would be consistent with applicable General Plan policies and City zoning designation and regulations, and the proposed project meets Criterion 15332(a).

Criterion 15332(b): Project Location, Size, and Context

The project site consists of 1.82 acres, located within the Morgan Hill city limits. The site is located near existing commercial development to the north, east, and south, as well as future commercial and residential development to the west, including the future Holiday Inn Express. Thus, the proposed project meets Criterion 15332(b).

Criterion 15332(c): Endangered, Rare, or Threatened Species

The site is currently developed with an unoccupied, single-story, 6,900-sf restaurant and an associated surface parking lot, as well as multiple trees located along the edges of the project site. As discussed in Section IV, Biological Resources, of this Initial Study, the project site is located within the boundaries of the Santa Clara Valley Habitat Plan (SCVHP) permit area. The SCVHP designates the project site as an Urban-Suburban developed land cover type. Typically, species covered by the SCVHP are unlikely to occur within Urban-Suburban areas. Pursuant to the Santa Clara Valley Habitat Agency Geobrowser program, the project site is not located within a designated Plant or Wildlife Survey Area for any covered species. The project applicant would be subject to payment of all applicable development fees according to the SCVHP. Due to the highly disturbed nature of the area surrounding the project site, as well as the existing development that has occurred within the project site, the project site does not provide habitat

³ Hexagon Transportation Consultants, Inc. *Subject: Trip Generation and Operations Analysis for the Proposed 18599 Sutter Boulevard Chick-Fil-A in Morgan Hill, California.* June 2, 2023.

value for endangered, rare, or threatened species. Thus, the proposed project meets Criterion 15332(c).

Criterion 15332(d): Traffic, Noise, Air Quality, and Water Quality

The following sections present a summary of the Initial Study analysis regarding potential effects related to traffic, noise, air quality, and water quality resulting from implementation of the proposed project. As demonstrated below, the proposed project meets Criterion 15332(d).

Traffic

As discussed in Section XVII, Transportation, of this Initial Study, the *Technical Advisory on Evaluating Transportation Impacts in CEQA* published by the Governor's Office of Planning and Research (OPR) in December 2018 provides recommendations regarding VMT evaluation methodology, significance thresholds, and screening thresholds for land use projects. The proposed project may be presumed to be a local-serving facility and would therefore have a less-than-significant impact on VMT.

In addition, the proposed project is consistent with the project site's existing General Plan land use and zoning designations. Therefore, vehicle trip generation associated with the project site and associated effects on local transportation facilities have been anticipated by the City and accounted for in regional planning efforts.

Noise

Operations associated with the proposed project would generate noise associated with parking lot movements, drive-through operations (vehicle passages and amplified menu speaker board), on-site vehicle circulation, outdoor patio noise (patrons conversing), delivery truck circulation and delivery activities, and non-transportation sources, such as landscaping, maintenance, and heating ventilation and air conditioning (HVAC) equipment. As discussed in detail in Section XIII, Noise, of this Initial Study, none of the foregoing noise generation sources would substantially increase noise levels from what currently exists in the project area.

During construction, the project would result in short-term noise level increases in the project vicinity. However, the Morgan Hill Municipal Code does not specify any short-term construction noise level limits. Construction activities would occur during normal daytime hours, as Chapter 8.28 of the Morgan Hill Municipal Code prohibits construction activities between 8:00 PM and 7:00 AM, Monday through Friday, and between 6:00 PM and 9:00 AM on Saturdays. Given the restrictions on construction hours and the City's standard conditions of approval requiring the use of best available technology by construction contractors to minimize excessive noise from construction equipment, the project would not result in a substantial temporary increase in noise generation during construction activities.

Based on the above, noise generation associated with the proposed project has been anticipated by the City and accounted for in regional planning efforts.

Air Quality

A detailed discussion of applicable thresholds of significance and estimated construction and operational emissions is present in Section III, Air Quality, of this Initial Study. As discussed therein, the proposed project would result in maximum construction and operational criteria air pollutant emissions that are below the applicable thresholds. Because the proposed project would result in emissions below the applicable thresholds of significance, the proposed project would not be expected to result in a significant contribution to the region's existing air quality conditions.

Therefore, the proposed project is not anticipated to result in short-term construction-related or long-term operational emissions of air quality pollutants that would be considered to have the potential to result in significant effects on the environment.

Water Quality

Issues related to stormwater infrastructure are discussed in Section X, Hydrology and Water Quality, of this Initial Study. Preliminary stormwater control and treatment measures have been designed for the project. Two storm drain inlets would be installed in the proposed parking area which would capture stormwater from the impervious surfaces on-site. The proposed project would include the installation of storm drain lines which would transport flows into the two bioretention areas located north of the proposed restaurant building. From there, flows would be directed to the existing storm drain inlet located at the westernmost corner of the project site. All proposed stormwater treatment measures have been designed in accordance with the Santa Clara County Clean Water Program Technical Guidance Handbook.

The final drainage system design for the project will be subject to review and approval by the City of Morgan Hill City Engineer to confirm that the proposed drainage system for the project is consistent with the City's Storm Drainage Master Plan and standard stormwater-related conditions of approval. Therefore, the proposed project would not result in any significant effects related to water quality.

Criterion 15332(e): Utilities and Public Services

Water and sewer service for the proposed development would be provided by the City through new connections to existing infrastructure within Cochrane Road and Sutter Boulevard, respectively. Given the presence of existing utilities in the immediate project vicinity, the proposed project would not require substantial off-site utility improvements. In addition, as discussed in Section XV, Public Services, and Section XIX, Utilities and Service Systems, of this Initial Study, the project would not exceed the capacity of public service or utility infrastructure. Thus, the site would be adequately served by all required utilities and public services.

Exceptions to Categorical Exemptions Analysis

Even if a project is ordinarily exempt under any of the potential categorical exemptions, CEQA Guidelines Section 15300.2 provides specific instances where exceptions to otherwise applicable exemptions apply. Exceptions to a categorical exemption apply in the following circumstances:

- (a) Location. Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located – a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.
- (b) Cumulative Impact. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.
- (c) Significant Effect. A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.
- (d) Scenic Highways. A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.

- (e) Hazardous Waste Sites. A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.
- (f) Historical Resources. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

The following analysis addresses whether any of the exceptions to the CEQA exemption apply to the proposed project.

Criterion 15300.2(a): Location

CEQA exemptions 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located. The project site is located within an urbanized area and is not located within a sensitive environment. Furthermore, as discussed under Criterion 15300.2(e), the project site is not located near environmental resources of hazardous or critical concern. Therefore, an exception to the exemption under CEQA Guidelines Section 15300.2(a) does not apply to the proposed project.

Criterion 15300.2(b): Cumulative Impact

Pursuant to CEQA Section 15300.2(b), in applying this exception, the cumulative impact must result from “successive projects of the same type in the same place.” Both the “same type” and “same place” limitations restrict the scope of this exception.⁴ The project site is bound by Cochrane Road to the northwest and Sutter Boulevard to the northeast. Surrounding existing land uses include commercial and light industrial uses to the north, and a business park to the northwest, across Cochrane Road; a shopping center to the east, across Sutter Boulevard; medical offices to the southeast; and the 20-acre Evergreen Village, which will include commercial uses such as a Holiday Inn Express and an assisted living facility, to the southwest.

The proposed project is consistent with the project site’s General Plan land use and zoning designations. Therefore, cumulative impacts associated with buildout of the project site have been previously anticipated by the City and analyzed in the General Plan EIR. As discussed above, the project would not exceed the capacity of the existing utility infrastructure in the project vicinity or require other related improvements with the potential to result in cumulatively considerable impacts.

In addition, as discussed above, the Trip Generation and Operations Analysis prepared for the proposed project determined that the addition of project traffic would not result in the degradation of the study intersections’ LOS during the AM and PM peak hours under both Existing Plus Project Conditions and Year 2030 Cumulative with Project Conditions. Therefore, the addition of project traffic would not result in the degradation of the study intersections’ LOS during the AM and PM peak hours under cumulative conditions.

With regard to ambient noise, according to the Environmental Noise and Vibration Assessment (ENVA) prepared for the proposed project by Bollard Acoustical Consultants, Inc. (BAC) (see Appendix C),⁵ the calculated noise levels generated by on-site operations in combination with cumulative conditions, including full development of Evergreen Village, would not be anticipated to generate a significant noise increase triggering the City’s applicable thresholds. In addition,

⁴ Stephen L. Kostka and Michael H. Zischke. *Practice Under the California Environmental Quality Act, Second Edition* [pg. 5-68]. March 2019 Update.

⁵ Bollard Acoustical Consultants, Inc. *Environmental Noise and Vibration Assessment: Chick-fil-A Restaurant*. May 1, 2023.

construction noise is intermittent and temporary and, thus, would not contribute to the cumulative noise environment. Therefore, noise impacts would not be cumulatively considerable.

Thus, the proposed project would not result in a cumulative impact, and an exception to the exemption under CEQA Guidelines Section 15300.2(b) does not apply to the proposed project.

Criterion 15300.2(c): Significant Effect

In listing a class of projects as exempt, the Secretary has determined that the environmental changes typically associated with projects in that class are not significant effects within the meaning of CEQA, even though an argument might be made that they are potentially significant. The plain language of Guidelines Section 15300.2, subdivision (c), requires that a potentially significant effect must be “due to unusual circumstances” for the exception to apply.

The determination as to whether there are “unusual circumstances” (Guidelines, Section 15300.2, subd. [c]) is reviewed under Public Resources Code (PRC) Section 21168.5’s substantial evidence prong. Whether a particular project presents circumstances that are unusual for projects in an exempt class is an essential factual inquiry. As to this question, the lead agency serves as “the finder of fact”.

Unusual circumstances are not defined by the Guidelines, but potential site characteristics could include sensitive habitats or contamination. The project site does not include any aquatic features or otherwise sensitive habitat, and is not included on any lists of hazardous waste sites. In addition, the project site is located within a FEMA Zone X, which is not considered a significant flood hazard area.

Thus, an exception to the exemption under CEQA Guidelines Section 15300.2(c) does not apply to the proposed project.

Criterion 15300.2(d): Scenic Highway

According to the California Department of Transportation (Caltrans) Scenic Highway Mapping System, officially designated State or County scenic highways do not occur in the project vicinity.⁶ Thus, an exception to the exemption under CEQA Guidelines Section 15300.2(d) does not apply to the proposed project.

Criterion 15300.2(e): Hazardous Waste Sites

The California Environmental Protection Agency (CalEPA) provides a list of data resources that provide information regarding the facilities or sites identified as meeting the “Cortese List” requirements, pursuant to Government Code 65962.5. Per a search of the State Water Resources Control Board’s (SWRCB) GeoTracker data management system, hazardous materials sites, including leaking underground storage tank (LUST) sites and Department of Toxic Substances Control (DTSC) cleanup sites, have not been identified on or within a 1,000-foot radius of the project area.⁷ In addition, the project site is not located on or near any hazardous waste sites identified on the Envirostor’s Hazardous Waste and Substance Site List.⁸ Thus, an exception to

⁶ California Department of Transportation. *Scenic Highways*. Available at: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed April 2023.

⁷ State Water Resources Control Board. *GeoTracker*. Available at: <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=morgan+hill>. Accessed April 2023.

⁸ Department of Toxic Substances Control. *Hazardous Waste and Substances Site List*. Available at: <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=18599+Sutter+Boulevard%2C+Morgan+Hill%2C+CA>. Accessed April 2023.

the exemption under CEQA Guidelines Section 15300.2(e) does not apply to the proposed project.

Criterion 15300.2(f): Historical Resources

The project site is currently developed with a vacant restaurant building and an associated parking lot. As such, the site has been subject to significant disturbance, and is unlikely to contain any cultural resources. Furthermore, the existing on-site restaurant building was constructed in 1990, and, thus, the existing structure is not considered eligible for listing under the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR). The proposed project would not result in a substantial adverse change in the significance of a historical resource, and an exception to the exemption under CEQA Guidelines Section 15300.2(f) does not apply to the proposed project.

H. ENVIRONMENTAL CHECKLIST

The following checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less Than Significant with Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

I. AESTHETICS.

Would the project:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	✗
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☐	✗
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	✗
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	✗

Discussion

- a,c. Examples of typical scenic vistas include mountain ranges, ridgelines, or bodies of water as viewed from a highway, public space, or other area designated for the express purpose of viewing and sightseeing. In general, a project's impact to a scenic vista would occur if development of the project would substantially change or remove a scenic vista. The City's General Plan does not designate official scenic view corridors or vistas. However, according to the General Plan, the hillsides that surround the City to the east and west are considered scenic. The project site is generally surrounded by existing development and is not located on a hillside or in the vicinity of a hillside. While distant views of the hills to the east and west of the City are visible to motorists, bicyclists, and pedestrians travelling along Cochrane Road and Sutter Boulevard, neither street is considered a scenic route. In addition, such views are partially obscured through the site by existing on-site trees.

Because the project site is located in an urbanized area, this discussion focuses on project consistency with applicable zoning and other regulations governing scenic quality.

The project site is zoned CG-PUD. Pursuant to Section 18.24.030 of the City's Municipal Code, a building within the CG-PUD zone may not exceed a height of 35 feet. The proposed height of the restaurant would be a maximum of approximately 24 feet. The project would also comply with the required setbacks. Further, the proposed project would exceed the minimum of ten percent of on-site landscaping required by Section 18.64.060 of the City's Municipal Code. Thus, the project would comply with the applicable zoning regulations regarding scenic quality. Additionally, the proposed project is subject to Design Review in accordance with Morgan Hill Municipal Code Section 18.108.040, which would ensure that the project is consistent with the applicable design and development standards.

Based on the above, the proposed project would not have a substantial adverse effect on a scenic vista or conflict with applicable zoning and other regulations governing scenic quality. Thus, ***no impact*** would occur.

- b. According to the Caltrans map of Santa Clara County prepared for the Scenic Highway Mapping System, officially designated State or County scenic highways do not occur in

the project vicinity.⁹ Because the project site is not located in the vicinity of any State scenic highway, the proposed project would not damage any scenic resources within a State scenic highway. Therefore, **no impact** related to damaging scenic resources within a State scenic highway would occur.

- d. As noted previously, the project site is currently developed with an unoccupied, single-story, 6,900-sf restaurant and an associated surface parking lot, as well as multiple trees located along the edges of the project site. The project site is generally surrounded by existing development, and streetlights are provided along Cochrane Road and Sutter Boulevard. Thus, the project site and vicinity already contain existing sources of light and glare, including, but not limited to, headlights on cars traveling along the adjacent roadways, exterior light fixtures, light reflecting off windows, and interior light spilling through windows.

New sources of lighting included in the proposed project would be required to comply with Section 18.76.060 (Glare) of the Morgan Hill Municipal Code, which includes such requirements as cut-off lenses to direct light downward and minimum lighting standards for walkways to ensure safe nighttime conditions. Compliance with these requirements would help to ensure that the light and glare created by the proposed project would be consistent with the levels of light and glare currently emitted in the surrounding developed environment. Therefore, the proposed project would not introduce new sources of substantial light or glare to the site which would adversely affect day or nighttime views in the area, and **no impact** would occur.

⁹ Caltrans. *California State Scenic Highway System Map*. Available at: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>. Accessed April 2023.

II. AGRICULTURE AND FOREST RESOURCES.

Would the project:

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

Discussion

- a,e. According to the California Department of Conservation Farmland Mapping and Monitoring Program, the project site is designated as "Urban and Built-Up Land."¹⁰ Given the designation of the site as Urban and Built-Up Land, development of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, or otherwise result in the loss of Farmland to non-agricultural use or forest land to non-forest use. Therefore, **no impact** would occur as a result of the proposed project.
- b. The project site is not zoned or designated for agricultural purposes and is not under a Williamson Act contract.¹¹ Therefore, buildout of the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and **no impact** would occur.
- c,d. The project site is not considered forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), and is not zoned Timberland Production (as defined by Government Code Section 51104[g]). Therefore, the proposed project would have **no impact** with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning.

¹⁰ California Department of Conservation. *California Important Farmland Finder*. Available at: <https://maps.conservation.ca.gov/dlrp/ciff/>. Accessed April 2023.

¹¹ City of Morgan Hill. *Morgan Hill 2035 Draft Environmental Impact Report* [pg. 4.2-4]. January 2016.

III. AIR QUALITY.

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	✗
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☐	✗
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	✗
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	✗

Discussion

- a,b. The City of Morgan Hill is located in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The SFBAAB area is currently designated as a nonattainment area for State and federal ozone, State and federal fine particulate matter 2.5 microns in diameter (PM_{2.5}), and State respirable particulate matter 10 microns in diameter (PM₁₀) ambient air quality standards (AAQS). The SFBAAB is designated attainment or unclassified for all other AAQS. It should be noted that on January 9, 2013, the U.S. Environmental Protection Agency (USEPA) issued a final rule to determine that the Bay Area has attained the 24-hour PM_{2.5} federal AAQS. Nonetheless, the Bay Area must continue to be designated as nonattainment for the federal PM_{2.5} AAQS until such time as the BAAQMD submits a redesignation request and a maintenance plan to the USEPA, and the USEPA approves the proposed redesignation. The USEPA has not yet approved a request for redesignation of the SFBAAB; therefore, the SFBAAB remains in nonattainment for 24-hour PM_{2.5}.

In compliance with regulations, due to the nonattainment designations of the area, the BAAQMD periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the AAQS, including control strategies to reduce air pollutant emissions through regulations, incentive programs, public education, and partnerships with other agencies. The current air quality plans are prepared in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG).

The most recent federal ozone plan is the 2001 Ozone Attainment Plan, which was adopted on October 24, 2001 and approved by the California Air Resources Board (CARB) on November 1, 2001. The plan was submitted to the USEPA on November 30, 2001 for review and approval. The most recent State ozone plan is the 2017 Clean Air Plan, adopted on April 19, 2017. The 2017 Clean Air Plan was developed as a multi-pollutant plan that provides an integrated control strategy to reduce ozone, PM, toxic air contaminants (TACs), and greenhouse gases (GHGs). Although a plan for achieving the State PM₁₀ standard is not required, the BAAQMD has prioritized measures to reduce PM in developing the control strategy for the 2017 Clean Air Plan. The control strategy serves as the backbone of the BAAQMD's current PM control program.

The aforementioned air quality plans contain mobile source controls, stationary source controls, and transportation control measures to be implemented in the region to attain the State and federal AAQS within the SFBAAB. Adopted BAAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure

continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. For development projects, BAAQMD establishes significance thresholds for emissions of the ozone precursors reactive organic gases (ROG) and oxides of nitrogen (NO_x), as well as for PM₁₀, and PM_{2.5}, expressed in pounds per day (lbs/day) and tons per year (tons/yr). The thresholds are listed in Table 1. Thus, by exceeding the BAAQMD's mass emission thresholds for construction and/or operational emissions of ROG, NO_x, or PM₁₀, a project would be considered to conflict with or obstruct implementation of the BAAQMD's air quality planning efforts.

Table 1 BAAQMD Thresholds of Significance			
Pollutant	Construction	Operational	
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀ (exhaust)	82	82	15
PM _{2.5} (exhaust)	54	54	10
<i>Source: BAAQMD, Air Quality Guidelines, April 2023.</i>			

Particulate matter can be split into two categories: fugitive and exhaust. The BAAQMD thresholds of significance for exhaust are presented in Table 1. It should be noted that BAAQMD does not maintain quantitative thresholds for fugitive emissions of PM₁₀ or PM_{2.5}, rather, BAAQMD requires all projects within the district's jurisdiction to implement Basic Construction Mitigation Measures (BCMMs) related to dust suppression.

The proposed project's construction and operational emissions were quantified using the California Emissions Estimator Model (CalEEMod) software version 2020.4.0 – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including construction data, vehicle mix, trip length, average speed, compliance with the 2019 California Building Standards Code (CBSC), etc. Where project-specific information is available, such information should be applied in the model. Accordingly, the proposed project's modeling assumes the following project and/or site-specific information:

- Demolition would begin in June 2024 and occur over approximately 20 days;
- Construction would begin in July 2024 and occur over approximately one year;
- The project would comply with the Model Water Efficient Landscape Ordinance (MWELO) and the 2019 CALGreen Code; and
- The project would comply with all applicable provisions of the 2022 California CBSC.

The proposed project's estimated emissions associated with construction and operations is provided below. All CalEEMod results are included as Appendix B to this IS/MND.

Construction Emissions

According to the CalEEMod results, the proposed project would result in maximum unmitigated construction criteria air pollutant emissions as shown in Table 2. As shown in the table, the proposed project's maximum unmitigated construction emissions would be below the applicable thresholds of significance.

Table 2			
Maximum Unmitigated Construction Emissions (lbs/day)			
Pollutant	Proposed Project Emissions	Threshold of Significance	Exceeds Threshold?
ROG	1.94	54	NO
NO _x	14.12	54	NO
PM ₁₀ *	0.63	82	NO
PM _{2.5} *	0.59	54	NO
Note: * Denotes emissions from exhaust only. BAAQMD has not yet adopted PM thresholds for fugitive emissions.			
Source: CalEEMod, June 2023 (see Appendix B).			

All projects within the jurisdiction of the BAAQMD are required to implement all of the BAAQMD's BCMMs, which would be required by the City as conditions of approval:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
7. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
8. Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a six- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
9. Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

The proposed project's required implementation of the BAAQMD's BCMMs listed above for the project's construction activities would help to minimize construction-related emissions.

Because the proposed project would be below the applicable thresholds of significance for construction emissions, project construction would not result in a significant air quality impact.

Operational Emissions

According to the CalEEMod results, the proposed project would result in maximum unmitigated operational criteria air pollutant emissions as shown in Table 3. As shown in the table, the proposed project's operational emissions would be below the applicable thresholds of significance. As such, the proposed project would not result in a significant air quality impact during operations.

Table 3 Maximum Unmitigated Operational Emissions					
Pollutant	Proposed Project Emissions		Threshold of Significance		Exceeds Threshold?
	lbs/day	tons/yr	lbs/day	tons/yr	
ROG	2.53	0.42	54	10	NO
NO _x	2.90	0.50	54	10	NO
PM ₁₀ *	0.05	0.009	82	15	NO
PM _{2.5} *	0.05	0.009	54	10	NO
Note: * Denotes emissions from exhaust only. BAAQMD has not yet adopted PM thresholds for fugitive emissions.					
Source: CalEEMod, June 2023 (see Appendix B).					

Conclusion

As stated previously, the applicable regional air quality plans include the 2001 Ozone Attainment Plan and the 2017 Clean Air Plan. According to BAAQMD, if a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the project may be considered consistent with the air quality plans. Because the proposed project would result in emissions below the applicable thresholds of significance, the proposed project would not be considered to conflict with or obstruct implementation of regional air quality plans.

Because the proposed project would not conflict with or obstruct implementation of the applicable air quality plans, violate any air quality standards or contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in any criteria air pollutant, **no impact** would occur.

- c. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest existing sensitive receptors to the project site are the medical offices located south of the project site and the future hotel planned immediately west of the project site.

The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions and TACs, as well as regional effects of emissions of criteria pollutants, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. Emissions of CO are of potential concern, as the pollutant is a toxic gas that results from the incomplete combustion of carbon-containing fuels such as gasoline or wood. CO emissions are particularly related to traffic levels.

In order to provide a conservative indication of whether a project would result in localized CO emissions that would exceed the applicable threshold of significance, the BAAQMD has established screening criteria for localized CO emissions. According to BAAQMD, a proposed project would result in a less-than-significant impact related to localized CO emission concentrations if all of the following conditions are true for the project:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans;
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Given that the proposed project is consistent with the site's current land use and zoning designations, the proposed project would not conflict with the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP).¹² Based on the Trip Generation and Operations Analysis prepared for the proposed project by Hexagon Transportation Consultants, Inc.,¹³ the proposed project would generate 820 vehicle trips per day. According to the City's General Plan Draft EIR, average daily two-way traffic on Sutter Boulevard and Cochrane Road in the project vicinity is 4,349 trips and 20,436 trips, respectively.¹⁴ Considering the proposed project is expected to generate up to 820 daily trips, traffic associated with the proposed development would not increase traffic volumes at any affected intersection to more than 44,000 vehicles per hour. Furthermore, areas where vertical and/or horizontal mixing is limited due to tunnels, underpasses, or similar features do not exist in the project area. Therefore, based on the BAAQMD's screening criteria for localized CO emissions, the proposed project would not be expected to result in substantial levels of localized CO at surrounding intersections or generate localized concentrations of CO that would exceed standards or cause health hazards.

¹² Santa Clara Valley Transportation Authority. *2021 Congestion Management Program Document*. December 2021.

¹³ Hexagon Transportation Consultants, Inc. *Subject: Trip Generation and Operations Analysis for the Proposed 18599 Sutter Boulevard Chick-Fil-A in Morgan Hill, California*. June 2, 2023.

¹⁴ City of Morgan Hill. *2035 General Plan Draft Environmental Impact Report* [pg. 4.14-23]. January 2016..

TAC Emissions

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, gas dispensing facilities, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk. As noted above, the nearest existing sensitive receptors to the project site are the medical offices located south of the project site and the future hotel planned immediately west of the project site.

The proposed project does not include any operations that would be considered a substantial source of TACs. Accordingly, operations of the proposed project would not expose sensitive receptors to excess concentrations of TACs.

Short-term, construction-related activities would result in the generation of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. Construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project. Health risks are typically associated with exposure to high concentrations of TACs over extended periods of time (e.g., 30 years or greater), whereas the construction period associated with the proposed project is estimated to be approximately one year.

All construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation, which is intended to help reduce emissions associated with off-road diesel vehicles and equipment, including DPM. Project construction would also be required to comply with all applicable BAAQMD rules and regulations, particularly associated with permitting of air pollutant sources. In addition, only portions of the site would be disturbed at a time throughout the construction period, with operation of construction equipment occurring intermittently throughout the course of a day rather than continuously at any one location on the project site. Operation of construction equipment within portions of the development area would allow for the dispersal of emissions, and would ensure that construction-activity is not continuously occurring in the portions of the project site closest to existing receptors. Because construction equipment on-site would not operate for long periods of time and would be used at varying locations within the site, associated emissions of DPM would not occur at the same location (or be evenly spread throughout the entire project site) for long periods of time. Due to the temporary nature of construction and the relatively short duration of potential exposure to associated emissions, the potential for any one sensitive receptor in the area to be exposed to concentrations of pollutants for a substantially extended period of time would be low.

Furthermore, the project applicant would be required to prepare, and include on all site development and grading plans, a management plan detailing strategies for control of noise, dust and vibration, and storage of hazardous materials during construction of the project. Pursuant to Section 18.76.040 (Air Contaminants) of the City's Municipal Code, the management plan must include all applicable BAAQMD rules and regulations, as well as the City's standard conditions for construction activity. The City of Morgan Hill

Development Services Department would ensure that the BAAQMD's BCMMs, listed under section "a,b" above, would be noted on project construction drawings prior to issuance of a building permit or approval of improvement plans.

Criteria Pollutant Emissions

Criteria pollutant emissions have the ability to cause negative health effects. As discussed under section 'a' above, the AAQS presented are health-based standards designed to ensure safe levels of criteria pollutants that avoid specific adverse health effects. Because the SFBAAB is designated as nonattainment for State and federal eight-hour ozone and State PM₁₀ standards, the BAAQMD, along with other air districts in the SFBAAB region, has adopted federal and state attainment plans to demonstrate progress towards attainment of the AAQS. Full implementation of the attainment plans would ensure that the AAQS are attained and sensitive receptors within the SFBAAB are not exposed to excess concentrations of criteria pollutants. The BAAQMD's thresholds of significance were established with consideration given to the health-based air quality standards established by the AAQS, and are designed to aid the district in implementing the applicable attainment plans to achieve attainment of the AAQS. Thus, if a project's criteria pollutant emissions exceed the BAAQMD's emission thresholds of significance, a project would be considered to conflict with or obstruct implementation of the BAAQMD's air quality planning efforts, thereby delaying attainment of the AAQS. Because the AAQSs are representative of safe levels that avoid specific adverse health effects, a project's hinderance of attainment of the AAQS could be considered to contribute towards regional health effects associated with the existing nonattainment status of ozone and PM standards.

However, as discussed above, the proposed project would not result in exceedance of the BAAQMD's thresholds of significance. Consequently, implementation of the proposed project would not conflict with the BAAQMD's adopted attainment plans nor would the proposed project inhibit attainment of regional AAQS. Therefore, implementation of the proposed project would not contribute towards regional health effects associated with the existing nonattainment status of ozone and PM₁₀ standards.

Conclusion

Based on the above, the proposed project would not expose any sensitive receptors to substantial concentrations of localized CO, TACs, or criteria air pollutants associated with construction or operation. Therefore, the proposed project would not result in the exposure of sensitive receptors to substantial pollutant concentrations, and **no impact** would occur.

- d. Emissions such as those leading to odors have the potential to adversely affect sensitive receptors within the project area. Pollutants of principal concern include emissions leading to odors, emission of dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in sections 'a' through 'c' above. Therefore, the following discussion focuses on emissions of odors and dust.

Pursuant to the BAAQMD CEQA Guidelines, odors are generally regarded as an annoyance rather than a health hazard.¹⁵ Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The presence of an

¹⁵ Bay Area Air Quality Management District. *California Environmental Quality Act Air Quality Guidelines* [pg. 7-1]. May 2017.

odor impact is dependent on several variables including: the nature of the odor source; the frequency of odor generation; the intensity of odor; the distance of odor source to sensitive receptors; wind direction; and sensitivity of the receptor.

Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantification of significant odor impacts is relatively difficult. Typical odor-generating land uses include, but are not limited to, wastewater treatment plants, landfills, and composting facilities. The proposed project would not introduce any such land uses.

Construction activities often include diesel-fueled equipment and heavy-duty diesel trucks, which can create odors associated with diesel fumes, which could be found to be objectionable. However, as discussed above, construction activities would be temporary, and operation of construction equipment would be regulated and intermittent. Project construction would also be required to comply with all applicable BAAQMD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations would help to minimize air pollutant emissions, as well as any associated odors. Accordingly, substantial objectionable odors would not occur during construction activities or affect a substantial number of people.

In addition, the BAAQMD rules and regulations would act to reduce construction-related dust, which would ensure that construction of the proposed project does not result in substantial emissions of dust. Following project construction, the project site would not include any exposed topsoil. Thus, project operations would not include any substantial sources of dust.

For the aforementioned reasons, construction and operation of the proposed project would not result in emissions (such as those leading to odors) adversely affecting a substantial number of people, and ***no impact*** would result.

IV. BIOLOGICAL RESOURCES.

Would the project:

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

Discussion

- a,f. The project site is located within the boundaries of the SCVHP. The SCVHP was developed through a partnership between Santa Clara County, the cities of San José, Morgan Hill, and Gilroy, the Santa Clara Valley Water District (SCVWD), the Santa Clara VTA, the U.S. Fish and Wildlife Service (USFWS), and the California Department of Fish and Wildlife (CDFW). The SCVHP is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in approximately 500,000 acres of southern Santa Clara County. The SCVHP provides take authorization for 18 covered species. In addition, the SCVHP includes conservation measures to protect the species covered by the SCVHP, as well as a conservation strategy designed to mitigate impacts on covered species and contribute to the recovery of the species in the study area.

The site is currently developed with an unoccupied, single-story, 6,900-sf restaurant and an associated surface parking lot, as well as multiple trees located along the edges of the project site. The observed site conditions are consistent with the SCVHP, which designates the site as an Urban-Suburban developed land cover type.¹⁶ The Urban-Suburban land cover type is described in the SCVHP as developed areas “where the native vegetation has been cleared for residential, commercial, industrial, transportation, or recreational structures, and is defined as one or more structures per 2.5 acres.”¹⁷

¹⁶ Santa Clara Valley Habitat Agency. *Geobrowser*. Available at: <http://www.hcpmaps.com/habitat/>. Accessed April 2023.

¹⁷ Santa Clara Valley Habitat Agency. *Final Santa Clara Valley Habitat Plan* [pg. 3-100]. August 2012.

Typically, species covered by the SCVHP are unlikely to occur within Urban-Suburban areas. Therefore, areas designated as Urban-Suburban are not subject to a Land Cover Fee.¹⁸ Pursuant to the SCVHP Geobrowser program, the project site is not located within a designated Plant or Wildlife Survey Area for any covered species.¹⁹ In addition, the SCVHP Geobrowser program indicates that the project site is located outside of the SCVHP Burrowing Owl Fee Area, and is not identified in the SCVHP as Occupied Nesting Burrowing Owl Habitat, Potential Burrowing Owl Nesting/Overwintering Habitat Depending on Site Conditions, or Overwintering Only Habitat.

Due to the disturbed nature of the project site and the existing development in the project vicinity, the project site does not provide habitat for endangered, rare, or threatened species. Thus, the project site meets the infill exemption criteria (c) established by CEQA Guidelines Section 15332. It should be noted that while not considered special-status species, migratory birds could potentially nest in the existing on-site trees and other vegetation. However, as part of the City's standard conditions of approval, a preconstruction survey for migratory birds would be required prior to removal of on-site trees if tree removal would occur during the avian nesting season.

Therefore, development of the proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS; nor would the proposed project conflict with the provisions of the SCVHP. Thus, **no impact** would occur.

- b,c. The project site is primarily characterized by an existing vacant restaurant and an associated surface parking lot, as well as multiple trees located along the edges of the project site. The project site is generally surrounded by existing development and roadways. The site does not contain any existing wetlands or riparian habitat. Accordingly, the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community, or on federally-protected wetlands, and **no impact** would occur.
- d. Movement corridors or landscape linkages are usually linear habitats that connect two or more habitat patches, providing assumed benefits to the species by reducing inbreeding depression and increasing the potential for recolonization of habitat patches. The project site does not fall within any regional corridor defined by the SCVHP. Furthermore, the project site does not support wildlife movement, as the site is currently developed and substantially surrounded by other urban development.

Given that the project site and the properties within the project vicinity are already developed or under construction and do not support any major wildlife movement corridors, buildout of the project site would not constrain native wildlife movement. As such, the proposed project would not interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. Thus, **no impact** would occur.

¹⁸ Santa Clara Valley Habitat Agency. *Geobrowser*. Available at: <http://www.hcpmaps.com/habitat/>. Accessed April 2023.

¹⁹ *Ibid.*

- e. Section 12.32.030 (Permit-Required) of the City of Morgan Hill's Municipal Code requires the approval of a tree removal permit before the removal of any Ordinance Sized Trees, defined as a non-indigenous tree with a circumference greater than 40 inches (approximately 12.7-inch diameter) or any indigenous tree with circumference greater than 18 inches (approximately 5.7 inches diameter). Indigenous tree means any tree native to the Morgan Hill region, such as oaks (all types), Sycamore, California Bay, Madrone, or Alder.

The proposed project would require the removal of all on-site trees. Currently, an evaluation of on-site trees has not been performed; as such, the project site has the potential to contain Ordinance Sized Trees. However, pursuant to Section 12.32.030(A) of the City's Code of Ordinances, a permit shall not be required for "Developments which have been reviewed and approved by the planning commission or community development director and the tree removal conforms with the landscape plans of those developments." The proposed project would be subject to Design Review, which, pursuant to Section 18.108.040 of the Code of Ordinances, shall be reviewed by the community development director. Therefore, the proposed project would not be required to obtain a tree removal permit. In addition, it is noted that the proposed project would include the planting of various shrubs and ground cover along the site perimeter, and within the proposed parking area. The Preliminary Landscape Plan prepared for the proposed project also reflects replacement planting of 14 crape myrtle trees, ten fruitless olives, and seven coast live oaks throughout the landscaped portions of the project site.

Based on the above, the proposed project would not conflict with local policies or ordinances protecting biological resources, and ***no impact*** would occur.

V. CULTURAL RESOURCES.

Would the project:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	✗
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	☐	☐	☐	✗
c. Disturb any human remains, including those interred outside of dedicated cemeteries.	☐	☐	☐	✗

Discussion

a,b,c. The project site is currently developed with a vacant restaurant building and an associated parking lot. As such, the site has been subject to significant disturbance, and is unlikely to contain any cultural resources. Furthermore, the existing on-site restaurant building was constructed in 1990, and, thus, does not meet the age for being considered historic. Therefore, historical resources would not be affected by implementation of the proposed project.

However, as noted in the General Plan EIR, archaeological surveys conducted in Morgan Hill have identified numerous prehistoric sites with shell midden components, including human burials. Based on such findings, the potential exists for subsurface historical resources and previously unknown archaeological resources to be found on-site during grading and excavation associated with development of the proposed project. In the event that such resources are unearthed during ground disturbing activities (i.e., any activity that exposes, works or redistributes soil, including but not limited to excavating, filling, stockpiling, grading, grubbing, or clearing), the following City standard conditions of approval related to the protection of historical and archaeological resources would be implemented, consistent with Section 18.60.090 of the City's Municipal Code:

A. The developer shall enter into written contracts with an archaeologist and the Tamien Nation Tribe, and pay all fees associated with the activities required by this condition. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply:

1. Prior to start of grading or earthmoving activity (includes demolition and moving of heavy equipment on site) on the "first day of construction", the archaeologist and Tamien Nation Tribal Monitor shall hold a preconstruction meeting for the purposes of "cultural sensitivity training" with the general contractor and subcontractors.
2. An archaeologist and a Tamien Nation Tribal Monitor shall be present on-site to monitor all ground disturbing activities and an archaeologist shall be on-call. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below:
 - a) Work at the location of the find will halt immediately within fifty feet of the find. If an archaeologist is not present at the time of the discovery, the applicant shall contact an archaeologist for

evaluation of the find to determine whether it qualifies as a unique archaeological resource as defined by this chapter.

- b) If the find is determined not to be a Unique Archaeological Resource, construction can continue. The archaeologist will prepare a brief informal memo/letter in collaboration with a tribal representative that describes and assesses the significance of the resource, including a discussion of the methods used to determine significance for the find;
 - c) If the find appears significant and to qualify as a unique archaeological resource, the archaeologist will determine if the resource can be avoided and will detail avoidance procedures in a formal memo/letter; and
 - d) If the resource cannot be avoided, the archaeologist in collaboration with a tribal representative shall develop within forty-eight hours an action plan to avoid or minimize impacts. The field crew shall not proceed until the action plan is approved by the Development Services Director. The action plan shall be in conformance with California Public Resources Code 21083.2.
3. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply. If human remains are discovered, it is probable they are the remains of Native Americans,
- a) If human remains are encountered, they shall be treated with dignity and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern. Information about such a discovery shall be held in confidence by all project personnel on a need-to-know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.
 - b) Remains should not be held by human hands. Surgical gloves should be worn if remains need to be handled.
 - c) Surgical mask should also be worn to prevent exposure to pathogens that may be associated with the remains.
4. In the event that known or suspected Native American remains are encountered, or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped. Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, ground stone mortars and pestles), culturally altered ash stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials and historic structure remains such as stone lined building foundations, wells or privy pits. Ground-disturbing project

activities may continue in other areas that are outside the exclusion zone as defined below.

5. An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the contractor foreman or authorized representative, or party who made the discovery and initiated these protocols, or if on-site at the time of discovery, by the monitoring archaeologist and tribal representative (typically twenty-five to fifty feet for single burial or archaeological find).
6. The discovery locale shall be secured (e.g., 24-hour surveillance) as directed by the City or County if considered prudent to avoid further disturbances.
7. The Contractor Foreman or authorized representative, or party who made the discovery and initiated these protocols shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition:
 - The City of Morgan Hill Development Services Director (408) 779-7247
 - The Contractor's Point(s) of Contact
 - The Coroner of the County of Santa Clara (if human remains found) (408) 793-1900
 - The Native American Heritage Commission (NAHC) in Sacramento (916) 653-4082
 - The Amah Mutsun Tribal Band (916) 481-5785 (H) or (916) 743-5833 (C)
 - The Tamien Nation (707) 295-4011 (office) and (925) 336-5359 (THPO)
8. The Coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American the Coroner has 24 hours to notify the NAHC.
9. The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD). (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)
10. Within 24 hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose.
11. Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's Development Services Director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items

associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the appropriate tribe may be considered and carried out.

12. If the MLD recommendation is rejected by the City of Morgan Hill the parties will attempt to mediate the disagreement with the NAHC. If mediation fails then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.

Compliance with the above standard conditions of approval would ensure that construction of the proposed project would result in ***no impact*** related to historical resources and unique archeological resources, as well as the disturbance of human remains.

VI. ENERGY.

Would the project:

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

Discussion

- a,b. The main forms of available energy supply are electricity, natural gas, and oil. A description of the 2022 California Green Building Standards Code (CALGreen Code) and the Building Energy Efficiency Standards, with which the proposed project would be required to comply, as well as discussions regarding the proposed project's potential effects related to energy demand during construction and operations are provided below.

California Green Building Standards Code

The 2022 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11) is a portion of the CBSC, which became effective on January 1, 2023.²⁰ The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The CALGreen standards regulate the method of use, properties, performance, types of materials used in construction, alteration repair, improvement and rehabilitation of a structure or improvement to property. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the CALGreen Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of EV charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources' MWELO, or a local ordinance, whichever is more stringent, to reduce outdoor water use;
- Diversion of 65 percent of construction and demolition waste from landfills; and
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board.

Building Energy Efficiency Standards

The 2022 Building Energy Efficiency Standards are a portion of the CBSC that expand upon energy efficiency measures from the 2019 Building Energy Efficiency Standards resulting in a reduction in energy consumption from the 2019 standards. Energy reductions relative to previous Building Energy Efficiency Standards would be achieved

²⁰ California Building Standards Commission. *California Green Building Standards Code*. 2022.

through various regulations including requirements for the use of high efficacy lighting, improved water heating system efficiency, and high-performance attics and walls.

As incorporated in the 2019 Building Energy Efficiency Standards, the 2022 Building Energy Efficiency Standards require that certain nonresidential developments be constructed with solar readiness for the future installation of rooftop solar panels.

Construction Energy Use

Construction of the proposed project would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met via a hookup to the existing electricity grid. Project construction would not involve the use of natural gas appliances or equipment.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project site would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. In addition, all construction equipment and operation thereof would be regulated pursuant to the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. In addition, as a means of reducing emissions, construction vehicles are required to become cleaner through the use of renewable energy resources. The In-Use Off-Road Diesel Vehicle Regulation would therefore help to improve fuel efficiency for equipment used in construction of the proposed project. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to further reduce demand on oil and limit emissions associated with construction.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, the proposed project would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

Operational Energy Use

In response to the growing climate crisis, the City has determined that natural gas use in local buildings, which accounts for approximately one-third of the community's carbon footprint, represents the City's greatest opportunity to reduce future GHG emissions. Requiring all new buildings to be constructed without natural gas will dramatically reduce future emission growth as electricity procured by Silicon Valley Clean Energy is 100 percent carbon free. The City Council adopted Ordinance No. 2306 on November 6, 2019,

which prohibits natural gas infrastructure in new buildings. According to the project designs, the proposed project would not be designed to include natural gas.

Energy use associated with operation of the proposed project would be typical of drive-thru commercial uses, requiring electricity for interior and exterior building lighting, HVAC, electronic equipment, machinery, cooking equipment, refrigeration, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by the proposed development.

The proposed project would be subject to all relevant provisions of the most recent update of the CBSC, including the CALGreen Code and the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code and the Building Energy Efficiency Standards would ensure that the proposed structure would consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting. Required compliance with the CBSC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary.

With regard to transportation energy use, the proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy. In addition, as discussed in Section XVII, Transportation, of this Initial Study, the proposed project qualifies as a local-serving facility. As such, the proposed project would not result in a significant impact related to VMT, or, by extension, fuel consumption. Therefore, the proposed project would not result in an adverse impact related to transportation energy use.

Conclusion

Based on the context above, construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, ***no impact*** would occur.

VII. GEOLOGY AND SOILS.

Would the project:

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

Discussion

ai-ii. According to the City of Morgan Hill General Plan EIR, major faults located in the project area include the Calaveras Fault located approximately 4.1 miles northeast of the City, the San Andreas Fault located approximately five miles southwest of the City, and the Sargent Fault located approximately three miles west of the City. Given that known surface expressions of fault traces do not exist within the City of Morgan Hill, including the site, fault rupture hazard is not a significant geologic hazard at the site. In addition, Alquist-Priolo Earthquake Fault Zones are not delineated within or near the project site.²¹

Due to the proximity of the site to nearby active faults, strong ground shaking could occur at the site as a result of an earthquake on any one of the faults. However, the proposed project would be subject to all applicable regulations within the CBSC and Chapter 15.08 (Building Code) of the City's Municipal Code, which provide standards to protect property and public safety by regulating the design and construction of foundations, building frames, and other building elements. Therefore, **no impact** would occur related to exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault or strong seismic ground shaking.

²¹ California Department of Conservation. *Earthquake Zones of Required Investigation*. Available at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>. Accessed April 2023.

aiii,aiv,

- c. The proposed project's potential effects related to liquefaction, landslides, lateral spreading, and subsidence/settlement are discussed in detail below.

Liquefaction

Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. In the process, the soil undergoes transient loss of strength, which commonly causes ground displacement or ground failure to occur. Because saturated soils are a necessary condition for liquefaction, soil layers in areas where the groundwater table is near the surface have higher liquefaction potential than those in which the water table is located at greater depths. Additionally, loose unsaturated sandy soils have the potential to settle during strong seismic shaking.

According to the ABAG Resilience Program's interactive Hazards Map, the project site is located in an area of low liquefaction susceptibility.²² However, the Safety, Services, and Infrastructure Element of the General Plan acknowledges the hazards associated with seismically induced liquefaction in the planning area, and includes a number of policies (SSI-1.1, 1.2, 2.1, and 2.3) that are relevant to the potential hazards. The CBSC and Morgan Hill Building Code also provide standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements, which would further reduce the potential for seismic-related ground failure, including liquefaction. Compliance with the aforementioned regulations would ensure that substantial adverse effects related to liquefaction would not occur.

Landslides

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. The project site is located on level ground, and, thus, would not be subject to landslides.

Lateral Spreading

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. As stated above, the project site is generally flat. In addition, a free face such as an excavation or channel is not located immediately adjacent to the project site. Furthermore, the General Plan EIR concluded that impacts related to lateral spreading would be reduced to a less-than-significant level with compliance with the CBSC, the Santa Clara County General Plan, and the Morgan Hill Municipal Code. Therefore, adverse impacts related to lateral spreading would not occur.

Subsidence/Settlement

Subsidence is the settlement of soils of very low density generally from either oxidation of organic material, or desiccation and shrinkage, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. Given that the proposed

²² Association of Bay Area Governments. *Resilience Program*. Available at: <https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8>. Accessed April 2023.

project would comply with the CBSC, the potential for subsidence to pose a risk to the proposed development is relatively low. In addition, the General Plan EIR concludes that impacts related to subsidence/settlement would be reduced to a less-than-significant level with compliance with the CBSC, the Santa Clara County General Plan, and the Morgan Hill Municipal Code. Therefore, adverse impacts related to subsidence or settlement would not occur.

Conclusion

Based on the above, the proposed project would not be subject to substantial risks related to liquefaction, landslides, lateral spreading, and subsidence/settlement. Compliance with standard construction regulations included in the CBSC would ensure that the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction, subsidence, or settlement, and would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site subsidence, liquefaction, or collapse. Thus, **no impact** would occur.

- b. Development of the proposed project would cause ground disturbance of mostly topsoil related to construction activity. The ground disturbance would be limited to the areas proposed for grading and excavation, including building pads, curb, gutter, drainage, sewer, and water infrastructure alignments. After grading and excavation and prior to overlaying the disturbed surfaces with impervious surfaces and structures, the potential exists for wind and water erosion to occur, which could adversely affect downstream storm drainage facilities.

New development within the City that disturbs one or more acres of land is required to comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit and prepare a Storm Water Pollution Prevention Plan (SWPPP) incorporating Best Management Practices (BMPs) to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. The proposed project would disturb approximately 1.82 acres and, thus, would be subject to such requirements. In addition, pursuant to Chapter 13.30 (Urban Storm Water Quality Management and Discharge Control) of the City's Municipal Code, an Erosion Control Plan must be prepared for the proposed project. BMPs of the Erosion Control Plan would include drainage inlet protection, designation of a temporary construction entrance, as well as temporary fiber rolls and other BMPs to prevent pollution and erosion. In addition, the Erosion Control Plan would be subject to review and approval by the City Engineer prior to the approval of improvement plans and the issuance of building permits to ensure that the plan complies with City standards. Therefore, the proposed project would not result in substantial soil erosion or the loss of topsoil, and, **no impact** would occur.

- d. Expansive soils can undergo significant volume changes with changes in moisture content. Specifically, such soils shrink and harden when dried and expand and soften when wetted. If structures are underlain by expansive soils, foundation systems must be capable of withstanding the potential damaging movements of the soil. According to the U.S. Department of Agriculture's Web Soil Survey, the project site consists entirely of Arbuckle gravelly loam, which is not limited with regard to shrink-swell potential.²³ In addition, the proposed project would be required to comply with all applicable CBSC

²³ United States Department of Agriculture. *Web Soil Survey*. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed April 2023.

standards to ensure the structural integrity of the proposed structures. Given required compliance with the CBSC and all applicable construction standards provided in the Municipal Code, the proposed project would not be subject to substantial risks related to expansive soils.

Based on the above, the proposed project would not create substantial direct or indirect risks to life or property related to being located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property. Thus, a **less-than-significant** impact would occur.

- e. The proposed development would connect to existing City-maintained sewer infrastructure and would not include the use of septic tanks. Accordingly, **no impact** would occur related to soils incapable of adequately supporting the use of septic tanks.
- f. Paleontological resources or fossils are the remains of prehistoric plant and animal life. As noted in the General Plan EIR, based on a review of the University of California's Museum of Paleontology's fossil locality database conducted for all of Santa Clara County, paleontological resources have not been identified within the City of Morgan Hill.²⁴ In addition, the project site has been subject to previous disturbance. Thus, paleontological resources are not expected to occur on the site. Furthermore, the proposed project would be subject to the City's standard measures listed in Section V, Cultural Resources, of this Initial Study. As noted in the General Plan EIR, such measures would ensure adverse impacts to paleontological resources are avoided.

As noted in the City's General Plan, occurrences of fossil resources are closely tied to the geologic units. The soil types at the project site are not considered unique geologic features and are common within the geographic area of the City. As such, development of the proposed project would not destroy a unique geologic feature. Therefore, the proposed project would not result in the direct or indirect destruction of a unique paleontological resource or unique geological feature, and **no impact** would occur.

²⁴ City of Morgan Hill. *Morgan Hill 2035 Draft Environmental Impact Report* [pg. 4.5-17]. January 2016.

VIII. GREENHOUSE GAS EMISSIONS.

Would the project:

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

Discussion

- a,b. Emissions of 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. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO₂) and, to a lesser extent, other GHG pollutants, such as methane (CH₄) and nitrous oxide (N₂O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO₂ equivalents (MTCO₂e/yr).

The proposed project is located within the jurisdictional boundaries of BAAQMD. The most recent BAAQMD Air Quality Guidelines were released in April 2023.²⁵ The updated GHG thresholds address more recent climate change legislation, including Senate Bill (SB) 32, and provide qualitative thresholds related to Buildings and Transportation.

Construction GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change. Neither the City nor BAAQMD has an adopted threshold of significance for construction-related GHG emissions and does not require quantification. Nonetheless, the proposed project's construction GHG emissions, as well as operational emissions, have been estimated using CalEEMod under the same assumptions discussed in Section III, Air Quality, of this IS (see Appendix B). The emissions estimates prepared for the proposed project determined that unmitigated construction of the project would result in total GHG emissions of 801.88 MTCO₂e over the entire construction period.

Potential impacts related to operational GHG emissions resulting from implementation of the proposed project are considered in comparison with BAAQMD's adopted thresholds of significance below.

²⁵ Bay Area Air Quality Management District. 2022 California Environmental Quality Act Guidelines. April 2023.

BAAQMD Thresholds of Significance

The BAAQMD's adopted thresholds of significance for GHG emissions are qualitative, and address recent climate change legislation, including SB 32. According to the new thresholds of significance, a project must either include specific project design elements (e.g., exclude use of natural gas, achieve a specific reduction in project-generated VMT below the regional average) or be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).²⁶

In December of 2021, the City of Morgan Hill adopted a Climate Action Plan (CAP);²⁷ however, the City's CAP does not qualify as a local GHG reduction strategy under CEQA Guidelines Section 15183.5(b). Therefore, the following analysis focuses on the new BAAQMD GHG thresholds related to specific project design elements.

According to the BAAQMD's thresholds of significance, in order to find a less-than-significant GHG impact, projects must include, at a minimum, the following project design elements:

1. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development);
2. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines;
3. The project will achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted SB 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA; and
4. The project will achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

In order to be consistent with the first criterion, the proposed project would be required to include all electric appliances and plumbing. The 2022 Building Energy Efficiency Standards requires that new development be built electric-ready (i.e., structures will be required to have electric supply panels and circuitry to support all-electric appliances and heating). According to the project design, the proposed project would not include natural gas. Thus, the proposed project would be consistent with the first criterion.

Regarding the second criterion, as discussed in Section VI, Energy, of this IS, the proposed project would comply with all applicable federal, State, and local regulations regarding energy use during both project construction and project operations. Therefore, as discussed therein, the proposed project would not result in any wasteful, inefficient, or unnecessary energy usage.

With respect to the third criterion, as discussed in Section XVII, Transportation, of this IS, the proposed project may be presumed to be a local-serving facility and would therefore have a less-than-significant impact on VMT. Therefore, the project would be consistent with the current version of the California Climate Change Scoping Plan.

²⁶ Bay Area Air Quality Management District. *2022 California Environmental Quality Act Guidelines*. April 2023.

²⁷ City of Morgan Hill. *Morgan Hill 2021 Climate Action Plan*. December 15, 2021.

With respect to the fourth criterion, the proposed project would be conditioned to comply with the Tier 2 CALGreen standards related to off-street electric vehicle requirements.

Conclusion

Based on the above, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs; and ***no impact*** would occur.

IX. HAZARDS AND HAZARDOUS MATERIALS.

Would the project:

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

Discussion

- a. Commercial land uses, especially restaurants such as the proposed project, are not typically associated with the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. Project operations and upkeep may require the use common household cleaning products, fertilizers, and herbicides on-site, any of which could contain potentially hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. In addition, Section 8.40.750 of the City's Municipal Code establishes regulations related to the types and quantities of hazardous materials that may be stored or used within the City. Based on the allowances within Section 8.40.750 of the Morgan Hill Municipal Code, should operation of the proposed project require the use or storage of hazardous materials in excess of the accepted limits, a formal request must be made to the City, including a declaration of information regarding the type and quantities of hazardous materials to be used or stored within the project site. Such requests would be considered by the City's Development Services Department. Therefore, such materials would be safely managed in accordance with the applicable regulations and would be subject to City review depending on the type or quantity of chemicals proposed for use.

Given the stringent regulations governing such materials, the proposed project would not create a significant hazard to the public or the environment related to the routine transport, use, or disposal of hazardous materials, and **no impact** would occur.

- b. Buildout of the proposed project would include the demolition of the existing on-site 6,900-sf unoccupied restaurant building. During demolition, the potential exists for construction

personnel or nearby receptors to be exposed to hazardous materials that are present in the existing structure. The primary hazardous materials of concern are asbestos and lead, as discussed below.

For buildings constructed prior to 1980, the Code of Federal Regulations (29 CFR 1926.1101) states that all thermal system insulation (boiler insulation, pipe lagging, and related materials) and surface materials must be designated as “presumed asbestos-containing material” unless proven otherwise through sampling in accordance with the standards of the Asbestos Hazard Emergency Response Act. As noted previously, the proposed project would require the demolition of the existing on-site 6,900-sf unoccupied restaurant building, which was constructed in 1990. Given that the on-site structure was constructed after 1980, the building is unlikely to contain asbestos-containing materials that could be released during demolition activities.

Lead-based paint (LBP) is defined by federal guidelines as any paint, varnish, stain, or other applied coating that has one milligram of lead per square centimeter or greater. Lead is a highly toxic material that may cause a range of serious illnesses, and in some cases death. Structures built prior to 1978, and especially prior to the 1960s, are expected to contain LBP. As noted above, the existing on-site building was developed in 1990 and, thus, is assumed not to include LBP. Therefore, demolition of the on-site building would not result in exposure to LBP.

Hazardous materials could be stored, used, and transported in varying amounts during construction of the proposed project. Construction activities associated with the proposed project would involve the use of various products such as concrete, paints, and adhesives. In addition, heavy-duty construction equipment operating on the project site would contain hydraulic fluid, diesel fuel, and other petroleum products. Small quantities of such potentially toxic substances would be used at the project site and transported to and from the site during construction. However, the project contractor would be required to comply with all California Health and Safety Codes and local ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Compliance with such regulations would ensure that the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment during construction activities.

Based on the above, implementation of the proposed project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. As such, **no impact** would occur.

- c. The nearest school relative to the project site is Ann Sobrato High School, located approximately 0.9-mile northwest of the site. Thus, the project site is not located within a quarter mile of any existing or proposed schools. Therefore, the proposed project would have **no impact** related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- d. The CalEPA has compiled a list of data resources that provide information regarding the facilities or sites identified as meeting the “Cortese List” requirements, pursuant to Government Code 65962.5. The components of the Cortese List include the DTSC

Hazardous Waste and Substances Site List, the list of LUST sites from the SWRCB's GeoTracker database, the list of solid waste disposal sites identified by the SWRCB, and the list of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO) from the SWRCB. Pursuant to the SWRCB GeoTracker data management system, hazardous materials sites, including LUST sites and DTSC cleanup sites, have not been identified on or within a 1,000-foot radius of the project site.²⁸ In addition, the project site is not located on or near any hazardous waste sites identified on the Envirostor's Hazardous Waste and Substance Site List.²⁹

Based on the above, the proposed project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As such, **no impact** would occur.

- e. The public airport nearest to the project site is the San Martin Airport, which is located approximately 5.5 miles southeast of the project site at 13030 Murphy Avenue. The project site is located well outside of the Airport Influence Area identified in the South County Airport Comprehensive Land Use Plan.³⁰ In addition, the project site is not located within the vicinity of a private airstrip. Therefore, the proposed project would not result in an airport-related safety hazard for people residing or working in the project area, and **no impact** would occur.
- f. Implementation of the proposed project would not result in any modifications to the City's existing roadway system. In addition, during construction, heavy equipment would be staged on-site such that the local roadways would not be blocked. Thus, implementation of the proposed project would not interfere with potential evacuation or response routes used by emergency response teams. Furthermore, the project would not conflict with the City's Emergency Operations Plan because the project would not affect the local roadway network.³¹ Therefore, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and **no impact** would occur.
- g. The City's Wildland Urban Interface map indicates that the project site is not located in a High or Very High Fire Hazard Severity Zone (FHSZ).³² In addition, the project site is substantially surrounded by urban development, thereby limiting the sources of fuel (e.g., dry grass) that could be ignited. Therefore, the proposed project would not expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, and **no impact** would occur.

²⁸ State Water Resources Control Board. *GeoTracker*. Available at: <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=morgan+hill>. Accessed April 2023.

²⁹ Department of Toxic Substances Control. *Hazardous Waste and Substances Site List*. Available at: <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=18599+Sutter+Boulevard%2C+Morgan+Hill%2C+CA>. Accessed April 2023.

³⁰ Santa Clara County. *Comprehensive Land Use Plan, Santa Clara County, South County Airport*. Amended November 16, 2016.

³¹ City of Morgan Hill. *Emergency Operations Plan*. January 11, 2018.

³² City of Morgan Hill. *City of Morgan Hill Wildland Urban Interface Map*. March 2009.

X. HYDROLOGY AND WATER QUALITY.

Would the project:

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

Discussion

- a. The proposed project's potential to result in water quality impacts during construction and operations is discussed in further detail separately below.

Construction

Project construction activities such as grading, excavation, and trenching for site improvements would result in the disturbance of on-site soils. The exposed soils have the potential to affect water quality in two ways: 1) suspended soil particles and sediments transported through runoff; or 2) sediments transported as dust that eventually reach local water bodies. Spills or leaks from heavy equipment and machinery, staging areas, or building sites also have the potential to enter runoff. Typical pollutants include, but are not limited to, petroleum and heavy metals from equipment and products such as paints, solvents, and cleaning agents, which could contain hazardous constituents. Sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products could result in water quality degradation if runoff containing the sediment or contaminants should enter receiving waters in sufficient quantities. Impacts from construction-related activities would generally be short-term and of limited duration.

Water quality degradation is regulated by the federal NPDES Program, established by the Clean Water Act, which controls and reduces pollutants to water bodies from point and non-point discharges. In California, the NPDES permitting program is administered by the

SWRCB through nine Regional Water Quality Control Boards (RWQCBs). As discussed in Section VII, Geology and Soils, of this Initial Study, new development within the City that disturbs one or more acres of land is required to comply with the NPDES General Construction Permit and prepare a SWPPP incorporating BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. The proposed project would disturb approximately 1.82 acres, and, thus, would be subject to the State NPDES General Construction Permit.

The proposed project would also be subject to all regional and local water quality regulations. In order to meet water quality objectives for the region, the City of Morgan Hill, City of Gilroy, and County of Santa Clara have prepared and are implementing a Revised Regional Storm Water Management Plan (SWMP).³³ The SWMP incorporates the efforts of the City of Morgan Hill, the City of Gilroy, and the unincorporated portion of Santa Clara County, within the watershed of the Pajaro River and Monterey Bay, to meet the Phase II Storm Water Permit requirements for small municipal separate storm sewer systems (MS4s). The City of Morgan Hill implements the SWMP through an extensive program that entails: 1) the establishment of SWMP goals for the City; 2) public education and outreach; 3) public involvement and participation; 4) illicit discharge control; 5) construction site stormwater runoff control; 6) post-construction stormwater management in development; and 7) pollution prevention. For construction activities, the SWMP presents BMPs that are required for the control of stormwater runoff quality during construction. Compliance with the City's SWMP, as well as the NPDES General Construction Permit, would ensure that adverse impacts to water quality would not occur during construction.

Operation

After project construction, impervious surfaces on the project site could contribute incrementally to the degradation of downstream water quality during storm events. During the dry season, vehicles and other urban activities may release contaminants onto the impervious surfaces, where they would accumulate until the first storm event. During the initial storm event, or first flush, the concentrated pollutants would be transported via stormwater runoff from the site to the stormwater drainage system and eventually a downstream waterway. Typical urban and commercial restaurant facility pollutants that would likely be associated with the proposed project include sediment, pesticides, oil and grease, nutrients, metals, bacteria, and trash.

The proposed project would be managed in accordance with Resolution R3-2013-0032 issued by the Central Coast RWQCB. The Resolution formally adopts post-construction stormwater management requirements for development projects in the Central Coast Region.³⁴ The requirements identify 10 Watershed Management Zones (WMZs) in the covered area, and specify stormwater management requirements for each zone, depending on the size of the development project. Because the project site is located in an area classified as WMZ-1, stormwater management at the project site must include site design and runoff features to limit the amount of runoff from the project site as well as on-site water quality treatment to reduce pollutant loads in the stormwater runoff using a Low

³³ City of Morgan Hill. *Stormwater and Urban Runoff Management*. Available at: <https://www.morgan-hill.ca.gov/737/Phase-II-General-Stormwater-Permit>. Accessed April 2023.

³⁴ California Water Boards. *Central Coast Post-Construction Stormwater Requirements*. Available at: https://www.waterboards.ca.gov/centralcoast/water_issues/programs/stormwater/docs/lid/hydromod_lid_docs/2013_0032_attach1_post_construction_requirements.pdf. Accessed April 2023.

Impact Development (LID) treatment system such as biofiltration. In WMZ-1, the treatment system must retain 95 percent of the runoff from the project site and also maintain peak runoff flows such that they do not exceed pre-project flows.

Although a Stormwater Control Plan (SWCP) has not yet been prepared for the proposed project, preliminary stormwater control and treatment measures have been conceptually designed for the project. Two storm drain inlets would be installed in the proposed parking area which would capture stormwater from the impervious surfaces on-site. The proposed project would include the installation of storm drain lines which would transport flows into the two bioretention areas located north of the proposed restaurant building. From there, flows would be directed to the existing storm drain inlet located at the westernmost corner of the project site. All proposed stormwater treatment measures have been designed in accordance with the Santa Clara County Clean Water Program Technical Guidance Handbook.

The design, construction, operation, and maintenance of the proposed stormwater system would need to be addressed in a SWCP to be submitted to the City of Morgan Hill in accordance with the stormwater management requirements set forth in Chapter 18.140 of the City's Municipal Code. The SWCP would demonstrate how the stormwater system would meet the specified water quality, runoff retention, and peak flow management requirements. Prior to the issuance of building permits, the stormwater controls would be verified by the City of Morgan Hill to confirm design of the controls in accordance with the specified standards, and the controls would be subject to later operation and maintenance inspections by the property owner.

The final design of the proposed drainage system would be reviewed and approved by the City Engineer, who would ensure that the proposed drainage system complies with all applicable regional and local standards and requirements with respect to incorporating sufficient permanent stormwater treatment control BMPs. Therefore, water quality standards or waste discharge requirements would not be violated, and water quality would not be substantially degraded as a result of operations of the proposed project.

Conclusion

Based on the above discussions, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction and operations. Therefore, **no impact** would occur.

- b,e. The City's water supplies currently consist entirely of groundwater. Approximately 25 percent of the City's supply is extracted from the Coyote Valley subarea of the Santa Clara Subbasin, and approximately 75 percent is extracted from the Llagas Subbasin. The project site is located within the Llagas Subbasin. Neither of the subbasins are in a condition of overdraft, and groundwater levels are not expected to drop.³⁵ It should be noted that water supply is further discussed in Section XIX, Utilities and Service Systems, of this Initial Study.

Groundwater within the Llagas Subbasin is managed by the SCVWD. The 2021 Groundwater Management Plan (GWMP), prepared pursuant to the Sustainable Groundwater Management Act of 2014, describes the SCVWD's comprehensive

³⁵ City of Morgan Hill. *Morgan Hill 2035 Draft Environmental Impact Report* [pg. 4.9-18]. January 2016.

groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. The GWMP covers the Santa Clara and Llagas subbasins, located entirely in Santa Clara County and identified by the Department of Water Resources (DWR) as Basins 2-9.02 and 3-3.01, respectively. DWR identified the Santa Clara and Llagas subbasins as high-priority based on criteria that include overlying population, projected growth, number of wells, irrigation acreage, groundwater reliance, and groundwater impacts. However, neither subbasin has been identified as being critically overdrafted.³⁶

Major recharge facilities within the Llagas Subbasin include the Uvas and Chesbro Reservoirs, in-stream recharge in Llagas and Uvas Creeks, the Madrone Channel, the San Pedro and Main Avenue groundwater recharge ponds, and the Uvas-Llagas pipeline, which is capable of diverting water from Uvas Reservoir to Llagas Creek. The project site is not located in the vicinity of any such facilities. In addition, the proposed stormwater drainage system would allow for a portion of the captured runoff to infiltrate underlying soils in a manner similar to what currently occurs on-site.

Given that groundwater levels within the subbasin underlying the project site are currently stable, and that the proposed project would provide for opportunities for on-site recharge, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the Llagas Subbasin. In addition, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Thus, **no impact** would occur.

- ci-iii. The project site consists of the demolition of the existing on-site building and subsequent development of a 5,028-sf Chick-fil-A restaurant with dual drive-thru lanes and outdoor patio seating. Because the project site is currently developed with impervious surfaces, buildout of the proposed project would not significantly alter the existing amount of on-site impervious surface. Stormwater runoff could cause soil erosion if not properly addressed and provide a more lucrative means of transport for pollutants to enter the waterways. However, as discussed above, the proposed stormwater system would treat and retain runoff from the project site and would be required to maintain peak runoff flows such that they do not exceed pre-project flows in accordance with the stormwater management requirements adopted by Resolution R3-2013-0032.

Stormwater runoff associated with the site would be required to comply with the City's SWMP standards. As such, the project would not significantly increase stormwater flows into the existing system. The final drainage system design for the project will be subject to review and approval by the City Engineer, who will confirm that the proposed drainage system for the project is consistent with the City's Storm Drainage Master Plan and standard stormwater-related conditions of approval. Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion, siltation, or flooding on- or off-site, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff. Thus, **no impact** would occur.

³⁶ Santa Clara Valley Water District. 2021 *Groundwater Management Plan, Santa Clara and Llagas Subbasins* [pg. ES-1]. November 2021.

- civ. According to FEMA Flood Insurance Rate Map number 06085C0444H, the project site is located within Zone X, which is not considered a Special Flood Hazard Area.³⁷ Therefore, the proposed project would not impede or redirect flood flows, and **no impact** would occur.
- d. A discussion of flood hazards can be found above, under question 'civ.' A seiche is defined as a wave generated by rapid displacement of water within a reservoir or lake, due to an earthquake that triggers land movement within the water body or land sliding into or beneath the water body. The project site is not located near a water body that is susceptible to seiche hazard. In addition, the distance to the nearest coastline does not subject the site to tsunami hazards.

The project site is, however, located within the dam failure inundation hazard zone for Anderson Reservoir as indicated within the dam failure inundation hazard maps.³⁸ The dams in Santa Clara County are managed by the SCVWD. The dams are inspected twice each year and are continuously monitored for seepage and settling and inspected immediately following significant earthquakes. A seismic stability evaluation performed in 2007 for Anderson Dam indicated that the downstream and upstream embankments could become unstable during a very large magnitude earthquake and the rupture of faults underlying the dam may have adverse impact on the outlet pipes and intake structure. The SCVWD has initiated a capital project, the Anderson Dam Seismic Retrofit Project (ADSRP), to complete the planning, design, and construction of the seismic retrofit of the dam. Construction work for the ADSRP was planned to start in 2021, but is still in the planning phase.³⁹

Until recently, in order to protect the public from potential effects until the ADSRP is complete, a storage restriction of approximately 45 feet below the dam crest has been put in place, with a reduced storage capacity of 61,810 acre-feet. The SCVWD and regulatory agencies (California Division of Safety of Dams and the Federal Energy Regulatory Commission) have approved the restriction and believe that the restriction would be sufficient to prevent the uncontrolled release of water in case of dam failure after a major earthquake. As of December 2020, Anderson Reservoir, the largest reservoir in Santa Clara County, has been completely drained under the direction of federal dam regulators.

Based on the above, the proposed project would not be exposed to substantial risks related to flooding as a result of the failure of a dam, tsunamis, or seiches. Therefore, the project would not result in the release of pollutants due to project inundation, and **no impact** would occur.

³⁷ Federal Emergency Management Agency. *National Flood Hazard Layer FIRMette No. 06085C0444H*. Available at: <https://msc.fema.gov/portal/search?AddressQuery=17090%20Peak%20Avenue%2C%20Morgan%20Hill%2C%20CA#searchresultsanchor>. Accessed April 2023.

³⁸ Association of Bay Area Governments. *Dam Failure Inundation Hazard Map for Morgan Hill*. 1995. Available at: http://www.mhcert.com/prepare/dam_failure.shtml. Accessed April 2023.

³⁹ Santa Clara Valley Water District. *C1: Anderson Dam Seismic Retrofit*. Available at: <https://www.valleywater.org/project-updates/2012-c1-anderson-dam-seismic-retrofit>. Accessed June 2023.

XI. LAND USE AND PLANNING.

Would the project:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	✗
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	✗

Discussion

- a. A project risks dividing an established community if the project would introduce infrastructure or alter land use so as to change the land use conditions in the surrounding community, or isolate an existing land use. Currently, the project site consists of an unoccupied, single-story, 6,900-sf restaurant and an associated surface parking lot, and the site is generally surrounded by existing and planned development. The proposed project is consistent with the former use on the project site and, therefore, would not introduce a new land use, change the conditions in the surrounding community, or isolate an existing land use. Therefore, the proposed project would not physically divide an established community and **no impact** would occur.
- b. The project site is designated Commercial within the City's General Plan and is zoned CG-PUD. The Commercial land use designation allows for a wide range of retail businesses, administrative and executive office uses, and professional services, either in stand-alone buildings or as part of shopping centers. Additionally, a drive-through facility is allowed within the CG-PUD district with approval of a Conditional Use Permit. Therefore, the proposed project would not conflict with the site's zoning or land use designation.

In addition, the proposed project would be consistent with other applicable policies and regulations adopted for the purpose of avoiding or mitigating environmental effects. For example, as discussed in Section IV, Biological Resources, of this Initial Study, the proposed project would comply with Section 12.32.030 of the City's Municipal Code regarding the removal of Ordinance Sized Trees. The project would not conflict with any applicable policies, regulations, or ordinances related to the protection of biological resources. Additionally, as discussed under Section XIII, Noise, of this Initial Study, the project would comply with the noise level thresholds established in the City's General Plan and Municipal Code during construction and operation. In addition, the proposed project would comply with Section 8.28.040.D of the City's Municipal Code, which limits the hours construction activities may occur.

Therefore, the proposed project would not cause a significant adverse environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and **no impact** would occur.

XII. MINERAL RESOURCES.

Would the project:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	✗
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	✗

Discussion

- a,b. The City's General Plan does not identify any regionally or locally important mineral resources within the City of Morgan Hill. The Santa Clara County General Plan does identify mineral resources of importance; however, the project site is not located in proximity to the quarries currently in operation. Furthermore, mining is not allowed by the project site's land use and zoning designations, and mining would be incompatible with the surrounding uses. Consequently, the proposed project would not result in the loss of a known mineral resource that would be of value to the region nor would the project result in the loss of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, **no impact** to mineral resources would occur as a result of the proposed project.

XIII. NOISE.

Would the project result in:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	✗
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	✗
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	✗

Discussion

- a. The following section includes a discussion of noise standards and criteria applicable to various land uses, as well as potential traffic noise and non-transportation noise sources associated with the proposed project. The analysis below is based on the ENVA prepared for the proposed project by BAC (see Appendix C).⁴⁰ The following terms are referenced in this discussion:

- Decibel (dB): A unit of sound energy intensity. An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels. All references to dB in this discussion will be A-weighted unless noted otherwise.
- Day-Night Average Level (DNL): The average sound level over a 24-hour period, with a penalty of 10 dB applied to noise occurring during nighttime hours (10:00 PM to 7:00 AM).
- Community Noise Equivalent Level (CNEL): The average sound level over a 24-hour period, with a penalty of 5 dB applied to noise occurring during daytime hours (7:00 AM to 10:00 PM) and a penalty of 10 dB applied to noise occurring during nighttime hours (10:00 PM to 7:00 AM).
- Equivalent Sound Level (L_{eq}): The average sound level over a given time-period.
- Maximum Sound Level (L_{max}): The maximum sound level over a given time-period.

Sensitive Receptors

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are considered to be sensitive to noise because intrusive noise can be disruptive to such activities. Within the project vicinity, and for the purposes of a CEQA evaluation, the nearest sensitive receptors are the medical offices located south of the project site and the future hotel planned immediately west of the project site.

⁴⁰ Bollard Acoustical Consultants, Inc. *Environmental Noise and Vibration Assessment: Chick-fil-A Restaurant*. May 1, 2023.

Existing Noise Environment

The ambient noise environment in the immediate project vicinity is defined by noise from traffic on Cochrane Road and Sutter Boulevard, as well as activities at nearby commercial uses. In order to quantify the existing ambient noise environment within the project vicinity, BAC conducted short-term ambient noise level measurements at two locations on February 14, 2023. The noise survey locations are shown in Figure 4, and are identified as Sites A and B. The ambient noise level survey results are summarized below in Table 4.

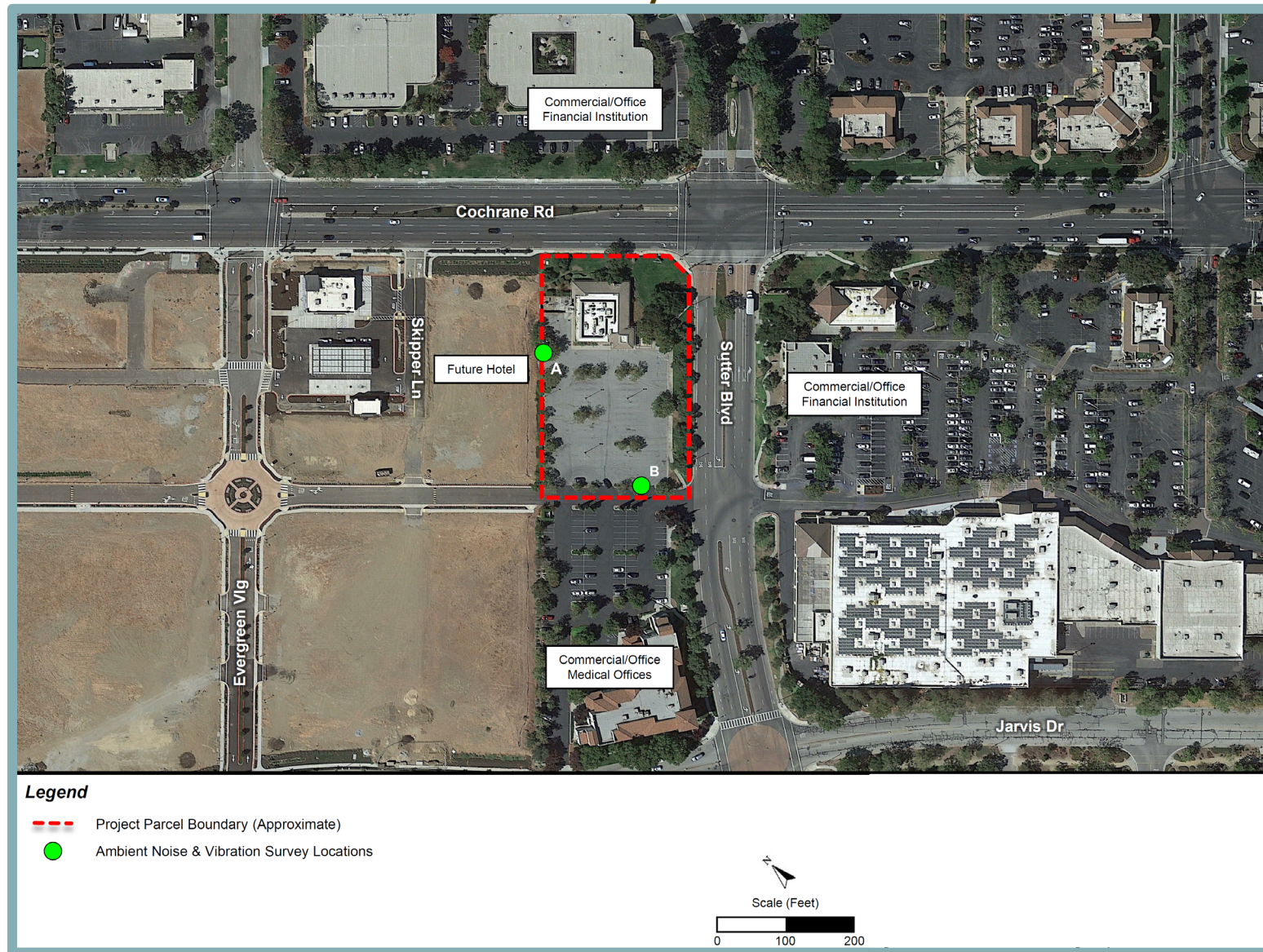
Table 4			
Ambient Noise Survey Results			
Survey Location¹	Time Period	Average Measured Noise Levels (dBA)	
		L_{eq}	L_{max}
Site A	10:00 AM to 11:00 AM	58.0	93.6
	11:00 AM to 12:00 PM	58.3	93.9
	12:00 PM to 1:00 PM	58.2	93.8
Site B	10:00 AM to 11:00 AM	60.3	77.5
	11:00 AM to 12:00 PM	58.3	86.8
	12:00 PM to 1:00 PM	58.4	78.2
Notes:			
¹ Noise survey site locations are shown in Figure 4.			
Source: Bollard Acoustical Consultants, Inc. 2023.			

City Noise Standards and Criteria

Chapter 9, Safety, Service, and Infrastructure, of the City's General Plan contains the following policies that would be applicable to the proposed project:

- SSI-8.2 Impact Evaluation. The impact of a proposed development project on existing land uses should be evaluated in terms of the potential for adverse community response based on significant increase in existing noise levels, regardless of compatibility guidelines.
- SSI-8.5 Traffic Noise Level Standards. Consider noise level increases resulting from traffic associated with new projects significant if: a) the noise level increase is 5 dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn}, or b) the noise level increase is 3 dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater.
- SSI-8.6 Stationary Noise Level Standards. Consider noise levels produced by stationary noise sources associated with new projects significant if they substantially exceed existing ambient noise levels.
- SSI-8.7 Other Noise Sources. Consider noise levels produced by other noise sources (such as ballfields) significant if an acoustical study demonstrates they would substantially exceed ambient noise levels.

Figure 4
Noise Survey Locations



SSI-8.9 Site Planning and Design. Require attention to site planning and design techniques other than sound walls to reduce noise impacts, including: a) installing earth berms, b) increasing the distance between the noise source and the receiver, c) using non-sensitive structures such as parking lots, utility areas, and garages to shield noise-sensitive areas, d) orienting buildings to shield outdoor spaces from the noise source, and e) minimizing the noise at its source.

In addition to the policies listed above, Section 18.76.090 (Noise) of the City's Municipal Code contains maximum noise levels for non-transportation noise sources. The City's quantitative exterior noise standards are reproduced below in Table 5. Importantly, this section of the Code states that noise standards in the below table (i.e., Table 18.76-1 of the Code) do not apply to noise generated by vehicle traffic in the public right-of-way or from temporary construction, demolition, and vehicles that enter and leave the site of the noise-generating use (e.g., construction equipment, trains, trucks).

Table 5	
Noise Level Performance Standards	
Receiving Land Use	Maximum Noise Level at Lot Line of Receiving Use^{1,2}
Industrial and Wholesale	70 dBA
Commercial	65 dBA
Residential or Public/Quasi Public	60 dBA
Notes: ¹ The standards presented herein are interpreted as being hourly average (L_{eq}) noise level standards. ² The planning commission may allow an additional 5 dBA noise level at the lot line if the maximum noise level shown above cannot be achieved with reasonable and feasible mitigation.	
Source: City of Morgan Hill Municipal Code.	

Furthermore, Section 8.28.040.D of the Morgan Hill Municipal Code, limits construction activity noise as follows:

"Construction activities" are defined as including but not limited to excavation, grading, paving, demolition, construction, alteration or repair of any building, site, street or highway, delivery or removal of construction material to a site, or movement of construction materials on a site. Construction activities are prohibited other than between the hours of seven a.m. and eight p.m., Monday through Friday and between the hours of nine a.m. to six p.m. on Saturday. Construction activities may not occur on Sundays or federal holidays. No third person, including but not limited to landowners, construction company owners, contractors, subcontractors, or employers, shall permit or allow any person working on construction activities which are under their ownership, control or direction to violate this provision.

Construction activities may occur in the following cases without violation of this provision:

- a. In the event of urgent necessity in the interests of the public health and safety, and then only with a permit from the Building Official, which permit may be granted for a period of not to exceed three days or less while the emergency continues and which permit may be renewed for periods of three days or less while the emergency continues.
- b. If the Building Official determines that the public health and safety will not be impaired by the construction activities between the hours of eight p.m.

and seven a.m., and that loss or inconvenience would result to any party in interest, the Building Official may grant permission for such work to be done between the hours of eight p.m. and seven a.m. upon an application being made at the time the permit for the work is issued or during the progress of the work.

- c. The city council finds that construction by the resident of a single residence does not have the same magnitude or frequency of noise impacts as a larger construction project. Therefore, the resident of a single residence may perform construction activities on that home during the hours in this subsection, as well as on Sundays and federal holidays from nine a.m. to six p.m., provided that such activities are limited to the improvement or maintenance undertaken by the resident on a personal basis.
- d. Public Works projects are exempt from this section and the City Engineer shall determine the hours of construction for City public projects.

Project Construction Noise

During construction of the proposed project, heavy-duty equipment would be used for demolition, grading, excavation, paving, and building construction, which would result in temporary noise level increases while in operation. Noise levels would vary depending on the type of equipment used, how the equipment is operated, and how well the equipment is maintained. In addition, noise exposure at any single point outside the project site would vary depending on the proximity of construction activities to that point. Standard construction equipment, such as graders, backhoes, loaders, and haul trucks would be used on-site. The nearest sensitive receptors are the medical offices located south of the project site and the future hotel planned immediately west of the project site.

Table 6 shows the maximum noise levels associated with typical construction equipment.

Table 6	
Construction Equipment Noise	
Type of Equipment	Maximum Level, dB at 50 feet
Backhoe	78
Compactor	83
Compressor (air)	78
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Pneumatic Tools	85
<i>Source: Federal Highway Administration, Roadway Construction Noise Model User's Guide, January 2006.</i>	

Based on the table, activities involved in typical construction would generate maximum noise levels up to 85 dB at a distance of 50 feet. The medical offices are located approximately 250 feet away from the project site and could be subject to construction noise levels up to 71 dB. The planned hotel would be located less than 50 feet to the west and, thus, could be exposed to noise levels greater than 85 dB.

As noted in Section 18.76.090 of the City's Municipal Code, the noise level performance standards set forth therein do not apply to noise generated by construction activities.

Additionally, Chapter 8.28 of the Morgan Hill Municipal Code prohibits construction activities between 8:00 PM and 7:00 AM, Monday through Friday, and between 6:00 PM and 9:00 AM on Saturdays. Construction activities may not occur on Sundays or federal holidays.

Given the restrictions on construction hours, and the City's standard conditions of approval requiring the use of best available technology by construction contractors to minimize excessive noise from construction equipment, the project would not result in an impact related to a substantial temporary increase in noise generation during construction activities.

Project Operational Noise

The project consists of operation of a Chick-fil-A restaurant with drive-through services. The project proposes restaurant operations (including drive-through services) during the hours of 6:00 AM to 10:00 PM. In addition to increased traffic on nearby roadways, the primary noise sources associated with project on-site operations have been identified in the ENVA as parking lot movements, drive-through operations (vehicle passages and amplified menu speaker board), on-site vehicle circulation, outdoor patio noise (patrons conversing), delivery truck circulation and delivery activities, and mechanical equipment.

For noise generated by on-site operations, Section 18.76.090 of the Morgan Hill Municipal Code establishes a property line exterior noise level standard of 65 dB L_{eq} for commercial uses. Additionally, Policy SSI-8.4 of the Morgan Hill General Plan states that interior noise levels in office buildings should be maintained at 45 dB L_{eq} . Furthermore, General Plan Policy SSI-8.6 states that noise levels produced by stationary noise sources associated with new projects shall be considered significant if they substantially exceed existing ambient noise levels. However, Policy SSI-8.6 does not contain numeric increase significance criteria. In terms of determining the temporary noise increase due to project on-site operations and demolition/construction activities (non-transportation noise sources) at existing sensitive receptors in the vicinity, an impact would occur if such activities would noticeably increase ambient noise levels above background levels at existing sensitive receptors. The threshold of perception of the human ear is approximately 3 to 5 dB; a 5 dB change is considered to be clearly noticeable. For the following analysis of project on-site commercial operations and demolition/construction activity noise level increases at existing sensitive receptors, a noticeable increase in ambient noise levels is assumed to occur where such activities would result in an increase by 5 dB or more over existing ambient noise levels. Satisfaction of the City's noise level criteria at the closest commercial uses would ensure compliance with the City's noise level limits at commercial uses located farther away.

Analyses of each of the identified project noise sources at the future hotel to the west and the existing medical offices to the south are provided below.

Increased Traffic on Nearby Roadways

Operation of the proposed project would generate noise associated with increased traffic on nearby roadways. Pursuant to General Plan Policy SSI-8.5, noise level increases resulting from traffic associated with new projects are considered significant if: a) the noise level increase is 5 dBA day-night average sound level (L_{dn}) or greater, with a future noise level of less than 60 dB L_{dn} ; or b) the noise level increase is 3 dB L_{dn} or greater, with a future noise level of 60 dB L_{dn} or greater.

As part of the ENVA, BAC evaluated existing and cumulative traffic noise levels in the project vicinity using traffic data provided by Hexagon Transportation Consultants, Inc. As shown in Table 8 and Table 10, respectively, of the ENVA, in both Existing Plus Project Conditions and Cumulative Plus Project Conditions, the greatest increase in traffic noise levels in the proximity of a sensitive receptor would be 0.1 dB. Therefore, the proposed project would not result in a traffic noise level increase of 3 dB or greater. In addition, vehicle trips generated by the proposed project are generally included in the estimate of buildout of the General Plan because the proposed project is consistent with the site's Commercial land use designation. Considering the anticipated change in transportation noise on adjacent roadways would not exceed the City's standards set forth in Policy SSI-8.5, traffic noise increases attributable to the project would be less than significant.

Parking Area Noise

As a means of determining potential noise exposure due to project parking lot activities, 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 mean sound exposure level (SEL) at a reference distance of 50 feet. Using the foregoing information, project parking activity noise exposure at the future hotel and existing medical offices was calculated; the results are presented below in Table 7.

Table 7			
Predicted Parking Area Noise Levels at Adjacent Uses			
Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB) ²
Future Hotel	West	Property Line	54
Medical Offices	South	Property Line	45
		Building Façade	33
Notes:			
¹ Noise survey site locations are shown in Figure 4.			
² Number of parking stalls included in analysis: Future Hotel (15) and Existing Medical Offices (25).			
Source: <i>Bollard Acoustical Consultants, Inc. 2023.</i>			

As shown in Table 7, project parking area movements are predicted to satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing uses. In addition, given the predicted noise level at the building facade of the existing medical offices to the south shown in Table 7, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (e.g., 25 dB with windows closed and 15 dB with windows open), project parking area noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest medical office buildings.

According to the ENVA, the parking-generated increase in ambient daytime noise levels would be less than 0.1 dB L_{eq} at the closest medical office buildings to the south. The calculated increase in ambient daytime noise levels indicated above would be well below the applied increase significance criterion of 5 dB. Therefore, impacts related to increased parking area noise generated by the proposed project would be less than significant.

Drive-Through Operations

The proposed project would include two drive-through lanes with two amplified menu speaker posts. In order to quantify the noise emissions of the proposed drive-through speaker usage, BAC utilized noise level measurements from the speaker manufacturer. BAC determined that the proposed speaker posts have the ability to incorporate automatic volume control (AVC), which adjusts outbound volume based on the ambient noise level environment. For example, assuming an outdoor ambient noise level of 45 dB, the speaker would adjust the volume of the system to 45 dB for a resulting overall sound level of 48 dB at a distance of four feet. Without the AVC option, the speaker reference noise level would be 72 dB at four feet. Based on data collected for similar drive-through operations, the ENVA determined that drive-through vehicle passages, including vehicle idling, have median and maximum noise levels of 60 dB L_{eq} at a distance of five feet. Using the foregoing information, data were projected from the proposed drive-through lanes and speaker posts to the future hotel and existing medical offices. The results of such projections, summarized in Table 8, below, include conservative predictions of project drive-through speaker noise levels (i.e., AVC option not enabled).

Table 8				
Predicted Drive-Through Noise Levels at Adjacent Uses				
Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB) ²	
			Speakers ³	Vehicles
Future Hotel	West	Property Line	44	37
Medical Offices	South	Property Line	34	50
		Building Façade	29	26
Notes:				
¹ Noise survey site locations are shown in Figure 4.				
² Combined noise level from two speakers in operation simultaneously (worst-case).				
³ Predicted speaker noise level with AVC option not enabled.				
Source: Bollard Acoustical Consultants, Inc. 2023.				

As indicated in Table 8, above, project drive-through operations noise levels are predicted to satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing uses. It should be noted that activation of the drive-through speaker model's AVC option would further reduce speaker noise level exposure at adjacent uses. In addition, after consideration of the exterior to interior noise level reduction typically provided by standard building construction, project drive-through operations noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing medical office buildings. Furthermore, the ENVA determined that drive-through related increases in ambient daytime noise levels would be less than 0.1 dB L_{eq} at the closest medical office buildings. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB. Therefore, impacts related to noise generated by the proposed drive-through operations would be less than significant.

On-Site Vehicle Circulation Noise

In order to quantify project on-site passenger vehicle circulation noise exposure, BAC utilized specific automobile passby noise level measurements, which indicate that individual passbys generate mean noise levels of approximately 70 dB SEL at a reference distance of 50 feet.

According to the ENVA, the project is estimated to generate up to 101 vehicle trips during an AM peak hour and as many as 201 vehicle trips during a PM peak hour. Based on a conservative 201 vehicle trips per hour, worst-case project on-site passenger vehicle circulation noise exposure at the future hotel and existing medical offices was calculated. The results are summarized below in Table 9. It is noted that the results presented in Table 9 conservatively assume that worst-case busy hour vehicle trip generation would all occur within the on-site drive lane located closest to the nearest adjacent commercial use. However, it is likely that on-site vehicle circulation would be more evenly distributed.

Table 9 Predicted On-Site Vehicle Circulation Noise Levels at Adjacent Uses			
Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB) ²
Future Hotel	West	Property Line	61
Medical Offices	South	Property Line	61
		Building Façade	46
Notes:			
¹ Noise survey site locations are shown in Figure 4.			
² Predicted noise levels are based on 201 vehicle trips during a given worst-case busy hour.			
Source: Bollard Acoustical Consultants, Inc. 2023.			

As indicated in Table 9, predicted worst-case project on-site vehicle circulation noise would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the future hotel and existing medical offices. Furthermore, the ENVA determined that increases in ambient daytime noise levels generated by on-site vehicle circulation would be 0.3 dB L_{eq} at the closest medical office buildings. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB. Therefore, impacts related to noise generated by on-site passenger vehicle circulation would be less than significant.

Outdoor Patio Noise

The proposed project would include a small outdoor patio which would be able to accommodate approximately 25 people at full capacity. In order to quantify outdoor patio area noise levels for the ENVA, BAC used reference file data for persons speaking in normal and raised voices. According the ENVA, a normal voice would be 57 dB per person at three feet and a raised voice would be 64 dB per person at three feet. Given the type of restaurant proposed, the ENVA assumed that patrons would generally occupy the patio area for a duration of approximately 15 to 30 minutes. However, the ENVA analysis conservatively assumed that patrons would occupy the patio area for a minimum of 30 minutes. Based on the foregoing information, and assuming full patio occupancy, outdoor seating area patron noise was projected at the future hotel and existing medical offices; the results of the analysis are present in Table 10, below.

As indicated in Table 10, predicted worst-case patio conversation noise levels would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the future hotel and existing medical offices. Furthermore, the ENVA determined that outdoor patio-related increases in ambient daytime noise levels would be less than 0.1 dB L_{eq} at the closest medical office buildings. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5

dB. Therefore, impacts related to patio conversation noise levels would be less than significant.

Table 10			
Predicted Outdoor Patio Noise Levels at Adjacent Uses			
Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB) ²
Future Hotel	West	Property Line	40
Medical Offices	South	Property Line	40
		Building Façade	32
Notes:			
¹ Noise survey site locations are shown in Figure 4.			
² Predicted noise levels are based on 25 people conversing simultaneously (20 normal speaking voices and five raised voices).			
Source: <i>Bollard Acoustical Consultants, Inc. 2023.</i>			

Truck Delivery Noise

Deliveries of product to the proposed restaurant would likely occur at the front of the building with medium-duty trucks/vans. However, while preparing the ENVA, BAC conservatively assumed that the project would receive deliveries from heavy trucks. The primary noise sources associated with delivery activities are trucks stopping (air brakes), trucks backing into position (back-up alarms), and trucks pulling away from the unloading area (revving engines). The ENVA states that noise levels associated with truck deliveries are approximately 76 dB SEL at a distance of 100 feet. In order to calculate hourly average noise level exposure from truck deliveries, the ENVA assumes that the project would conservatively have one heavy truck and one medium duty truck delivery during the same worst-case busy hour. Based on the foregoing information, worst-case project truck delivery noise exposure at the future hotel and existing medical offices was calculated; the results of the analysis are present in Table 11, below.

Table 11			
Predicted Truck Delivery Noise Levels at Adjacent Uses			
Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB) ²
Future Hotel	West	Property Line	43
Medical Offices	South	Property Line	43
		Building Façade	33
Notes:			
¹ Noise survey site locations are shown in Figure 4.			
² Predicted noise levels are based on one heavy truck and one medium truck delivery within the same hour.			
Source: Bollard Acoustical Consultants, Inc. 2023.			

As indicated in Table 11, predicted truck delivery noise levels would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the future hotel and existing medical offices. Furthermore, the ENVA determined that truck delivery-related increases in ambient daytime noise levels would be less than 0.1 dB L_{eq} at the closest medical office buildings. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB. Therefore, impacts related to truck delivery noise levels would be less than significant.

On-Site Truck Circulation Noise

As discussed above, although deliveries of product to the proposed restaurant would likely occur at the front of the building with medium-duty trucks/vans, while preparing the ENVA, BAC conservatively assumed that the project would receive deliveries from heavy trucks. On-site truck passbys are expected to be relatively brief and would occur at low speeds. The ENVA determined that single-event heavy and medium truck passby noise levels are approximately 83 and 76 dB SEL, respectively, at a reference distance of 50 feet. In order to calculate hourly average noise level exposure from truck circulation, the ENVA assumes that the project would conservatively have one heavy-duty truck and one medium-duty truck delivery during the same worst-case busy hour. Based on the foregoing information, worst-case project on-site truck circulation noise exposure at the future hotel and existing medical offices was calculated; the results of the analysis are presented in Table 12, below.

Table 12 Predicted On-Site Truck Circulation Noise Levels at Adjacent Uses			
Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB) ²
Future Hotel	West	Property Line	53
Medical Offices	South	Property Line	53
		Building Façade	33
Notes: ¹ Noise survey site locations are shown in Figure 4. ² Predicted noise levels are based on one heavy truck and one medium truck delivery within the same hour.			
Source: <i>Bollard Acoustical Consultants, Inc. 2023.</i>			

As indicated in Table 12, predicted on-site truck circulation noise levels would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the future hotel and existing medical offices. Furthermore, the ENVA determined that on-site truck circulation-related increases in ambient daytime noise levels would be less than 0.1 dB L_{eq} at the closest medical office buildings. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB. Therefore, impacts related to on-site truck circulation noise levels would be less than significant.

Mechanical Equipment Noise

In preparing the ENVA, BAC determined that HVAC requirements for the proposed project would most likely be met using packaged roof-mounted systems. BAC reference file data for HVAC systems indicate that a 12.5-ton packaged unit would be expected to generate an A-weighted sound power level of 85 dB. Using the foregoing information, project HVAC equipment noise exposure at the future hotel and existing medical offices was calculated; the results of the analysis are presented in Table 13, below.

As indicated in Table 13, predicted HVAC equipment noise levels associated with the proposed project would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the future hotel and existing medical offices. Furthermore, the ENVA determined that project HVAC equipment-related increases in ambient daytime noise levels would be less than 0.1 dB L_{eq} at the closest medical office buildings. The

calculated 0.1 dB L_{eq} increase in ambient daytime noise levels is well below the applied increase significance criterion of 5 dB. Therefore, impacts related to project HVAC equipment noise levels would be less than significant.

Table 13			
Predicted HVAC Equipment Noise Levels at Adjacent Uses			
Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB)
Future Hotel	West	Property Line	45
Medical Offices	South	Property Line	41
		Building Façade	33
Notes:			
¹ Noise survey site locations are shown in Figure 4.			
Source: Bollard Acoustical Consultants, Inc. 2023.			

Combined On-Site Operational Noise

The calculated combined noise levels from all foregoing analyzed on-site operations at the adjacent future hotel and existing medical offices are presented in Table 14, below. It should be noted that due to the logarithmic nature of the decibel scale, the sum of two noise values which differ by 10 dB equates to an overall increase in noise levels of 0.4 dB. When the noise sources are equivalent, the sum would result in an overall increase in noise levels of 3 dB.

As indicated in Table 14, calculated combined noise level exposure from project operations would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the future hotel and existing medical offices. Furthermore, the ENVA determined that combined project-related increases in ambient daytime noise levels would be 0.3 dB L_{eq} at the closest medical office buildings. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB. Therefore, impacts related to combined noise level exposure from project operations would be less than significant.

Conclusion

Based on the above, implementation of the proposed project would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the City's General Plan and the Municipal Code. Therefore, **no impact** would occur.

- b. Similar to noise, vibration involves a source, a transmission path, and a receiver. However, noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency.

A person's perception to the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating. Vibration is measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of the velocity in decibels in root-mean-square (VdB, RMS).

Table 14
Combined On-Site Noise Levels at Adjacent Uses

Receiver ¹	Direction	Parking	Drive-Through ²		On-Site Vehicle Circulation ²	Outdoor Patio ²	On-Site Truck Circulation ²	Truck Deliveries ²	HVAC ²	Combined Leq (dB) ³
			Speakers	Vehicles						
Future Hotel	West	54	44	37	61	40	53	43	45	62
Medical Offices	South	45	34	50	61	40	53	43	41	62
		33	29	26	46	32	33	33	33	47

Notes:

¹ Noise survey site locations are shown in Figure 4.

² Predicted exterior noise levels, Leq (dB).

³ Calculated combined noise levels are based on the predicted noise levels presented in the analysis above.

Source: **Bollard Acoustical Consultants, Inc. 2023.**

During project demolition and construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of construction. According to the ENVA, the nearest existing structures to the project site have been identified as relatively newer engineered commercial buildings, and, thus, are not highly susceptible to damage by vibration.

Table 15 shows the typical vibration levels produced by construction equipment at 25 feet, as well as projected equipment vibration levels at the future hotel and existing medical offices.

Table 15 Vibration Levels for Various Construction Equipment			
Type of Equipment	Maximum Vibration at 25 feet, VdB (rms)	Medical Offices	Future Hotel
Vibratory Roller	94	60	73
Hoe Ram	87	<55	63
Large bulldozer	87	<55	63
Caisson drilling	87	<55	63
Loaded trucks	86	<55	62
Jackhammer	79	<55	58
Small bulldozer	58	<55	<55
Source: 2018 Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual and BAC calculations.			

Based on the data presented in Table 15, vibration levels generated from on-site demolition/construction activities are predicted to be below the applicable threshold for damage to engineered structures. Demolition/construction-related vibration levels at the nearest medical office buildings are predicted to be below the 65 VdB threshold of human perception. Although the existing medical buildings to the south of the project may contain equipment sensitive to vibration, the ENVA determined that predicted demolition/construction-related vibration levels at the closest medical building would be below the applicable threshold for buildings where vibration would interfere with interior operations/equipment.

It should be noted that an analysis of project-generated vibration levels was also conducted at the future off-site hotel building located west of the site in the event the structure is completed and operational before project construction activities commence. As indicated in Table 15, construction-related vibration levels are predicted to be below levels considered to be annoying (75 VdB) at the future hotel building. Therefore, on-site construction within the project area is not expected to result in excessive groundborne vibration levels at nearby off-site structures.

Based on the above, the proposed project would not expose people to or generate excessive groundborne vibration or groundborne noise levels, and **no impact** would occur.

- c. The public airport nearest to the project site is the San Martin Airport, which is located approximately 5.5 miles southeast of the project site at 13030 Murphy Avenue. The project site is located well outside of the Airport Influence Area identified in the South County

Airport Comprehensive Land Use Plan.⁴¹ In addition, the project site is not located within the vicinity of a private airstrip. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with air traffic, and ***no impact*** would occur.

⁴¹ Santa Clara County. *Comprehensive Land Use Plan, Santa Clara County, South County Airport*. Amended November 16, 2016.

XIV. POPULATION AND HOUSING.

Would the project:

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	☐	☐	☐	✗
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	✗

Discussion

- a. The project site does not contain any existing residential development, nor would the proposed project result in the addition of residential development to the site. As such, buildout of the proposed project would not induce population growth. The primary consideration regarding increased growth is not the growth itself, but the effects of such growth on the City's infrastructure systems, with the key inquiry being whether the systems would become overburdened as a result of the additional demand created by the project. As discussed in Section XIX, Utilities and Service Systems, of this Initial Study, adequate utility infrastructure would be available to support the proposed project. Thus, the proposed project would not induce substantial unplanned population growth in an area, either directly or indirectly, and **no impact** would occur.
- b. The proposed project would not require the demolition of any existing residential units. As such, the proposed project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere, and **no impact** would occur.

XV. PUBLIC SERVICES.

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

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Fire protection?	☐	☐	☐	✗
b. Police protection?	☐	☐	☐	✗
c. Schools?	☐	☐	☐	✗
d. Parks?	☐	☐	☐	✗
e. Other Public Facilities?	☐	☐	☐	✗

Discussion

a-e. The City of Morgan Hill contracts with California Department of Forestry and Fire Protection (CAL FIRE) for fire protection services. The nearest fire station to the project site (El Toro Station) is located approximately 1.6 miles to the southwest. Although the City has not adopted response time standards or goals related to fire suppression, CAL FIRE is held to a seven minute, 59 second response time standard based on the 911 Emergency Medical Services Provider Agreement between the City of Morgan Hill and the County of Santa Clara Emergency Medical Services Agency.⁴² The incremental increase in demand for fire protection associated with the proposed project would not necessitate new or physically altered fire protection facilities and would not be substantial enough such that the current response times could not be maintained. In addition, the proposed building would include a fire sprinkler system which would decrease the likelihood of fire-related incidents to occur at the site.

The project site is also located in close proximity to the Morgan Hill Police Department, which is located at 16200 Vineyard Boulevard, approximately 3.5 miles south of the site. Thus, police response times would be comparable to nearby existing developments.

With respect to schools and recreational facilities, given that the project would be a commercial use, the proposed project would not increase the demand for public schools, parks, or libraries in the area.

Because the project is an allowable use under the site's General Plan land use designation, buildout of the site has been evaluated in the City's General Plan EIR and assumed in City planning efforts. Thus, the associated increase in demand for public services has already been anticipated and planned for by the City. Furthermore, the proposed project would be subject to payment of development impact fees, which are used to help pay for infrastructure, including fire facilities, police facilities, and other public facilities needed to support new development within the City.

Based on the above, the proposed project would have **no impact** with respect to creating adverse physical environmental impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for fire protection, police protection, schools, and other public facilities.

⁴² Dwight Good, Assistant Chief Cooperative Fire Protection, Morgan Hill Fire Department. Personal communication [phone] with Nick Pappani, Vice President, Raney Planning and Management, Inc. June 1, 2021.

XVI. RECREATION.

Would the project:

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

Discussion

- a,b. The proposed project would include the development of a drive-through restaurant. The proposed project would not result in population growth that could result in increased use of existing recreational facilities, nor would the proposed project include or require construction or expansion of recreational facilities. Thus, **no impact** would occur related to recreational resources.

XVII. TRANSPORTATION.

Would the project:

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

Discussion

- a. The law has changed with respect to how transportation-related impacts may be addressed under CEQA. Traditionally, lead agencies used LOS to assess the significance of such impacts, with greater levels of congestion considered to be more significant than lesser levels. Enacted as part of Senate Bill 743 (2013), PRC Section 21099, subdivision (b)(1), directed the OPR to prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed CEQA Guidelines addressing “criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.”

Pursuant to SB 743, the Natural Resources Agency promulgated CEQA Guidelines Section 15064.3 in late 2018. It became effective in early 2019. Subdivision (a) of that section provides that “[g]enerally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, ‘vehicle miles traveled’ refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project’s effect on automobile delay shall not constitute a significant environmental impact.”

Please refer to Question ‘b’ for a discussion of VMT.

Transit, Bicycle, and Pedestrian Facilities

Bus service in the City of Morgan Hill is provided by the Santa Clara VTA, which operates local bus service with regional connections to destinations north and south of Morgan Hill. The nearest bus stop to the project site is located less than 200 feet north of the project site at the intersection of Cochrane Road and Sutter Boulevard. Because the proposed project would only slightly increase transit riders, the demands of the proposed project could be accommodated by the existing transit facilities. Therefore, the proposed project would not conflict with a program, plan, ordinance, or policy related to the City’s transit facilities.

In the project vicinity, bike lanes are located along both sides of Cochrane Road and Sutter Boulevard. Due to the nature of the proposed project, the project is not expected to generate a significant amount of bicycle trips. Therefore, the demand generated by the proposed project could be accommodated by the existing bicycle facilities in the vicinity of the project site. Thus, the proposed project would not conflict with a program, plan, ordinance, or policy related to the City’s bicycle facilities.

Currently, sidewalks are located along each side of both Cochrane Road and Sutter Boulevard. Sidewalks along roadways within the in-construction Evergreen Village are currently missing, but will be constructed concurrently with the Village. Crosswalks with protected crossing phases are provided along all four legs of the intersection of Cochrane Road and Sutter Boulevard, and another crosswalk is provided at the intersection of Sutter Boulevard and Jarvis Drive, south of the project site.

As part of the proposed project, the existing sidewalks along the Cochrane Road and Sutter Boulevard project frontages would be reconstructed. New ADA-compliant curb ramps would be installed at the southwest corner of the intersection of Cochrane Road and Sutter Boulevard, at the northwest corner of the intersection of Sutter Boulevard and Cochrane Plaza, as well as along the proposed project driveways and at on-site pedestrian crossings across drive-through lanes. In addition, a new sidewalk would be constructed along the easement drive to the south of the project site, providing a continuous pedestrian route between Sutter Boulevard and the future Evergreen Village.

Overall, the existing and proposed pedestrian infrastructure would provide adequate connection and circulation in the project vicinity. Therefore, the proposed project would not conflict with existing transit, bicycle, or pedestrian facilities.

Conclusion

Based on the above, **no impact** would occur related to conflicting with a program, plan, ordinance, or policy addressing the circulation system, including transit, bicycle, and pedestrian facilities.

- b. Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Pursuant to Section 15064.3, analysis of VMT attributable to a project is the most appropriate measure of transportation impacts, with other relevant considerations consisting of the effects of the project on transit and non-motorized travel. VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT measures the full distance of personal motorized vehicle-trips, with one end within the project site. Typically, development projects that are farther from other, complementary land uses (such as a business park far from housing) and in areas without transit or active transportation infrastructure (bike lanes, sidewalks, etc.) generate more driving than development near complementary land uses with more robust transportation options. Therefore, development projects located in a central business district with high density and diversity of complementary land uses and frequent transit services are expected to internalize trips and generate shorter and fewer vehicle trips than developments located in a suburban area with low density of residential developments and no transit service in the project vicinity.

To adhere to the state's legislation, the City is currently developing the framework for new transportation policies based on the implementation of VMT as the primary measure of transportation impacts for CEQA purposes. The new policies will replace the City's current transportation policies that are based on LOS. However, as the City has not formally adopted City-specific VMT policies, the VMT assessment for the proposed project incorporated methodology and impact thresholds recommended in the OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory)*. A VMT Assessment was prepared for the proposed project by Hexagon Transportation

Consultants, Inc. in order to assess VMT-related impacts of the proposed project (see Appendix D).⁴³

The OPR provides screening threshold recommendations that are intended to identify when a project can be determined to cause a less-than-significant impact without conducting a detailed VMT evaluation. The OPR screening threshold recommendations are based on project size, maps, transit availability, and provision of affordable housing. One such recommendation is that local-serving retail developments (considered to be less than 50,000 sf in size) may be assumed to cause a less-than-significant impact on VMT. However, the guidelines for the evaluation of VMT for development projects is limited to general land use categories such as residential, office, industrial, and retail. Therefore, the assessment of VMT for the proposed fast-food restaurant required a conversion to an equivalent amount of one of the general land uses that has similar trip generating and trip origin/destination characteristics. The number and origination/destination of daily trips and resulting VMT generated by the proposed fast-food restaurant available within the City would be similar to that of local-serving retail since there is not another Chick-fil-A restaurant located within the City. As such, the proposed project would provide service to City residents that does not exist today. Therefore, the proposed fast-food restaurant was converted to an equivalent amount of local-serving retail space based on a comparison of estimated daily trips using Institute of Transportation Engineers (ITE) trip rates for the proposed fast-food restaurant and typical retail uses.

The VMT Assessment estimated site-generated vehicular traffic for the proposed project by using trip generation rates that were determined based on vehicular counts at three existing Chick-fil-A restaurants with two drive-through lanes and with comparable square footage as the proposed project. Daily trip generation was estimated based on the surveyed peak-hour trips and the ratio of peak-hour trips to daily trips for a fast-food restaurant with drive-through window (Land Use 934) published in the ITE *Trip Generation Manual, 11th Edition*. The results of each survey were used to calculate average trip rates. Using these average rates, the proposed project is estimated to produce 1,822 daily vehicle trips prior to any trip reductions.

Fast-food restaurants with drive-through windows attract a substantial number of pass-by trips, which are trips made by drivers who already pass by the project site on an adjacent street en-route to another destination, such as a trip from work to home. In contrast, primary (non-pass-by) trips are new trips made for the sole purpose of visiting the project site. Thus, pass-by trips are not considered new trips that are generated by the project site. However, the attraction of pass-by trips does result in a reassignment of existing traffic passing-by the project site on adjacent streets at site driveways and intersections immediately adjacent to the project site. Surveys of fast-food restaurants with a drive-through window at various sites around the country exhibited an average pass-by rate of 50 percent during the PM peak hour. Therefore, a 55 percent reduction was assumed for the estimated daily trips. After subtracting pass-by trips, the project is expected to generate 911 primary vehicle trips per day.

The proposed project consists of a 5,028-sf drive-through restaurant. Because the OPR screening criteria are not directly applicable to such uses, the VMT Assessment converted the proposed project to an equivalent amount of retail/commercial use. The results of the

⁴³ Hexagon Transportation Consultants, Inc. *VMT Assessment for the Proposed 18599 Sutter Boulevard Chick-Fil-A in Morgan Hill, California*. April 24, 2023.

conversion of the proposed fast-food restaurant to an equivalent amount of retail/commercial space, indicate that the proposed fast-food restaurant would generate net new daily trips equivalent to that of an approximately 22,500-sf retail development. If pass-by reduction is not applied, the proposed project would generate daily trips equivalent to that of an approximately 49,500-sf retail development.

Because the proposed project's converted retail size, with or without pass-by reductions, would be less than 50,000 sf, the proposed project may be presumed to be a local-serving facility and would therefore have a less-than-significant impact on VMT. The OPR guidelines suggest that by adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. Chick-fil-A, in particular, does not have a significant presence in the Southern Santa Clara Valley region, with restaurants in South San Jose and Salinas being the closest to Morgan Hill. The proposed new Morgan Hill location would provide a proximate location for City residents to a Chick-fil-A restaurant, thus resulting in shorter trips and subsequent reduction in VMT generated by Morgan Hill residents for the purpose of visiting a Chick-fil-A location. Moreover, the trip generation estimates assume a significant number of trips will be pass-by trips, which are based on pass-by rates derived from the ITE *Trip Generation Manual, 11th Edition*. As discussed above, pass-by trips are not considered new trips and merely result in a reassignment of existing through traffic (i.e., along Cochrane Road and Sutter Boulevard) at site driveways and intersections immediately adjacent to the project site. Such pass-by trips are already accounted for in the baseline VMT and are not new VMT generated by the proposed project. Therefore, the proposed project can be presumed to be a local-serving facility and, as such, would not have a significant impact related to VMT.

Based on the above, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and **no impact** would occur.

- c,d. As part of the Trip Generation and Operations Analysis prepared for the proposed project, Hexagon Transportation Consultants, Inc. evaluated site access and geometric design.⁴⁴ Primary vehicular access to the project site would be provided by an existing full-access driveway in the southern corner of the project site which connects to Sutter Boulevard. The driveway along Sutter Boulevard currently serves the project site and an existing commercial/office use located southeast of the project site by way of a shared easement drive aisle. It is noted that the shared easement drive aisle also provides vehicular access to the future Evergreen Village Project west of the site. A secondary ingress-only access point is proposed along Cochrane Road. An existing landscaped median along Cochrane Road would prohibit inbound and outbound left-turns to and from the project driveway.

The City's Design Standards specify a minimum driveway width of 16 feet and a maximum driveway width of 36 feet for commercial uses. The ingress-only Cochrane Road project driveway would be 22 feet wide, and, thus, would meet City standards. The proposed 35-foot wide two-way access point along the southern project frontage would fall within the acceptable range of standard driveway widths. However, the access point is along a shared easement and is not subject to the City's standard driveway requirements.

⁴⁴ Hexagon Transportation Consultants, Inc. *Subject: Trip Generation and Operations Analysis for the Proposed 18599 Sutter Boulevard Chick-Fil-A in Morgan Hill, California*. June 23, 2023.

Implementation of the proposed project would not result in any modifications to the City's existing roadway system, and would provide adequate access to the site for emergency vehicles. Emergency vehicles would use the primary access driveway to enter the site, and could pull into the parking areas located on-site.

The proposed drive-through lanes would be compliant with the City's standard requirements for drive-through facilities, as established in Chapter 18.92.040 of the City's Code of Ordinances. The proposed drive-through would be comprised of two lanes, with each lane having its own ordering point. During non-peak periods, customers would merge into a single lane as they proceed past the ordering canopy towards the pick-up window. During peak demand periods, customers would remain in two-lane configuration as staff members are deployed to deliver food to customers in the outside lane. When needed, the outside lane would also be used as a by-pass lane to prioritize customers with smaller orders through the drive-through sequence. Each lane would be 10 feet wide and would have their own entrance and exit points. The lanes would be separated by pavement markings and removable bollards. Each lane would have a maximum capacity of approximately 24 vehicles per lane, assuming 20 feet per car and full utilization of each lane.

As part of the Trip Generation and Operations Analysis prepared for the proposed project, Hexagon Transportation Consultants, Inc. observed vehicle queues at three existing Chick-fil-A restaurants with two drive-through lanes during the weekday AM and PM peak-hours, as well as the Saturday lunchtime period, to confirm that the proposed drive-through storage would be sufficient to meet demand. The maximum queue observed during weekdays was a total of 29 vehicles across two drive-through lanes during the PM peak-hour, while the maximum queue observed during the Saturday lunchtime period was 38 vehicles. As such, the proposed drive-through, which would have a total capacity for up to 48 vehicles, is anticipated to have adequate capacity to accommodate expected queues during peak hours.

Based on the observed drive-through queues, vehicle queues are unlikely to exceed the planned drive-through capacity, and are not expected to spill over into Sutter Boulevard or Cochrane Road. However, as a Condition of Approval, the proposed project would be required to prepare a Drive-Through Queue Management Plan that can be implemented during abnormally high demand periods to ensure that circulation within the on-site parking lot and on adjacent drive aisles would not be negatively affected by drive-through operations. The Drive-Through Queue Management Plan could include, but would not be limited to, measures used at other Chick-fil-A locations, including:

- Having staff members monitor the drive-through queues and direct traffic as necessary if queues extend beyond the drive-through lanes;
- Implementing face-to-face ordering through an iPad ordering system during peak periods; or
- Using the secondary drive-through lane as a by-pass lane to expedite service for customers with smaller orders.

Implementation of the foregoing Drive-Through Queue Management Plan would ensure that operations of the proposed drive-through would not result in an adverse impact.

Based on the above, the proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), and would not result in inadequate emergency access. Therefore, ***no impact*** would occur.

XVIII. TRIBAL CULTURAL RESOURCES.

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

	Potentially Significant Impact	Less-Than- Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).	☐	☐	☐	✗
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	✗

Discussion

- a,b. As discussed in Section V, Cultural Resources, of this Initial Study, the existing on-site structure does not meet the criteria to be eligible for listing in the California Register of Historical Resources, or a local register of historical resources as defined in PRC Section 5020.1(k), and the site does not contain known resources that could be considered historic pursuant to the criteria set forth in subdivision (c) of PRC Section 5024.1. Furthermore, due to the highly disturbed and previously developed nature of the project site, tribal cultural resources are unlikely to occur on-site. However, compliance with Section 18.60.090 of the City's Municipal Code would ensure that the proper measures are taken should tribal cultural resources be discovered within the project site.

Given compliance with the City's standard conditions of approval related to cultural resource discovery, **no impact** to tribal cultural resources would occur.

XIX. UTILITIES AND SERVICE SYSTEMS.

Would the project:

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

Discussion

- a-c. Brief discussions of the water, wastewater, stormwater drainage, electrical, and telecommunications facilities that would serve the proposed project are included below.

Water

The City of Morgan Hill provides potable water service to its residential, commercial, industrial, and institutional customers within the City limits. The City's water system facilities include 17 groundwater wells, 10 reservoir sites, nine pumping stations, and 165 miles of pressured pipes ranging from two to 14 inches in diameter. The City has planned and constructed water projects in conjunction with new street construction in anticipation of future growth and water needs.

According to the City's Urban Water Management Plan (UWMP), the City's projected water supply far exceeds the water demand for normal, single-dry, and multiple-dry years until at least 2045.⁴⁵ For example, Table 7-2 of the UWMP indicates that, under a 2045 multiple-dry year scenario, Morgan Hill would have a 22,810 acre-feet water surplus by the third dry year. According to the City's UWMP, in 2020 domestic water use totaled approximately 7,808 acre-feet (AF), only 730 AF of which was supplied to commercial, institutional, and industrial uses within the City. As such, commercial uses represent a small fraction of the overall water demand. In addition, the proposed project is generally consistent with the project site's General Plan land use and zoning designation; thus, the increase in water demand associated with the proposed project has been anticipated in the City's UWMP projections. Furthermore, the water demand of the proposed project would be similar to the demand of the restaurant that formerly occupied the project site,

⁴⁵ City of Morgan Hill. 2020 Urban Water Management Plan [pg. 7-4 to 7-7]. October 2021.

and the proposed project would connect to the existing water supply infrastructure in the project vicinity.

The increase in water demand associated with implementation of the proposed project could be accommodated by the City's existing water supplies, even after three consecutive dry years in the year 2045, as identified in the UWMP. Therefore, the proposed project would not require or result in the construction of new water treatment facilities or expansion of existing facilities, and sufficient water supplies would be available to serve the project from existing entitlements and resources.

Wastewater

The City of Morgan Hill sewer collection system consists of approximately 160 miles of gravity sewers, over 3,000 manholes, nearly three miles of force mains, and 14 lift stations. The sewer lines range in size from four inches to 30 inches in diameter and the piping system includes 26 siphons. The City's collection system directs wastewater to the South County Regional Wastewater Authority (SCRWA) Wastewater Treatment Facility (WWTF) located in southern Gilroy. SCRWA is a joint powers authority formed by the cities of Morgan Hill and Gilroy to collectively treat the wastewater of both cities.⁴⁶ The City of Morgan Hill has an allocation of 3.56 million gallons per day (MGD) from the WWTF. The average dry weather flow from the City of Morgan Hill was approximately 2.7 MGD in 2015.⁴⁷

As discussed above, because the proposed project would be generally consistent with the General Plan land use and zoning designation for the project site, the wastewater demands of the project site were anticipated in the General Plan EIR. In addition, the wastewater demand of the proposed project would be similar to the demand of the restaurant that formerly occupied the project site, and the proposed project would connect to the existing wastewater infrastructure in the project vicinity.

In addition, because the General Plan EIR determined that the WWTF would be required to be expanded in order to accommodate buildout of the General Plan, the SCRWA is planning to fund, design, and construct expansion of the WWTF beyond its current wastewater treatment capacity of 8.5 MGD. The General Plan EIR determined that, after expansion of the treatment plant, wastewater generated by General Plan buildout, including the project site, would not exceed the expanded permitted treatment capacity of the SCRWA WWTF facility.

Based on the above, the incremental increase in wastewater generation associated with the development of the proposed project would not require the construction of new or expansion of existing wastewater treatment facilities, as capacity is already sufficient to serve the proposed project.

Stormwater

Issues related to stormwater infrastructure are discussed in Section X, Hydrology and Water Quality, of this Initial Study. As noted therein, the proposed project would not significantly increase stormwater flows into the City's existing system. The final drainage system design for the project will be subject to review and approval by the City Engineer

⁴⁶ City of Morgan Hill. *City Council Staff Report 2163, Accept Report Regarding Wastewater System Needs and Rate Study Schedule*. February 6, 2019.

⁴⁷ City of Morgan Hill. *2035 General Plan Draft Environmental Impact Report*. January 2016.

to confirm that the proposed drainage system for the project is consistent with the City's Storm Drainage Master Plan and standard stormwater-related conditions of approval. Therefore, the proposed project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Electricity, Natural Gas, and Telecommunications

Electricity service for the proposed project would be Pacific Gas & Electric. The proposed project would not use natural gas, as natural gas is prohibited in all new construction effective March 1, 2020, pursuant to City Ordinance No. 2306. The proposed project would be able to connect to the electricity infrastructure that already serves the site. Therefore, the project would not require major upgrades to, or extension of, existing infrastructure.

Conclusion

Based on the above, the increase in water demand, wastewater generation, and stormwater drainage associated with the proposed project could be adequately accommodated by existing facilities. In addition, the project is located within an urbanized area and would not require major expansion or extension of existing water, wastewater, electrical, or telecommunications facilities in the project area.

Therefore, the proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater, electric power, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Sufficient water supplies would be available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Furthermore, adequate wastewater capacity would be available to serve the project's projected demand. Thus, **no impact** would occur.

- d,e. Recology South Valley provides solid waste and recycling services to the businesses and residents of the cities of Morgan Hill and Gilroy. Recology South Valley has contracted with the Monterey Regional Waste Management District to provide solid waste disposal services at the Monterey Peninsula Landfill and Materials Recovery Facility for the waste collected by Recology.⁴⁸ Pursuant to the Landfill's current Solid Waste Facility Permit, the Landfill has a maximum permitted tonnage limit of 3,500 tons per day and a design capacity of 49,700,000 cubic yards.⁴⁹ Considering the relatively small scale of the proposed project, and because the project is consistent with the type of development that has been planned for the project site, the proposed project would not produce enough solid waste for the landfill to exceed capacity. As such, sufficient permitted capacity exists at the Monterey Peninsula Landfill and Materials Recovery Facility to accommodate the proposed project's incremental increase in solid waste disposal needs. Furthermore, the proposed project would comply with applicable federal, State, and local statutes and regulations related to solid waste. For example, during project demolition and construction, as required by CBSC Section 4.408, the proposed project would be required to submit a Waste Management Plan to the City detailing on-site sorting of demolition and construction debris. Implementation of the Waste Management Plan would ensure that

⁴⁸ Andi Borowski, Environmental Services Assistant, Morgan Hill Environmental Services Department. Personal communication [email] with Jesse Fahrney, Associate, Raney Planning and Management, Inc. July 26, 2022.

⁴⁹ California Department of Resources Recycling and Recovery (CalRecycle). *Facility/Site Summary Details: Monterey Peninsula Landfill (27-AA-0010)*. Available at: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2642?siteID=1976>. Accessed April 2023.

the proposed project meets established diversion requirements for reused or recycled construction waste.

Based on the above, the proposed project would have ***no impact*** related to solid waste.

XX. WILDFIRE.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	✗
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	✗
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	✗
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	✗

Discussion

- a-d. The City's Wildland Urban Interface map indicates that the project site is not located in a High or Very High FHSZ.⁵⁰ Furthermore, CAL FIRE's Fire and Resource Assessment program indicates that the project site is not located in a High or Very High FHSZ.⁵¹ The nearest Very High FHSZ is located approximately 0.75-mile to the west. The proposed project would be required to comply with all applicable requirements of the California Fire Code (CFC), as adopted by Chapter 15.44 of the City's Municipal Code, including installation of fire sprinkler systems. In addition, the CBSC includes requirements related to fire hazards for new buildings. In compliance with the CBSC (specifically Section 903.2.11.5), an automatic sprinkler system shall be installed in commercial kitchen exhaust hood and duct systems. Such features would help to reduce the spread of fire.

As noted in Section IX, implementation of the proposed project would not interfere with potential evacuation or response routes used by emergency response teams. The project would not conflict with the City's Emergency Operations Plan.⁵² In addition, the proposed project would not include any development on, or at the base of, a substantial slope. Thus, implementation of the proposed project would not exacerbate any existing conditions or hazards related to downslope flooding or landslides, slope instability, or drainage changes. Therefore, the project area does not include any existing features that would substantially increase fire risk for future residents.

Given that the project site is located within a developed urban area and is situated adjacent to existing roads, water lines, and other utilities, the proposed project would not require the development of additional infrastructure, and, thus, would not result in substantial fire risks related to installation or maintenance of such infrastructure. Therefore, the proposed project would not be subject to substantial risks related to wildfires, and **no impact** would occur.

⁵⁰ City of Morgan Hill. *City of Morgan Hill Wildland Urban Interface Map*. March 2009.

⁵¹ California Department of Forestry and Fire Protection. *Morgan Hill, Very High Fire Hazard Severity Zones in LRA*. Available at: https://osfm.fire.ca.gov/media/5934/morgan_hill.pdf. Accessed April 2023.

⁵² City of Morgan Hill. *Emergency Operations Plan*. January 11, 2018.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.

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

Discussion

- a. As discussed in Section IV, Biological Resources, of this Initial Study, the proposed project would not result in any significant impacts to rare, threatened or endangered species. In addition, the site does not contain known historical or cultural resources. Although unlikely, the possibility exists that grading and other construction activities associated with the site could unearth deposits of cultural significance. However, this Initial Study explains how the City's Municipal Code requires standard measures for development projects that would ensure no impacts to such resources would occur. Therefore, the proposed project would result in **no impact** related to degradation of the quality of the environment, substantial reduction of habitat or plant and wildlife species, and elimination of important examples of the major periods of California history or prehistory.
- b. As demonstrated in this Initial Study, the proposed project would not result in any significant environmental impacts, through compliance with applicable General Plan policies and Municipal Code standards, as well as other applicable local and State regulations. For this reason, as well as due to the project's relatively small increase in traffic, noise, air pollutant emissions, and demand for utilities and service systems, the project's incremental contribution towards cumulative impacts in the area would not be cumulatively considerable. Therefore, when viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of the proposed project would not substantially contribute to cumulative impacts in the City of Morgan Hill, and **no impact** would occur.
- c. The project site would be developed in a generally urbanized and built-up area of the City of Morgan Hill. As discussed throughout this Initial Study, development of the proposed project would not result in substantial adverse impacts to human beings, either directly or indirectly. Specifically, as discussed in Section III, Air Quality, Section VIII, GHG Emissions, Section IX, Hazards and Hazardous Materials, Section XIII, Noise, and Section XVII, Transportation, of this Initial Study, the proposed project would not cause substantial adverse effects to human beings, including effects related to exposure to air pollutants, GHG, hazardous materials, noise, and traffic. As such, **no impact** would result.

Appendix A

Trip Generation and Operations Analysis



Memorandum

Date: June 23, 2023
To: Nick Pappani, Raney Planning & Management
From: Robert Del Rio, T.E., Luis Descanzo
Subject: Trip Generation and Operations Analysis for the Proposed 18599 Sutter Boulevard Chick-Fil-A in Morgan Hill, California

Hexagon Transportation Consultants, Inc. has completed a trip generation and operations analysis for the proposed Chick-Fil-A restaurant located at 18599 Sutter Boulevard (APN 726-32-002) in Morgan Hill, California (see Figure 1). The site is currently occupied by a vacant restaurant. As proposed, the project would consist of a 5,028 s.f. Chick-Fil-A restaurant with two drive-through lanes. Vehicular access would be provided via an existing full-access driveway along Sutter Boulevard and a proposed right-in-only access driveway along Cochrane Road.

The methodology, results, and recommendations of the analysis are discussed below.

Scope of Study

The current General Plan, *Morgan Hill 2035 General Plan*, adopted in July 2016 uses Level of Service (LOS) as its primary metric for the evaluation of the projected operation of the City's roadway system. Therefore, this traffic operations analysis which includes a peak hour intersection level of service analysis is included for consistency with the General Plan goals and policies. The traffic operations analysis supplements the California Environmental Quality Act (CEQA) required VMT analysis provided in a separate memorandum. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis.

The purposes of the trip generation and operations analysis is to evaluate the magnitude of traffic that would be added to the roadway system due to the proposed project and to determine whether a comprehensive traffic study is required for the proposed project. The analysis consists of an estimation of project trip generation and evaluation peak-hour intersection level of service analysis at intersections in the immediate vicinity of the project site. A review of the project's site access per the proposed site plan also is included. Traffic conditions were evaluated for the scenarios listed below.

Existing Conditions. Existing conditions represent the existing peak-hour traffic volumes on the existing roadway network. Existing traffic volumes at the study intersections (except for three intersections) were derived from traffic counts collected in May 2018, to which a 1.5% annual growth factor was applied to represent existing conditions in 2023. New turning movement counts were conducted at three study intersections (Sutter Boulevard/Cochrane Road, Woodview Avenue/Cochrane Road, Sutter Boulevard/Cochrane Plaza) in March 2023, to account for traffic generated by newly-built commercial uses within the Evergreen Village development. The new counts also account for changes to the roadway network since 2018 as a result of access improvements to Evergreen Village, such as signalization of the Woodview Avenue/Cochrane Road

Figure 1
Site Location

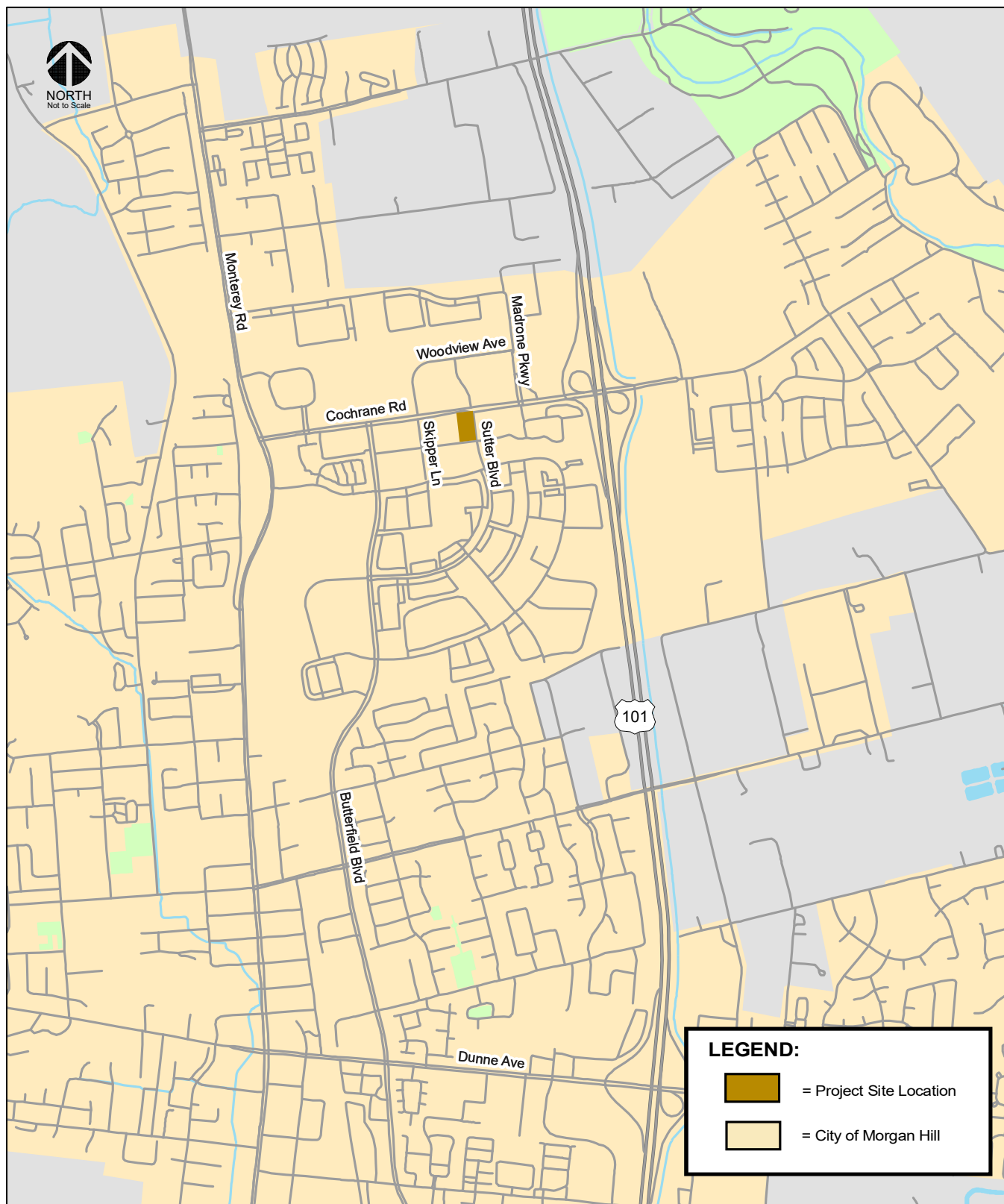
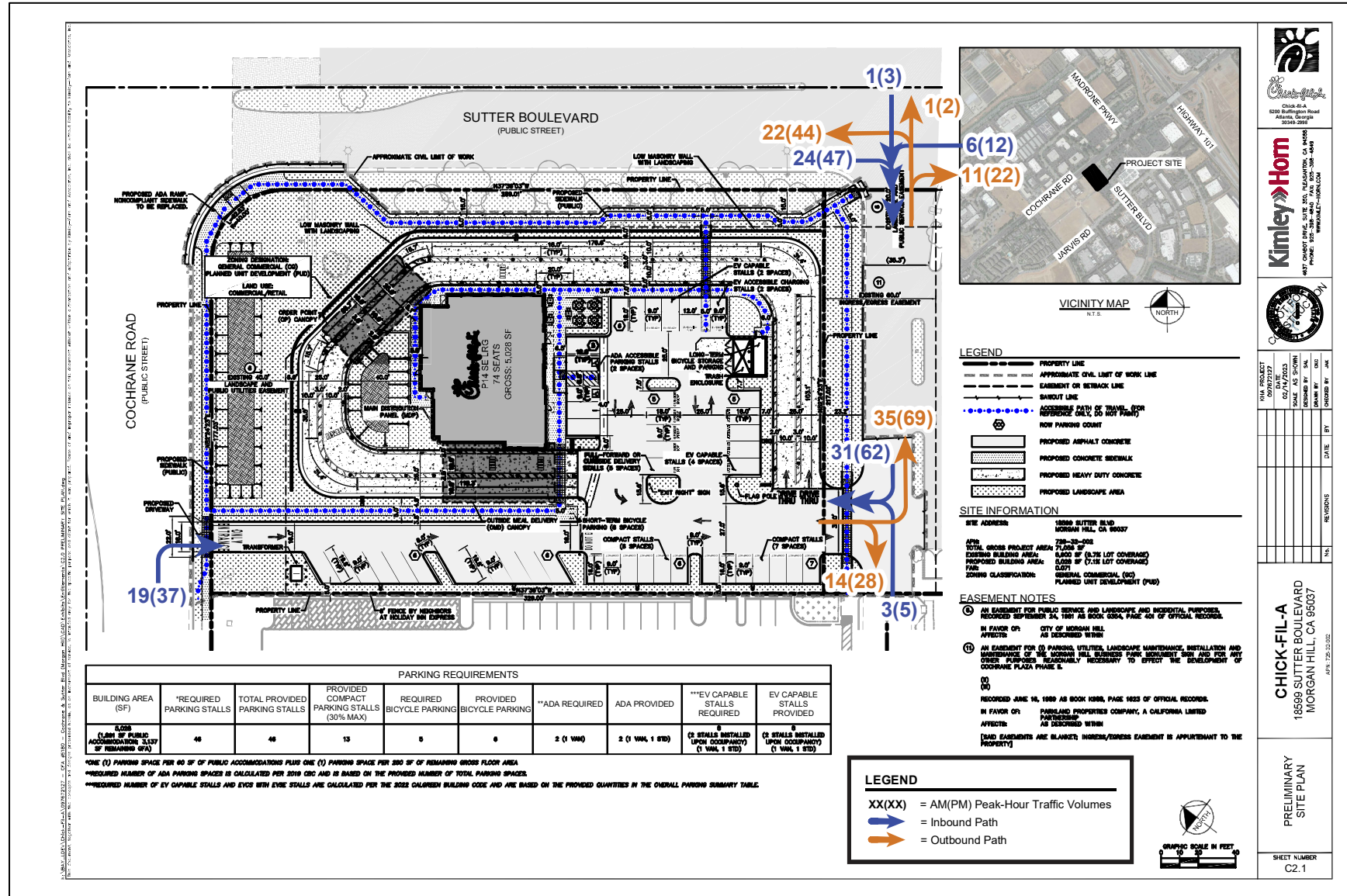


Figure 2
Site Plan and Project Trips at Site Access Points



Intersection, a new internal drive aisle connection to the Sutter Boulevard/Cochrane Plaza intersection, and new driveways along Jarvis Drive and Butterfield Boulevard.

A comparison of factored volumes and new counts showed that factored volumes along eastbound and westbound Cochrane Road were generally higher than the new counts during the AM and PM peak-hours. It can therefore be assumed that factored volumes are a conservative estimate of 2023 traffic volumes. However, factored volumes at the intersection of Madrone Parkway/Cochrane Road showed 150 fewer vehicles in the eastbound direction during the AM peak-hour compared to the new counts collected at the upstream intersection of Sutter Boulevard/Cochrane Road. Therefore, volumes at the intersections of Madrone Parkway/Cochrane Road, US 101 Southbound Ramps/Cochrane Road, and US 101 Northbound Ramps/Cochrane Road were adjusted by adding 150 vehicles in the eastbound direction during the AM peak-hour.

Existing Plus Project Conditions. Existing plus project peak-hour traffic volumes were estimated by adding to the existing traffic volumes the additional traffic that would be generated by the proposed project. Existing plus project conditions were evaluated relative to existing conditions in order to determine the effects of the proposed project on existing traffic conditions.

Year 2030 Cumulative Conditions. Year 2030 Cumulative conditions represent future traffic volumes on the existing transportation network. Year 2030 Cumulative conditions include traffic growth projected to occur in the Year 2030 without the proposed project.

Year 2030 Cumulative with Project Conditions. Year 2030 Cumulative with Project conditions consists of 2030 Cumulative traffic conditions with the addition of project traffic.

Project Trip Generation Estimates and Assignment

In determining the project trip generation, the magnitude of traffic entering and existing the site is estimated for the AM and PM peak hours. Peak-hour trip generation for the proposed fast-food restaurant with drive-through window was estimated utilizing trip generation rates that were determined based on vehicular counts at three existing Chick-fil-A restaurants with two drive-through lanes and of comparable square footage as that of the proposed project. The trip surveys were completed between February 18, 2023 and February 25, 2023 at the following three locations:

- Pittsburg, CA – 4717 Century Boulevard (4.99 k.s.f.)
- Milpitas, CA – 755 E. Calaveras Boulevard (4.96 k.s.f.)
- Daly City, CA – 6 Serramonte Center (4.92 k.s.f.)

Daily trip generation was estimated based on the surveyed peak-hour trips and the ratio of peak-hour trips to daily trips for a fast-food restaurant with drive-through window (Land Use 934) published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. The results of each survey, shown on Table 1, were utilized to calculate average peak hour trip rates. Using these average rates, the project is estimated to produce 1,822 daily vehicle trips with 101 AM peak-hour trips (52 inbound and 49 outbound) and 201 PM peak-hour trips (101 inbound and 97 outbound) before any reductions.

Fast-food restaurants with drive-through windows attract a substantial number of pass-by trips, which are trips made by drivers who already pass by the project site on an adjacent street en route to another destination, such as work to home. In contrast, primary (non-pass-by) trips are new trips made for the sole purpose of visiting the project site. Thus, pass-by trips are not considered new trips that are generated by the project site. However, the attraction of pass-by trips does result in a reassignment of existing through traffic (i.e. along Cochrane Road and Sutter Boulevard) at site driveways and

Table 1
Trip Survey Summary

Survey Location ¹	Size (ksf)	AM Peak-Hour				PM Peak-Hour			
		Rate	In	Out	Total	Rate	In	Out	Total
Pittsburg - 4717 Century Blvd	4.99	19.86	54	45	99	34.90	89	85	174
Milpitas - 755 E Calaveras Blvd	4.96	13.30	30	36	66	31.24	92	63	155
Daly City - 6 Serramonte Center	4.92	27.03	69	64	133	54.07	126	140	266
Survey Average	4.96	20.06	51	48	99	40.07	102	96	198
<i>ITE 934: Fast-Food Restaurant with Drive-Through</i>	<i>4.96</i>	<i>44.61</i>	<i>113</i>	<i>108</i>	<i>221</i>	<i>33.03</i>	<i>85</i>	<i>79</i>	<i>164</i>
Notes: ¹ Peak-hour trips are based on trip survey counts conducted February 18, 2023 to February 25, 2023.									

intersections immediately adjacent to the project site. A 50 percent pass-by reduction was assumed for the estimated daily, AM peak-hour, and PM peak-hour trips. After subtracting pass-by trips, the project is expected to generate 911 primary vehicle trips per day, with 51 primary vehicle trips (26 inbound and 25 outbound) in the AM peak hour and 100 primary vehicle trips (52 inbound and 48 outbound) in the PM peak hour. Because the existing commercial building on the project site is currently vacant, no trip credits are applied for the existing commercial space. Trip generation estimates for the proposed project are shown in Table 2.

The directional distribution of site-generated traffic to and from the project site was estimated based on the existing travel patterns on the surrounding roadway network that reflect typical weekday AM and PM peak commute patterns, the location of the project driveways, freeway access points, and the locations of complimentary land uses. The peak-hour project trips associated with the proposed project were added to the transportation network in accordance with the distribution pattern. The project trip distribution pattern and assignment of project trips at the study intersections under existing plus project conditions are shown on Figure 3.

Year 2030 Cumulative Conditions Project Trip Generation Estimates

Analysis under cumulative conditions is based on the General Plan traffic model which assumes no new development on the project site.

Intersection Level of Service Analysis

Traffic conditions at the following study intersections were analyzed for the weekday AM and PM peak hours of traffic:

1. Monterey Road and Cochrane Road
2. Butterfield Boulevard and Cochrane Road
3. Woodview Avenue/Skipper Lane and Cochrane Road
4. Sutter Boulevard and Cochrane Road
5. Madrone Parkway/Cochrane Plaza and Cochrane Road
6. US 101 Southbound Ramps and Cochrane Road
7. US 101 Northbound Ramps and Cochrane Road
8. Sutter Boulevard and Cochrane Plaza

Other intersections in the project area were not studied because the addition of project trips will be minimal, less than 10 peak hour trips per lane. The weekday AM peak hour of traffic generally falls within the 7:00 AM to 9:00 AM period and the weekday PM peak hour is typically in the 4:00 PM to 6:00 PM period. It is during these times that the most congested traffic conditions occur on a typical weekday.

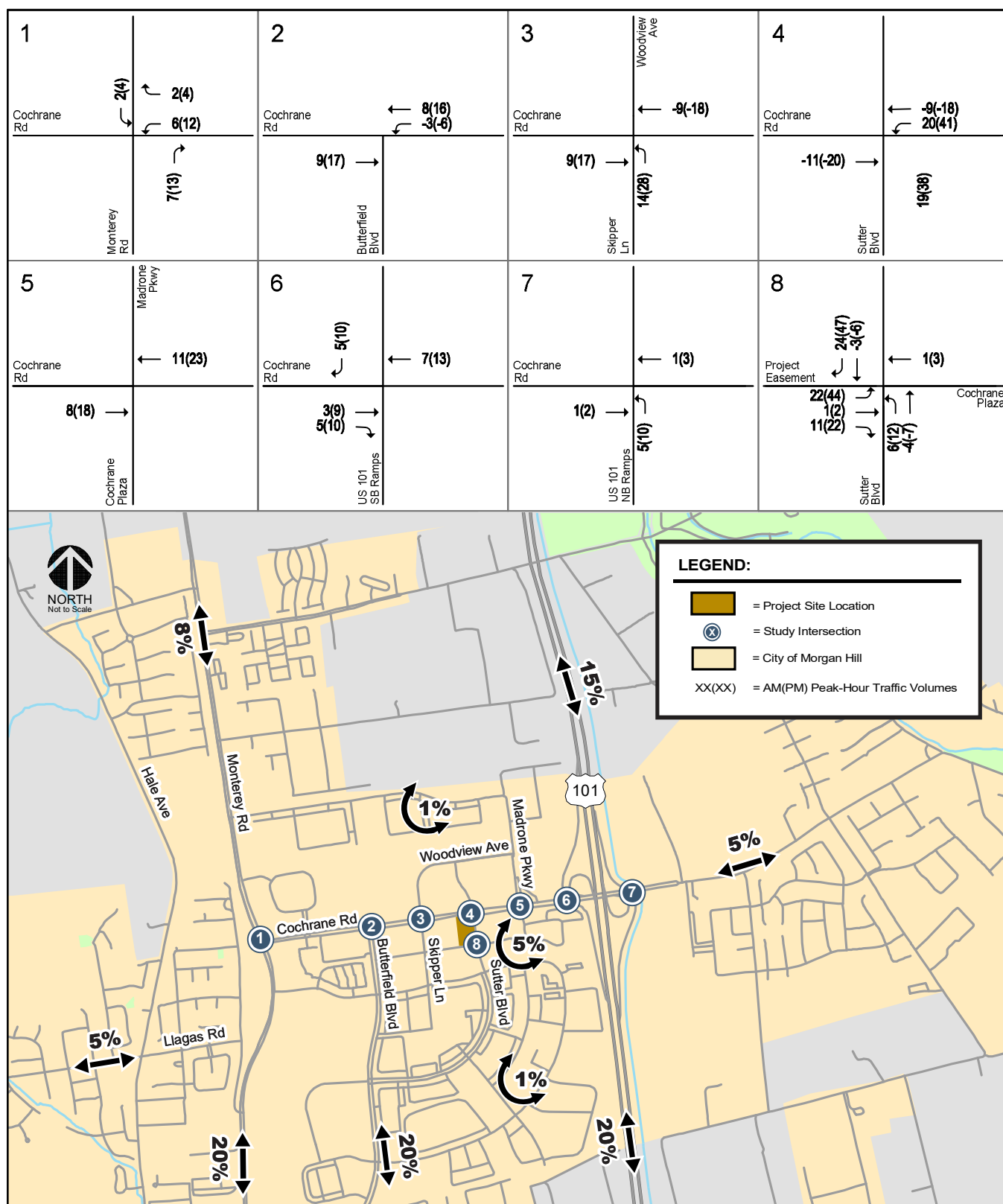
Signalized Intersection Analysis

Signalized study intersections are subject to the City of Morgan Hill's level of service standards. The City of Morgan Hill's level of service methodology is TRAFFIX, which is based on the 2000 *Highway Capacity Manual* (HCM) method for signalized intersections. TRAFFIX evaluates signalized intersections operations based on average delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersection level of service methodology, the City of Morgan Hill methodology employs the CMP defaults values for the analysis parameters, which include adjusted saturation flow rates to reflect conditions in Santa Clara County. All intersections within the City of Morgan Hill are required to meet the City's LOS standard of LOS D, with the exception of the following:

Table 2
Trip Generation Summary

Land Use	Size (ksf)	Daily		AM Peak-Hour				PM Peak-Hour			
		Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total
Proposed Project											
Chick-Fil-A with Drive-Through ¹	5.03	362.34	1,822	20.06	52	49	101	40.07	104	97	201
Pass-by Reduction (50%) ²			-911		-26	-24	-50		-52	-49	-101
Net Project Trips			911		26	25	51		52	48	100
Notes:											
¹ Peak-hour trips are based on trip survey counts conducted February 18, 2023 to February 25, 2023.											
Daily trips are based on surveyed peak-hour trips and the ratio of peak-hour trips to daily trips published in the ITE <i>Trip Generation Manual</i> , 11 th Edition for Land Use Code 934: Fast-Food Restaurant with Drive-Through.											
² Peak-hour pass-by trip reduction percentage assumed to be 50% of daily, AM peak-hour, and PM peak-hour trips.											

Figure 3
Project Trip Distribution and Project Trip Assignment



- **LOS F** for Downtown intersections and segments including at Main/Monterey, along Monterey Road between Main and Fifth Street, and along Depot Street at First through Fifth Street;
- **LOS E** for the following intersections and freeway zones:
 - Main Avenue and Del Monte Avenue
 - Main Avenue and Depot Street
 - Dunne Avenue and Del Monte Avenue
 - Dunne Avenue and Monterey Avenue
 - Dunne Avenue and Church Street
 - Dunne Avenue and Depot Street
 - Cochrane Road and Monterey Road
 - Tennant Avenue and Monterey Road
 - Tennant Avenue and Butterfield Boulevard
 - Cochrane Road Freeway Zone: from Madrone Parkway/Cochrane Plaza to Cochrane Road/DePaul Drive
 - Dunne Avenue Freeway Zone: from Walnut Grove Drive/East Dunne Avenue to Condit Road/East Dunne Avenue
 - Tennant Avenue Freeway Zone: from Butterfield Boulevard/Tennant Avenue to Condit Road/Tennant Avenue

According to the City of Morgan Hill level of service guidelines, a development is said to create a significant adverse effect on traffic conditions at a signalized intersection if for either peak hour:

1. The level of service at the intersection degrades from an acceptable level (LOS D or LOS E as identified above) under no project conditions to an unacceptable level (LOS E or F) under project conditions, or
2. The level of service at the intersection is an unacceptable level (LOS E or F as identified above) under no project conditions and the addition of project trips causes the average critical delay to increase by four (4) or more seconds *and* the volume-to-capacity ratio (V/C) to increase by 0.01.

An exception to this rule applies when the addition of project traffic reduces the amount of average delay for critical movements (i.e., the change in average delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by 0.01 or more.

Unsignalized Intersection Analysis

Unsignalized intersections within the City of Morgan Hill have a minimum operating level of LOS D. According to the City of Morgan Hill level of service guidelines, a development is said to have a significant adverse impact on traffic conditions at an unsignalized intersection if for either peak hour the addition of project traffic causes the worst approach delay to degrade to LOS E or F *and* the traffic volumes at the intersection are sufficiently high to satisfy the peak hour volume warrant.

Level of Service Results

The results of the intersection level of service analysis show that all study intersections currently operate at an acceptable LOS D or better conditions under existing conditions, and the addition of project traffic would not result in the degradation of the study intersections' levels of service during the AM and PM peak hours under existing plus project conditions. In addition, the unsignalized study intersection of Sutter Boulevard and Cochrane Plaza is projected to have traffic volumes that fall below the thresholds that warrant signalization under existing plus project conditions.

Under Year 2030 Cumulative conditions, all signalized study intersections would continue to operate at an acceptable level of service, and the addition of project traffic would not result in the degradation of

the study intersections' levels of service during the AM and PM peak hours. Although the unsignalized study intersection of Sutter Boulevard and Cochrane Plaza is projected to have a worst approach delay corresponding to an unacceptable LOS E during the PM peak-hour, traffic volumes would fall below the thresholds that warrant signalization under cumulative plus project conditions.

Based on the results of the intersection level of service analysis, the project would not have an adverse effect on operations at the study intersections. The results of level of service analysis are summarized in Table 3.

The poor operations at the Sutter Boulevard and Cochrane Plaza intersection are reflective of delays experienced by drivers exiting the Cochrane Plaza (Walmart) parking lot and project driveway due to insufficient gaps in traffic flow along Sutter Boulevard during the peak hours. Turn movements from each of the driveways are inhibited given that there is no control of Sutter Boulevard traffic flow.

Recommendation: Operations could be improved at the Sutter Boulevard and Cochrane Plaza intersection by restricting left-turns and through movements from each of the driveways at the intersection (east and west legs) by closing the median gap along Sutter Boulevard. As shown on Figure 4, the median could be constructed to maintain left-turns from Sutter Boulevard to each of the driveways.

Intersection Queueing Analysis

The analysis of intersection level of service was supplemented with an analysis of intersection operations for selected intersections where the project would add a significant number of left-turning vehicles. The operations analysis is based on vehicle queueing for high demand left-turn movements at intersections. Vehicle queues were estimated using a Poisson probability distribution, which estimates the probability of “n” vehicles for a vehicle movement using the following formula:

$$P(x=n) = \frac{\lambda^n e^{-\lambda}}{n!}$$

Where:

P (x=n) = probability of “n” vehicles in queue per lane

n = number of vehicles in the queue per lane

λ = Average number of vehicles in the queue per lane (vehicles per hour per lane/signal cycles per hour)

The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95th percentile maximum number of queued vehicles per cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement. This analysis thus provides a basis for estimating future left-turn storage requirements at intersections. The 95th percentile queue length value indicates that during the peak hour, a queue of this length or less would occur on 95 percent of the signal cycles. Likewise, a queue length larger than the 95th percentile queue would only occur on 5 percent of the signal cycles (about 3 cycles during the peak hour for a signal with a 60-second cycle length). Therefore, left-turn storage pocket designs based on the 95th percentile queue length would ensure that storage space would be exceeded only 5 percent of the time. The 95th percentile queue length is also known as the “design queue length”.

The vehicle queue estimates and a tabulated summary of the findings are provided in Table 4. The queueing analysis shows that all high-demand movements would continue to have sufficient queueing storage space with the addition of project traffic.

Table 3
Intersection Level of Service Summary

														Year 2030 without Project			Year 2030 with Project				
Int. #	Intersection	Int. Control	LOS Std	Peak Hour	Count Date	Existing			Existing Plus Project			Year 2030 without Project			Year 2030 with Project						
						Warrant Met?	Delay ¹	LOS	Warrant Met?	Delay ¹	LOS	Incr. In Crit. Delay	Incr. In V/C	Warrant Met?	Delay ¹	LOS	Warrant Met?	Delay ¹	LOS	Incr. In Crit. Delay	Incr. In V/C
1	Monterey Road and Cochrane Road	Signal	E	AM PM	05/08/18 05/08/18	-- --	37.7 26.5	D C	-- --	37.7 26.7	D C	0.1 1.2	0.002 0.038	-- --	71.2 44.4	E D	-- --	71.6 45.0	E D	0.7 1.2	0.002 0.004
2	Butterfield Boulevard and Cochrane Road	Signal	D	AM PM	05/08/18 05/08/18	-- --	12.5 12.1	B B	-- --	12.5 12.0	B B	0.0 -0.1	0.001 -0.002	-- --	13.0 15.5	B B	-- --	13.0 15.4	B B	0.0 -0.1	0.001 -0.002
3	Woodview Avenue/Skipper Lane and Cochrane Road	Signal	D	AM PM	03/07/23 03/07/23	-- --	17.2 17.0	B B	-- --	17.3 17.2	B B	0.2 0.7	0.007 0.013	-- --	16.4 16.6	B B	-- --	16.4 16.8	B B	0.1 0.3	0.007 0.013
4	Sutter Boulevard and Cochrane Road	Signal	D	AM PM	03/07/23 03/07/23	-- --	16.8 17.7	B B	-- --	17.0 18.1	B B	0.4 1.0	0.006 0.012	-- --	17.8 17.6	B B	-- --	18.0 19.9	B B	0.4 2.8	0.006 0.207
5	Madrone Parkway/Cochrane Plaza and Cochrane Road	Signal	E	AM PM	05/08/18 05/08/18	-- --	19.2 32.1	B C	-- --	19.1 32.0	B C	-0.1 -0.1	0.003 0.004	-- --	19.4 33.2	B C	-- --	19.4 33.5	B C	0.0 0.6	0.000 -0.009
6	US 101 Southbound Ramps and Cochrane Road	Signal	E	AM PM	05/08/18 05/08/18	-- --	13.4 17.2	B B	-- --	13.4 17.3	B B	0.0 0.1	0.002 0.006	-- --	16.2 26.1	B C	-- --	16.3 26.6	B C	0.1 0.9	0.002 0.006
7	US 101 Northbound Ramps and Cochrane Road	Signal	E	AM PM	05/08/18 05/08/18	-- --	8.8 11.5	A B	-- --	8.8 11.6	A B	0.0 0.1	0.002 0.004	-- --	8.0 12.4	A B	-- --	8.1 12.5	A B	0.1 0.1	0.002 0.004
8	Sutter Boulevard and Cochrane Plaza	TWSC	D	AM PM	03/07/23 03/07/23	No No	14.0 22.2	B C	No No	14.3 24.5	B C	N/A N/A	N/A N/A	No No	15.6 33.9	C D	No No	16.1 39.4	C E	N/A N/A	N/A N/A
<u>Notes:</u> ¹ The reported delay and corresponding level of service for signalized intersections represent the average delay for all approaches at the intersection. The reported delay and corresponding level of service for one- and two-way stop-controlled intersections are based on the stop-controlled approach with the highest delay.																					

Figure 4
Proposed Sutter Boulevard Median Closure

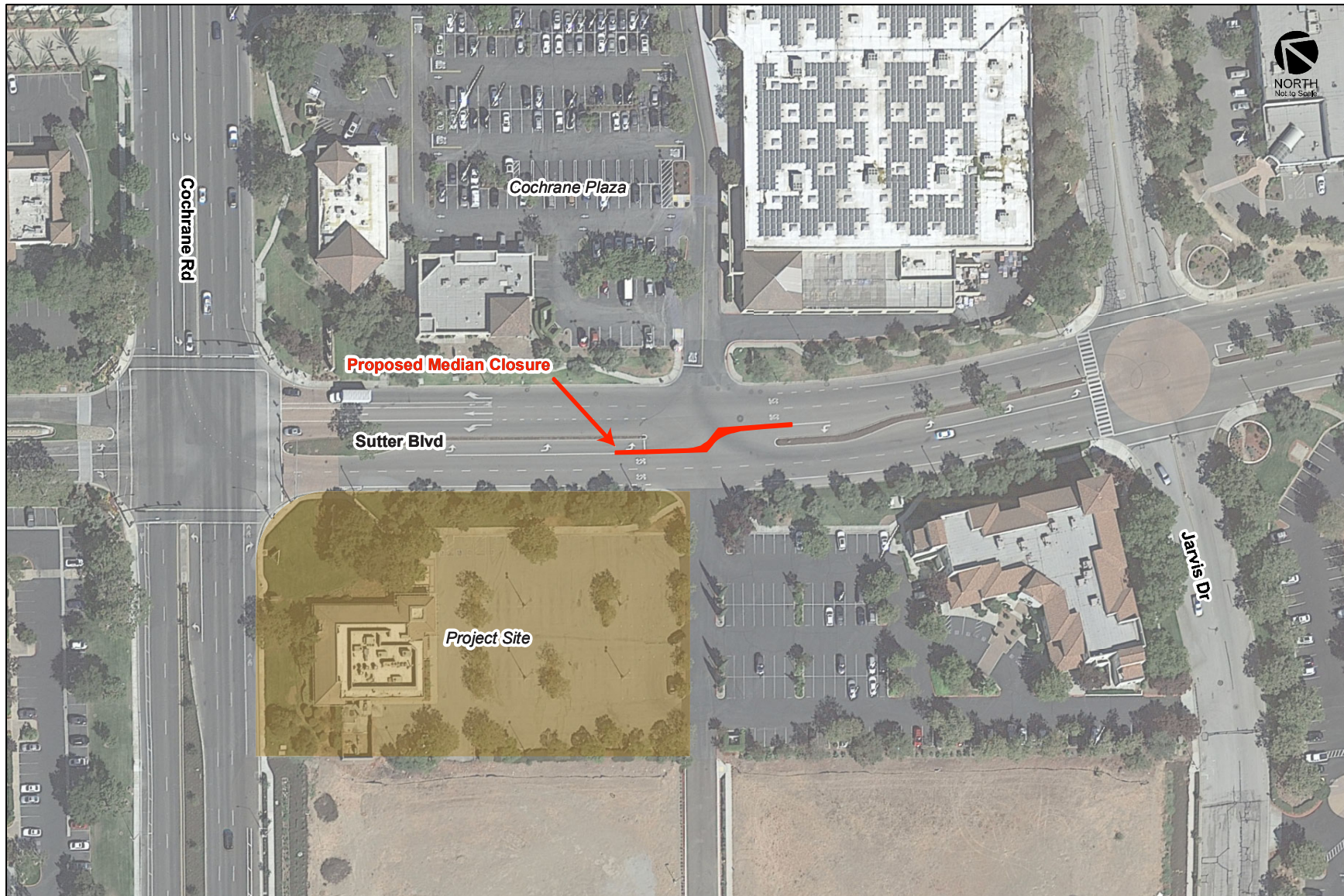


Table 4
Intersection Queueing Summary

Measurement	Sutter Boulevard and Cochrane Road				Woodview Avenue/Skipper Lane and Cochrane Road		Sutter Boulevard and Cochrane Plaza			
	Westbound Left		Northbound Right		Northbound Left/Through		Northbound Left		Eastbound	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Existing Conditions										
Cycle Length/Control Delay (sec) ¹	60	60	60	60	60	75	7.7	7.5	9.9	13.4
Lanes	2	2	1	1	1	1	1	1	1	1
Volume (vph)	204	151	359	378	50	25	8	4	8	35
Volume (vphpl)	102	76	359	378	50	25	8	4	8	35
95 th % Queue (veh/ln.)	4	3	10	11	2	2	0	0	0	1
95 th % Queue (ft./ln.) ²	100	75	250	275	50	50	0	0	0	25
Storage (ft./ln.)	375	375	325	325	150	150	50	50	50	50
Adequate (Y/N)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Existing Plus Project Conditions (with Evergreen Plaza)										
Cycle Length/Control Delay (sec) ¹	60	60	60	60	60	75	7.9	7.8	13.4	18.8
Lanes	2	2	1	1	1	1	1	1	1	1
Volume (vph)	277	234	407	471	145	145	17	19	74	143
Volume (vphpl)	139	117	407	471	145	145	17	19	74	143
95 th % Queue (veh/ln.)	5	5	11	13	5	6	0	0	1	2
95 th % Queue (ft./ln.) ²	125	125	275	325	125	150	0	0	25	50
Storage (ft./ln.)	375	375	325	325	150	150	50	50	50	50
Adequate (Y/N)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Notes:										
¹ Cycle length for signalized intersections and control delay for stop-controlled intersections.										
² Assumes 25 feet per vehicle queued										

Site Access

The evaluation of site access is based on the site plan prepared by Kimley-Horn dated February 14, 2023. Site access was evaluated to determine the adequacy of the site's access points with regard to the following: traffic volume, geometric design, and sight distance. Site access was evaluated in accordance with generally accepted traffic engineering standards and transportation planning principles.

As shown on Figure 2, primary vehicular access to the project site would be provided via an existing full-access driveway located at the west leg of the Sutter Boulevard/Cochrane Plaza intersection. The driveway along Sutter Boulevard currently serves the subject property and an existing commercial/office use located southeast of the project site (18525 Sutter Boulevard) via a shared easement drive aisle. As proposed, a two-way access point to the project site would be constructed along the easement drive aisle, approximately 190 feet west of Sutter Boulevard. The access point would be directly opposite from the westernmost access point to 18525 Sutter Boulevard. It should be noted that the shared easement drive aisle also provides vehicular access to the Evergreen Village development, located west of the project site. Therefore, project traffic would have access to roadways and intersections within and adjacent to Evergreen Village. Trips generated by Evergreen Village are included in this site access analysis, based on trips published in the *Cochrane & Butterfield Mixed-Use Development TIA* by Hexagon, dated June 7, 2018. It should be noted that the study did not assume a direct connection between Evergreen Village and the Sutter Boulevard/Cochrane Plaza intersection. Therefore, trips published in the *Cochrane & Butterfield Mixed-Use Development TIA* were manually adjusted to reflect usage of the Sutter Boulevard/Cochrane Plaza driveway.

A secondary ingress-only access point is proposed along Cochrane Road, approximately 190 feet west of Sutter Boulevard and 190 feet east of an existing right-in/right-out only driveway. An existing landscaped median along Cochrane Road would prohibit inbound and outbound left-turns to and from the proposed project driveway.

Driveway Operations

Sutter Boulevard Driveway

The project parcel is currently served by three access points along the shared easement drive aisle. The proposed project will eliminate the two easternmost access points and condense access to the project site to one point at its western boundary from the drive aisle.

The project trip estimates and assignment indicates a maximum of 17 PM peak-hour trips would make inbound left-turns from northbound Sutter Boulevard into the project's easement driveway. As shown in the queueing analysis, the northbound left-turn pocket at the Sutter Boulevard/Cochrane Plaza intersection would have adequate storage space to serve traffic volumes under existing plus project conditions.

A maximum of 68 PM peak-hour project trips (103 trips including existing trips and 143 trips including Evergreen Village trips) would exit via the project's easement driveway onto Sutter Boulevard. As shown in the queueing analysis, the outbound (eastbound) movement would have a maximum queue length of 2 vehicles. Therefore, there would be adequate storage space to serve outbound traffic volumes without blocking access to the 18525 Sutter Boulevard parking lot under existing plus project conditions.

However, as noted in the intersection level of service discussion above, it is recommended that the closure of the median gap along Sutter Boulevard be implemented to improve operations at the Sutter Boulevard/Cochrane Plaza intersection (see Figure 4). The median gap closure would restrict turn

movements from the Sutter Boulevard driveway to right-turns only and require project trips that are bound for northbound Sutter Boulevard and Cochrane Road to utilize Skipper Lane rather than Sutter Boulevard. Thus, right-turn only signs should be placed at the project site driveway along the drive aisle.

In addition, the project should coordinate with the City to determine if closure of the drive aisle access to 18525 Sutter Boulevard directly across from the project site entrance would be feasible. Doing so would restrict project trips from utilizing 18525 Sutter Boulevard as a cut-through route to/from Jarvis Drive. However, implementation of a median within the shared drive aisle easement may require additional roadway width than currently provided and may also restrict vehicular access between the surrounding roadway network and 18525 Sutter Boulevard.

Cochrane Road Driveway

The Cochrane Road driveway is not anticipated to experience operational issues due to being an ingress-only driveway. Providing egress from the Cochrane Road driveway is not recommended due to the following:

- adequate outbound access from the project site onto eastbound Cochrane Road would be provided via Sutter Boulevard and Skipper Lane
- outbound vehicles would turn onto a right-turn only lane along Cochrane Road and would need to merge into the adjacent travel lane to continue eastbound along Cochrane Road
- an existing bike lane merges with the right-turn lane at the location of the proposed driveway

Driveway Design

The City's Design Standards specify a minimum driveway width of 16 feet and a maximum driveway width of 36 feet for commercial uses. The site plan indicates that the ingress-only Cochrane Road project driveway would be 22 feet wide, and would thus meet City standards. The proposed 35-foot wide two-way access point along the southern project frontage would fall within the acceptable range of standard driveway widths. However, the access point is along a shared easement and is not subject to the City's standard driveway requirements.

Drive-Through Operations

The proposed drive-through is comprised of two lanes, with each lane having its own ordering point. During non-peak periods, customers will merge into a single lane as they proceed past the ordering canopy towards the pick-up window. During peak demand periods, customers will remain in two-lane configuration as staff members are deployed to deliver food to customers in the outside lane. When needed, the outside lane also would be used as a by-pass lane to prioritize customers with smaller orders through the drive-through sequence.

Each lane is shown to be 10 feet wide and will have their own entrance and exit points. The lanes will be separated by pavement markings and removable bollards. The site plan shows a maximum capacity for approximately 24 vehicles per lane, assuming 20 feet per car and full utilization of each lane.

Conformance with City Requirements for Drive-Through Facilities

As proposed, the drive-through lanes will meet the City's standard requirements for drive-through facilities (Morgan Hill Code of Ordinances, Chapter 18.92.040).

- Drive-through lanes for fast food restaurants shall have a capacity for at least eight vehicles, at 20 feet per vehicle.

The site plan shows storage space for approximately 24 vehicles per lane (48 vehicles total), assuming 20 feet per car. Thus, the proposed capacity would exceed minimum requirements.

- Drive-through lanes shall be separate from the circulation lanes necessary for entering and exiting the property and providing access to parking.

The drive-through lanes are separate from the drive aisles serving the project's surface parking lot. Drive-through operations would not interfere with ingress and egress of vehicles to/from the project site.

- Pedestrian access routes shall not cross a drive-through lane within the minimum stacking space distance (8 vehicles).

As shown on the site plan, pedestrian access routes will be located across the drive-through exits (past the drive-through window) and across both lanes, approximately 17 car-lengths back from the drive-through exits. Thus, the location of the proposed pedestrian access routes would meet minimum requirements.

- Vehicular entrance or exit to a drive-through establishment shall be setback from the nearest public street intersection.

The proposed Cochrane Road driveway would be located approximately 190 feet east of an existing right-in/right-out only driveway and 190 feet west of Sutter Boulevard. This meets the required separation of at least 115 feet for roadways with a posted speed limit of 45 mph without a median opening. The existing Sutter Boulevard driveway is located approximately 340 feet south of Cochrane Road and 340 feet north of Jarvis Drive. This meets the required separation of at least 150 feet for roadways with a posted speed limit of 35 mph with a median opening.

Queueing Observations

Vehicle queues were observed at three Chick-fil-A restaurants with two drive-through lanes during the weekday AM and PM peak-hours, as well as the Saturday lunchtime period, to confirm that the proposed drive-through storage would meet demand. The maximum queue observed during weekdays was a total of 29 vehicles across two drive-through lanes during the PM peak-hour, while the maximum queue observed during the Saturday lunchtime period was 38 vehicles. Thus, the proposed drive-through with a total capacity for up to 48 vehicles is expected to have adequate capacity to accommodate expected queues during peak periods.

Based on the observed drive-through queues, it is unlikely that queues would exceed the planned drive-through capacity and queues are not expected to spill over onto Sutter Boulevard or Cochrane Road. However, Chick-Fil-A should develop a drive-through queue management plan that can be implemented during abnormally high demand periods to ensure that circulation within the site parking lot and on adjacent drive aisles would not be negatively affected by drive-through operations. The queue management plan could include but not be limited to measures utilized at other Chick-Fil-A locations:

- Having staff members monitor the drive-through queues and direct traffic as necessary if queues extend beyond the drive-through lanes.
- Implementing face-to-face ordering via an iPad ordering system during peak periods.
- Utilizing the secondary drive-through lane as a by-pass lane to expedite service for customers with smaller orders.

Recommendation: The proposed drive-through is expected to have adequate capacity to accommodate the expected queues during peak periods. Drive-through queues are not expected to spill over onto Sutter Boulevard or Cochrane Road. However, it is recommended Chick-Fil-A develop a

queue management plan that can be implemented during abnormally high demand periods to prevent the potential for the drive-through queues to inhibit circulation within the project parking lot and access of adjacent properties.

Parking

Vehicular Parking

According to the Planned Unit Development for the Morgan Hill Business Park, of which the project site is included, sites are required to provide on-site vehicular parking at a rate of 1 space per 60 s.f. of public accommodation and one space per 250 gross floor area of additional area.

Therefore, the proposed 5,028 s.f. fast-food restaurant would require a total of 45 vehicular parking spaces. Per the site plan, the project proposes a total of 46 on-site parking spaces. Therefore, vehicle parking as proposed by the project will meet the off-street parking requirement for the site.

Bicycle Parking

According to the City of Morgan Hill Zoning Regulations (Table 18.72-7), non-residential uses are required to provide on-site bicycle parking as specified below:

- Short-term spaces – 10% of required automobile spaces
- Long-term spaces – 1 per 20 required automobile spaces for uses 10,000 s.f. or greater

Based on these requirements, the project will be required to provide a total of 6 short-term bicycle parking spaces. The site plan shows bike lockers provided for at least 6 bicycles, located adjacent to the trash enclosure. Pedestrian access routes are provided between the bike lockers and the project frontages along Sutter Boulevard and Cochrane Road. Therefore, bicycle parking as proposed by the project will meet City bicycle parking requirements.

Transit, Pedestrian, and Bicycle Facility Evaluation

Transit Facilities

The project site is served by VTA bus routes that run along Cochrane Road.

- Rapid Route 568 (Gilroy Transit Center to San Jose Diridon Transit Center) serves bus stops at the intersection of Cochrane Road and Cochrane Circle, approximately 1/3-mile walking distance from the project site.
- Express Route 121 (Gilroy/Morgan Hill to Lockheed Martin) serves bus stops at the intersection of Cochrane Road and Sutter Boulevard, less than 200 feet walking distance from the project site.
- Local Route 87 (Morgan Hill Civic Center to Burnett Avenue) serves bus stops at the intersection of Cochrane Road and Sutter Boulevard, less than 200 feet walking distance from the project site.

The transit ridership demands of the proposed project can be accommodated by the existing transit facilities.

Pedestrian Facilities

In the vicinity of the project site, there are existing sidewalks along all public roadways, including Sutter Boulevard and Cochrane Road. Sidewalks along roadways within Evergreen Village are currently missing along undeveloped parcels but will be constructed with their development.

Crosswalks with protected crossing phases are provided along all four legs of the Sutter Boulevard/Cochrane Road intersection. No crosswalks or ADA-compliant curb ramps are provided along any of the approaches at the Sutter Boulevard/Cochrane Plaza intersection. However, a crosswalk across Sutter Boulevard is provided at the Sutter Boulevard/Jarvis Drive intersection, approximately 340 feet south of the project site.

Project Improvements

The project proposes to reconstruct existing sidewalks along the Cochrane Road and Sutter Boulevard project frontages. A new sidewalk will be constructed along the easement drive to the south of the project site, providing a continuous pedestrian route between Sutter Boulevard and Evergreen Village. Multiple access points from the sidewalks are provided to on-site walkways. All sidewalks are shown on the site plan to measure at least 5 feet wide.

Additionally, new ADA-compliant curb ramps will be installed at the southwest corner of the Sutter Boulevard/Cochrane Road intersection, at the northwest corner of the Sutter Boulevard/Cochrane Plaza intersection, along the proposed project driveways, and at on-site pedestrian crossings across drive-through lanes.

Overall, the proposed sidewalks and curb ramps create an accessible network of pedestrian pathways to/from the project site and surrounding uses. A continuous, accessible pedestrian route would be provided between the project site and bus stops at the intersection of Cochrane Road/Sutter Boulevard. However, It should be noted that pedestrian access to areas south and east of the project site would be constrained due to missing crosswalks and ADA-compliant curb ramps along any of the approaches at the Sutter Boulevard/Cochrane Plaza intersection. The proposed new curb ramp located at the northwest corner of the intersection cannot serve as part of an accessible route due to the missing facilities which are not the responsibility of the proposed project.

Bicycle Facilities

In the project vicinity, there are bike lanes located along Sutter Boulevard and Cochrane Road. The demand generated by the proposed project could be accommodated by the existing bicycle facilities in the vicinity of the project site. Additionally, the project as proposed will not conflict with any existing or planned bicycle facilities.

Appendix B

Air Quality and Greenhouse Gas Modeling Results

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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

Chick-fil-A @ Sutter Boulevard

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	46.00	Space	0.41	18,400.00	0
Fast Food Restaurant with Drive Thru	5.03	1000sqft	1.41	5,028.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	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 updated to represent total acreage of project site.

Construction Phase - Architectural coating assumed to start two weeks after building construction initiation and lasts for the same duration.

Demolition - Building square footage is equal to the existing building on-site.

Vehicle Trips - Updated to be consistent with the project-specific traffic report.

Water Mitigation - Compliant with MWELO.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblLandUse	LandUseSquareFeet	5,030.00	5,028.00
tblLandUse	LotAcreage	0.12	1.41

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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

tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PR_TP	29.00	100.00
tblVehicleTrips	ST_TR	616.12	181.11
tblVehicleTrips	SU_TR	472.58	181.11
tblVehicleTrips	WD_TR	470.95	181.11

2.0 Emissions Summary

Chick-fil-A @ Sutter Boulevard - Bay Area 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					
2024	0.1321	0.9278	1.0475	1.9200e-003	0.0328	0.0388	0.0716	0.0128	0.0372	0.0500	0.0000	161.8868	161.8868	0.0274	9.6000e-004	162.8573
2025	0.0791	0.4993	0.6197	1.1300e-003	5.1600e-003	0.0190	0.0241	1.4000e-003	0.0184	0.0198	0.0000	94.5228	94.5228	0.0133	5.5000e-004	95.0181
Maximum	0.1321	0.9278	1.0475	1.9200e-003	0.0328	0.0388	0.0716	0.0128	0.0372	0.0500	0.0000	161.8868	161.8868	0.0274	9.6000e-004	162.8573

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					
2024	0.1321	0.9278	1.0475	1.9200e-003	0.0328	0.0388	0.0716	0.0128	0.0372	0.0500	0.0000	161.8866	161.8866	0.0274	9.6000e-004	162.8572
2025	0.0791	0.4993	0.6197	1.1300e-003	5.1600e-003	0.0190	0.0241	1.4000e-003	0.0184	0.0198	0.0000	94.5227	94.5227	0.0133	5.5000e-004	95.0180
Maximum	0.1321	0.9278	1.0475	1.9200e-003	0.0328	0.0388	0.0716	0.0128	0.0372	0.0500	0.0000	161.8866	161.8866	0.0274	9.6000e-004	162.8572

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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
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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-3-2024	9-2-2024	0.4365	0.4365
2	9-3-2024	12-2-2024	0.4685	0.4685
3	12-3-2024	3-2-2025	0.4454	0.4454
4	3-3-2025	6-2-2025	0.2846	0.2846
		Highest	0.4685	0.4685

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0239	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Energy	5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	71.1749	71.1749	3.5800e-003	1.3200e-003	71.6593
Mobile	0.3895	0.4511	3.7695	8.0800e-003	0.8982	5.9200e-003	0.9041	0.2400	5.5100e-003	0.2455	0.0000	764.2708	764.2708	0.0472	0.0354	775.9924
Waste						0.0000	0.0000		0.0000	0.0000	11.7613	0.0000	11.7613	0.6951	0.0000	29.1381
Water						0.0000	0.0000		0.0000	0.0000	0.4844	0.7959	1.2803	0.0499	1.1900e-003	2.8820
Total	0.4190	0.5022	3.8128	8.3900e-003	0.8982	9.8000e-003	0.9080	0.2400	9.3900e-003	0.2494	12.2457	836.2426	848.4883	0.7957	0.0379	879.6728

Chick-fil-A @ Sutter Boulevard - Bay Area 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	0.0239	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Energy	5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	71.1749	71.1749	3.5800e-003	1.3200e-003	71.6593
Mobile	0.3895	0.4511	3.7695	8.0800e-003	0.8982	5.9200e-003	0.9041	0.2400	5.5100e-003	0.2455	0.0000	764.2708	764.2708	0.0472	0.0354	775.9924
Waste						0.0000	0.0000		0.0000	0.0000	11.7613	0.0000	11.7613	0.6951	0.0000	29.1381
Water						0.0000	0.0000		0.0000	0.0000	0.4844	0.7896	1.2740	0.0499	1.1900e-003	2.8756
Total	0.4190	0.5022	3.8128	8.3900e-003	0.8982	9.8000e-003	0.9080	0.2400	9.3900e-003	0.2494	12.2457	836.2363	848.4819	0.7957	0.0379	879.6664

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/3/2024	6/28/2024	5	20	
2	Site Preparation	Site Preparation	6/29/2024	7/2/2024	5	2	
3	Grading	Grading	7/3/2024	7/8/2024	5	4	

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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

4	Paving	Paving	7/9/2024	7/22/2024	5	10
5	Building Construction	Building Construction	7/23/2024	4/28/2025	5	200
6	Architectural Coating	Architectural Coating	8/6/2024	5/12/2025	5	200

Acres of Grading (Site Preparation Phase): 1.88**Acres of Grading (Grading Phase): 4****Acres of Paving: 0.41****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,542; Non-Residential Outdoor: 2,514; Striped Parking Area: 1,104 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36

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Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	31.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Demolition - 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					
Fugitive Dust					3.4000e-003	0.0000	3.4000e-003	5.1000e-004	0.0000	5.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.1389	0.1349	2.4000e-004		6.3100e-003	6.3100e-003		5.8900e-003	5.8900e-003	0.0000	21.0916	21.0916	5.3400e-003	0.0000	21.2250
Total	0.0144	0.1389	0.1349	2.4000e-004	3.4000e-003	6.3100e-003	9.7100e-003	5.1000e-004	5.8900e-003	6.4000e-003	0.0000	21.0916	21.0916	5.3400e-003	0.0000	21.2250

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3.2 Demolition - 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	3.0000e-005	2.1000e-003	5.0000e-004	1.0000e-005	2.6000e-004	2.0000e-005	2.8000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	0.9106	0.9106	3.0000e-005	1.4000e-004	0.9544
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.0000e-004	2.6900e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	0.0000	2.8000e-004	0.0000	0.7852	0.7852	2.0000e-005	2.0000e-005	0.7919
Total	3.4000e-004	2.3000e-003	3.1900e-003	2.0000e-005	1.2900e-003	3.0000e-005	1.3100e-003	3.4000e-004	2.0000e-005	3.7000e-004	0.0000	1.6959	1.6959	5.0000e-005	1.6000e-004	1.7463

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					3.4000e-003	0.0000	3.4000e-003	5.1000e-004	0.0000	5.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.1389	0.1349	2.4000e-004		6.3100e-003	6.3100e-003		5.8900e-003	5.8900e-003	0.0000	21.0915	21.0915	5.3400e-003	0.0000	21.2250
Total	0.0144	0.1389	0.1349	2.4000e-004	3.4000e-003	6.3100e-003	9.7100e-003	5.1000e-004	5.8900e-003	6.4000e-003	0.0000	21.0915	21.0915	5.3400e-003	0.0000	21.2250

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3.2 Demolition - 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	3.0000e-005	2.1000e-003	5.0000e-004	1.0000e-005	2.6000e-004	2.0000e-005	2.8000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	0.9106	0.9106	3.0000e-005	1.4000e-004	0.9544
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.0000e-004	2.6900e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	0.0000	2.8000e-004	0.0000	0.7852	0.7852	2.0000e-005	2.0000e-005	0.7919
Total	3.4000e-004	2.3000e-003	3.1900e-003	2.0000e-005	1.2900e-003	3.0000e-005	1.3100e-003	3.4000e-004	2.0000e-005	3.7000e-004	0.0000	1.6959	1.6959	5.0000e-005	1.6000e-004	1.7463

3.3 Site Preparation - 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					
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	1.1100e-003	0.0118	6.6300e-003	2.0000e-005		4.8000e-004	4.8000e-004		4.4000e-004	4.4000e-004	0.0000	1.5113	1.5113	4.9000e-004	0.0000	1.5235
Total	1.1100e-003	0.0118	6.6300e-003	2.0000e-005	6.2700e-003	4.8000e-004	6.7500e-003	3.0000e-003	4.4000e-004	3.4400e-003	0.0000	1.5113	1.5113	4.9000e-004	0.0000	1.5235

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3.3 Site Preparation - 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	2.0000e-005	1.0000e-005	1.7000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0483	0.0483	0.0000	0.0000	0.0487
Total	2.0000e-005	1.0000e-005	1.7000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0483	0.0483	0.0000	0.0000	0.0487

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	1.1100e-003	0.0118	6.6300e-003	2.0000e-005		4.8000e-004	4.8000e-004		4.4000e-004	4.4000e-004	0.0000	1.5113	1.5113	4.9000e-004	0.0000	1.5235
Total	1.1100e-003	0.0118	6.6300e-003	2.0000e-005	6.2700e-003	4.8000e-004	6.7500e-003	3.0000e-003	4.4000e-004	3.4400e-003	0.0000	1.5113	1.5113	4.9000e-004	0.0000	1.5235

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3.3 Site Preparation - 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	2.0000e-005	1.0000e-005	1.7000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0483	0.0483	0.0000	0.0000	0.0487
Total	2.0000e-005	1.0000e-005	1.7000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0483	0.0483	0.0000	0.0000	0.0487

3.4 Grading - 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					
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	2.6000e-003	0.0276	0.0174	4.0000e-005		1.1400e-003	1.1400e-003		1.0500e-003	1.0500e-003	0.0000	3.6207	3.6207	1.1700e-003	0.0000	3.6500
Total	2.6000e-003	0.0276	0.0174	4.0000e-005	0.0142	1.1400e-003	0.0153	6.8500e-003	1.0500e-003	7.9000e-003	0.0000	3.6207	3.6207	1.1700e-003	0.0000	3.6500

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3.4 Grading - 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	5.0000e-005	3.0000e-005	4.1000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1208	0.1208	0.0000	0.0000	0.1218
Total	5.0000e-005	3.0000e-005	4.1000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1208	0.1208	0.0000	0.0000	0.1218

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	2.6000e-003	0.0276	0.0174	4.0000e-005		1.1400e-003	1.1400e-003		1.0500e-003	1.0500e-003	0.0000	3.6207	3.6207	1.1700e-003	0.0000	3.6500
Total	2.6000e-003	0.0276	0.0174	4.0000e-005	0.0142	1.1400e-003	0.0153	6.8500e-003	1.0500e-003	7.9000e-003	0.0000	3.6207	3.6207	1.1700e-003	0.0000	3.6500

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3.4 Grading - 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	5.0000e-005	3.0000e-005	4.1000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1208	0.1208	0.0000	0.0000	0.1218
Total	5.0000e-005	3.0000e-005	4.1000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1208	0.1208	0.0000	0.0000	0.1218

3.5 Paving - 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	3.0900e-003	0.0293	0.0441	7.0000e-005		1.4100e-003	1.4100e-003		1.3000e-003	1.3000e-003	0.0000	5.8870	5.8870	1.8700e-003	0.0000	5.9337
Paving	5.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.6300e-003	0.0293	0.0441	7.0000e-005		1.4100e-003	1.4100e-003		1.3000e-003	1.3000e-003	0.0000	5.8870	5.8870	1.8700e-003	0.0000	5.9337

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3.5 Paving - 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	1.6000e-004	1.0000e-004	1.3500e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3926	0.3926	1.0000e-005	1.0000e-005	0.3960
Total	1.6000e-004	1.0000e-004	1.3500e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3926	0.3926	1.0000e-005	1.0000e-005	0.3960

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	3.0900e-003	0.0293	0.0441	7.0000e-005		1.4100e-003	1.4100e-003		1.3000e-003	1.3000e-003	0.0000	5.8870	5.8870	1.8700e-003	0.0000	5.9337
Paving	5.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.6300e-003	0.0293	0.0441	7.0000e-005		1.4100e-003	1.4100e-003		1.3000e-003	1.3000e-003	0.0000	5.8870	5.8870	1.8700e-003	0.0000	5.9337

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3.5 Paving - 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	1.6000e-004	1.0000e-004	1.3500e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3926	0.3926	1.0000e-005	1.0000e-005	0.3960
Total	1.6000e-004	1.0000e-004	1.3500e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3926	0.3926	1.0000e-005	1.0000e-005	0.3960

3.6 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	0.0824	0.6417	0.7260	1.2800e-003		0.0261	0.0261		0.0252	0.0252	0.0000	105.3345	105.3345	0.0175	0.0000	105.7731
Total	0.0824	0.6417	0.7260	1.2800e-003		0.0261	0.0261		0.0252	0.0252	0.0000	105.3345	105.3345	0.0175	0.0000	105.7731

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3.6 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	2.4000e-004	0.0103	3.1600e-003	5.0000e-005	1.5200e-003	6.0000e-005	1.5800e-003	4.4000e-004	6.0000e-005	5.0000e-004	0.0000	4.5082	4.5082	9.0000e-005	6.7000e-004	4.7092
Worker	1.3900e-003	9.1000e-004	0.0120	4.0000e-005	4.5800e-003	2.0000e-005	4.6100e-003	1.2200e-003	2.0000e-005	1.2400e-003	0.0000	3.5033	3.5033	9.0000e-005	9.0000e-005	3.5331
Total	1.6300e-003	0.0112	0.0152	9.0000e-005	6.1000e-003	8.0000e-005	6.1900e-003	1.6600e-003	8.0000e-005	1.7400e-003	0.0000	8.0116	8.0116	1.8000e-004	7.6000e-004	8.2423

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	0.0824	0.6417	0.7260	1.2800e-003		0.0261	0.0261		0.0252	0.0252	0.0000	105.3344	105.3344	0.0175	0.0000	105.7730
Total	0.0824	0.6417	0.7260	1.2800e-003		0.0261	0.0261		0.0252	0.0252	0.0000	105.3344	105.3344	0.0175	0.0000	105.7730

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3.6 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	2.4000e-004	0.0103	3.1600e-003	5.0000e-005	1.5200e-003	6.0000e-005	1.5800e-003	4.4000e-004	6.0000e-005	5.0000e-004	0.0000	4.5082	4.5082	9.0000e-005	6.7000e-004	4.7092
Worker	1.3900e-003	9.1000e-004	0.0120	4.0000e-005	4.5800e-003	2.0000e-005	4.6100e-003	1.2200e-003	2.0000e-005	1.2400e-003	0.0000	3.5033	3.5033	9.0000e-005	9.0000e-005	3.5331
Total	1.6300e-003	0.0112	0.0152	9.0000e-005	6.1000e-003	8.0000e-005	6.1900e-003	1.6600e-003	8.0000e-005	1.7400e-003	0.0000	8.0116	8.0116	1.8000e-004	7.6000e-004	8.2423

3.6 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0556	0.4373	0.5225	9.3000e-004		0.0165	0.0165		0.0159	0.0159	0.0000	76.2855	76.2855	0.0125	0.0000	76.5969
Total	0.0556	0.4373	0.5225	9.3000e-004		0.0165	0.0165		0.0159	0.0159	0.0000	76.2855	76.2855	0.0125	0.0000	76.5969

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3.6 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	7.4400e-003	2.2500e-003	3.0000e-005	1.1000e-003	4.0000e-005	1.1500e-003	3.2000e-004	4.0000e-005	3.6000e-004	0.0000	3.2065	3.2065	7.0000e-005	4.7000e-004	3.3495
Worker	9.5000e-004	5.9000e-004	8.1700e-003	3.0000e-005	3.3200e-003	2.0000e-005	3.3300e-003	8.8000e-004	1.0000e-005	9.0000e-004	0.0000	2.4763	2.4763	6.0000e-005	6.0000e-005	2.4964
Total	1.1200e-003	8.0300e-003	0.0104	6.0000e-005	4.4200e-003	6.0000e-005	4.4800e-003	1.2000e-003	5.0000e-005	1.2600e-003	0.0000	5.6828	5.6828	1.3000e-004	5.3000e-004	5.8459

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0556	0.4373	0.5225	9.3000e-004		0.0165	0.0165		0.0159	0.0159	0.0000	76.2854	76.2854	0.0125	0.0000	76.5968
Total	0.0556	0.4373	0.5225	9.3000e-004		0.0165	0.0165		0.0159	0.0159	0.0000	76.2854	76.2854	0.0125	0.0000	76.5968

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3.6 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	7.4400e-003	2.2500e-003	3.0000e-005	1.1000e-003	4.0000e-005	1.1500e-003	3.2000e-004	4.0000e-005	3.6000e-004	0.0000	3.2065	3.2065	7.0000e-005	4.7000e-004	3.3495
Worker	9.5000e-004	5.9000e-004	8.1700e-003	3.0000e-005	3.3200e-003	2.0000e-005	3.3300e-003	8.8000e-004	1.0000e-005	9.0000e-004	0.0000	2.4763	2.4763	6.0000e-005	6.0000e-005	2.4964
Total	1.1200e-003	8.0300e-003	0.0104	6.0000e-005	4.4200e-003	6.0000e-005	4.4800e-003	1.2000e-003	5.0000e-005	1.2600e-003	0.0000	5.6828	5.6828	1.3000e-004	5.3000e-004	5.8459

3.7 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	0.0159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5800e-003	0.0646	0.0959	1.6000e-004		3.2300e-003	3.2300e-003		3.2300e-003	3.2300e-003	0.0000	13.5322	13.5322	7.6000e-004	0.0000	13.5513
Total	0.0255	0.0646	0.0959	1.6000e-004		3.2300e-003	3.2300e-003		3.2300e-003	3.2300e-003	0.0000	13.5322	13.5322	7.6000e-004	0.0000	13.5513

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3.7 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	2.5000e-004	1.7000e-004	2.2000e-003	1.0000e-005	8.4000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6403	0.6403	2.0000e-005	2.0000e-005	0.6457
Total	2.5000e-004	1.7000e-004	2.2000e-003	1.0000e-005	8.4000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6403	0.6403	2.0000e-005	2.0000e-005	0.6457

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5800e-003	0.0646	0.0959	1.6000e-004		3.2300e-003	3.2300e-003		3.2300e-003	3.2300e-003	0.0000	13.5322	13.5322	7.6000e-004	0.0000	13.5513
Total	0.0255	0.0646	0.0959	1.6000e-004		3.2300e-003	3.2300e-003		3.2300e-003	3.2300e-003	0.0000	13.5322	13.5322	7.6000e-004	0.0000	13.5513

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3.7 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	2.5000e-004	1.7000e-004	2.2000e-003	1.0000e-005	8.4000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6403	0.6403	2.0000e-005	2.0000e-005	0.6457
Total	2.5000e-004	1.7000e-004	2.2000e-003	1.0000e-005	8.4000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6403	0.6403	2.0000e-005	2.0000e-005	0.6457

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0141					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0300e-003	0.0538	0.0850	1.4000e-004		2.4200e-003	2.4200e-003		2.4200e-003	2.4200e-003	0.0000	12.0003	12.0003	6.5000e-004	0.0000	12.0167
Total	0.0222	0.0538	0.0850	1.4000e-004		2.4200e-003	2.4200e-003		2.4200e-003	2.4200e-003	0.0000	12.0003	12.0003	6.5000e-004	0.0000	12.0167

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3.7 Architectural Coating - 2025

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	2.1000e-004	1.3000e-004	1.8300e-003	1.0000e-005	7.4000e-004	0.0000	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.5542	0.5542	1.0000e-005	1.0000e-005	0.5587
Total	2.1000e-004	1.3000e-004	1.8300e-003	1.0000e-005	7.4000e-004	0.0000	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.5542	0.5542	1.0000e-005	1.0000e-005	0.5587

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0141					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0300e-003	0.0538	0.0850	1.4000e-004		2.4200e-003	2.4200e-003		2.4200e-003	2.4200e-003	0.0000	12.0003	12.0003	6.5000e-004	0.0000	12.0166
Total	0.0222	0.0538	0.0850	1.4000e-004		2.4200e-003	2.4200e-003		2.4200e-003	2.4200e-003	0.0000	12.0003	12.0003	6.5000e-004	0.0000	12.0166

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3.7 Architectural Coating - 2025

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	2.1000e-004	1.3000e-004	1.8300e-003	1.0000e-005	7.4000e-004	0.0000	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.5542	0.5542	1.0000e-005	1.0000e-005	0.5587
Total	2.1000e-004	1.3000e-004	1.8300e-003	1.0000e-005	7.4000e-004	0.0000	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.5542	0.5542	1.0000e-005	1.0000e-005	0.5587

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3895	0.4511	3.7695	8.0800e-003	0.8982	5.9200e-003	0.9041	0.2400	5.5100e-003	0.2455	0.0000	764.2708	764.2708	0.0472	0.0354	775.9924
Unmitigated	0.3895	0.4511	3.7695	8.0800e-003	0.8982	5.9200e-003	0.9041	0.2400	5.5100e-003	0.2455	0.0000	764.2708	764.2708	0.0472	0.0354	775.9924

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	910.98	910.98	910.98	2,436,714	2,436,714
Parking Lot	0.00	0.00	0.00		
Total	910.98	910.98	910.98	2,436,714	2,436,714

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive Thru	9.50	7.30	7.30	2.20	78.80	19.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.553839	0.058700	0.188468	0.120786	0.022796	0.005663	0.010629	0.007566	0.000983	0.000556	0.026354	0.000841	0.002820
Parking Lot	0.553839	0.058700	0.188468	0.120786	0.022796	0.005663	0.010629	0.007566	0.000983	0.000556	0.026354	0.000841	0.002820

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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	15.5616	15.5616	2.5200e-003	3.1000e-004	15.7155
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	15.5616	15.5616	2.5200e-003	3.1000e-004	15.7155
NaturalGas Mitigated	5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	55.6133	55.6133	1.0700e-003	1.0200e-003	55.9438
NaturalGas Unmitigated	5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	55.6133	55.6133	1.0700e-003	1.0200e-003	55.9438

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	1.04215e+006	5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	55.6133	55.6133	1.0700e-003	1.0200e-003	55.9438
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	55.6133	55.6133	1.0700e-003	1.0200e-003	55.9438

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	1.04215e+006	5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	55.6133	55.6133	1.0700e-003	1.0200e-003	55.9438
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	55.6133	55.6133	1.0700e-003	1.0200e-003	55.9438

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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	161751	14.9658	2.4200e-003	2.9000e-004	15.1138
Parking Lot	6440	0.5959	1.0000e-004	1.0000e-005	0.6018
Total		15.5616	2.5200e-003	3.0000e-004	15.7155

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	161751	14.9658	2.4200e-003	2.9000e-004	15.1138
Parking Lot	6440	0.5959	1.0000e-004	1.0000e-005	0.6018
Total		15.5616	2.5200e-003	3.0000e-004	15.7155

6.0 Area Detail

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0239	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Unmitigated	0.0239	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.0100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0208					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Total	0.0239	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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	3.0100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0208					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Total	0.0239	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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	1.2740	0.0499	1.1900e-003	2.8756
Unmitigated	1.2803	0.0499	1.1900e-003	2.8820

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	1.52677 / 0.0974537	1.2803	0.0499	1.1900e-003	2.8820
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.2803	0.0499	1.1900e-003	2.8820

Chick-fil-A @ Sutter Boulevard - Bay Area 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	1.52677 / 0.077963	1.2740	0.0499	1.1900e-003	2.8756
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.2740	0.0499	1.1900e-003	2.8756

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11.7613	0.6951	0.0000	29.1381
Unmitigated	11.7613	0.6951	0.0000	29.1381

Chick-fil-A @ Sutter Boulevard - Bay Area 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	57.94	11.7613	0.6951	0.0000	29.1381
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		11.7613	0.6951	0.0000	29.1381

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	57.94	11.7613	0.6951	0.0000	29.1381
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		11.7613	0.6951	0.0000	29.1381

9.0 Operational Offroad

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
----------------	--------

11.0 Vegetation

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Chick-fil-A @ Sutter Boulevard**

Bay Area AQMD Air District, Summer

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	46.00	Space	0.41	18,400.00	0
Fast Food Restaurant with Drive Thru	5.03	1000sqft	1.41	5,028.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	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 updated to represent total acreage of project site.

Construction Phase - Architectural coating assumed to start two weeks after building construction initiation and lasts for the same duration.

Demolition - Building square footage is equal to the existing building on-site.

Vehicle Trips - Updated to be consistent with the project-specific traffic report.

Water Mitigation - Compliant with MWELO.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblLandUse	LandUseSquareFeet	5,030.00	5,028.00
tblLandUse	LotAcreage	0.12	1.41

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PR_TP	29.00	100.00
tblVehicleTrips	ST_TR	616.12	181.11
tblVehicleTrips	SU_TR	472.58	181.11
tblVehicleTrips	WD_TR	470.95	181.11

2.0 Emissions Summary

Chick-fil-A @ Sutter Boulevard - Bay Area 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					
2024	1.9359	14.1074	14.6483	0.0267	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,517.685 1	2,517.685 1	0.6471	0.0180	2,537.896 8
2025	1.8287	11.7443	14.5517	0.0266	0.1257	0.4455	0.5712	0.0340	0.4314	0.4654	0.0000	2,450.947 0	2,450.947 0	0.3458	0.0142	2,463.835 9
Maximum	1.9359	14.1074	14.6483	0.0267	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,517.685 1	2,517.685 1	0.6471	0.0180	2,537.896 8

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					
2024	1.9359	14.1074	14.6483	0.0267	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,517.685 1	2,517.685 1	0.6471	0.0180	2,537.896 8
2025	1.8287	11.7443	14.5517	0.0266	0.1257	0.4455	0.5712	0.0340	0.4314	0.4654	0.0000	2,450.947 0	2,450.947 0	0.3458	0.0142	2,463.835 9
Maximum	1.9359	14.1074	14.6483	0.0267	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,517.685 1	2,517.685 1	0.6471	0.0180	2,537.896 8

Chick-fil-A @ Sutter Boulevard - Bay Area 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	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Chick-fil-A @ Sutter Boulevard - Bay Area 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	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Energy	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Mobile	2.3673	2.2815	20.7417	0.0468	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,879.4818	4,879.4818	0.2687	0.2037	4,946.8904
Total	2.5292	2.5615	20.9820	0.0485	5.1290	0.0538	5.1828	1.3661	0.0516	1.4177		5,215.4007	5,215.4007	0.2752	0.2098	5,284.8061

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	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Energy	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Mobile	2.3673	2.2815	20.7417	0.0468	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,879.4818	4,879.4818	0.2687	0.2037	4,946.8904
Total	2.5292	2.5615	20.9820	0.0485	5.1290	0.0538	5.1828	1.3661	0.0516	1.4177		5,215.4007	5,215.4007	0.2752	0.2098	5,284.8061

Chick-fil-A @ Sutter Boulevard - Bay Area 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	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/3/2024	6/28/2024	5	20	
2	Site Preparation	Site Preparation	6/29/2024	7/2/2024	5	2	
3	Grading	Grading	7/3/2024	7/8/2024	5	4	
4	Paving	Paving	7/9/2024	7/22/2024	5	10	
5	Building Construction	Building Construction	7/23/2024	4/28/2025	5	200	
6	Architectural Coating	Architectural Coating	8/6/2024	5/12/2025	5	200	

Acres of Grading (Site Preparation Phase): 1.88**Acres of Grading (Grading Phase): 4****Acres of Paving: 0.41****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,542; Non-Residential Outdoor: 2,514; Striped Parking Area: 1,104 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	31.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

3.2 Demolition - 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					
Fugitive Dust					0.3396	0.0000	0.3396	0.0514	0.0000	0.0514			0.0000			0.0000
Off-Road	1.4397	13.8867	13.4879	0.0241		0.6311	0.6311		0.5895	0.5895		2,324.945 9	2,324.945 9	0.5884		2,339.656 2
Total	1.4397	13.8867	13.4879	0.0241	0.3396	0.6311	0.9707	0.0514	0.5895	0.6409		2,324.945 9	2,324.945 9	0.5884		2,339.656 2

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	3.3100e-003	0.2027	0.0495	9.2000e-004	0.0271	1.7100e-003	0.0288	7.4300e-003	1.6400e-003	9.0700e-003		100.3403	100.3403	3.3600e-003	0.0159	105.1632
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	0.0329	0.0180	0.2896	9.0000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		92.3990	92.3990	2.1600e-003	2.1000e-003	93.0774
Total	0.0362	0.2207	0.3391	1.8200e-003	0.1339	2.2100e-003	0.1361	0.0358	2.1000e-003	0.0379		192.7393	192.7393	5.5200e-003	0.0180	198.2406

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

3.2 Demolition - 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					
Fugitive Dust					0.3396	0.0000	0.3396	0.0514	0.0000	0.0514			0.0000			0.0000
Off-Road	1.4397	13.8867	13.4879	0.0241		0.6311	0.6311		0.5895	0.5895	0.0000	2,324.945 9	2,324.945 9	0.5884		2,339.656 2
Total	1.4397	13.8867	13.4879	0.0241	0.3396	0.6311	0.9707	0.0514	0.5895	0.6409	0.0000	2,324.945 9	2,324.945 9	0.5884		2,339.656 2

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	3.3100e-003	0.2027	0.0495	9.2000e-004	0.0271	1.7100e-003	0.0288	7.4300e-003	1.6400e-003	9.0700e-003		100.3403	100.3403	3.3600e-003	0.0159	105.1632
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	0.0329	0.0180	0.2896	9.0000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		92.3990	92.3990	2.1600e-003	2.1000e-003	93.0774
Total	0.0362	0.2207	0.3391	1.8200e-003	0.1339	2.2100e-003	0.1361	0.0358	2.1000e-003	0.0379		192.7393	192.7393	5.5200e-003	0.0180	198.2406

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 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					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1067	11.8407	6.6317	0.0172		0.4823	0.4823		0.4437	0.4437		1,665.8826	1,665.8826	0.5388		1,679.3521
Total	1.1067	11.8407	6.6317	0.0172	6.2662	0.4823	6.7485	3.0041	0.4437	3.4478		1,665.8826	1,665.8826	0.5388		1,679.3521

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	0.0202	0.0111	0.1782	5.5000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		56.8609	56.8609	1.3300e-003	1.2900e-003	57.2784
Total	0.0202	0.0111	0.1782	5.5000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		56.8609	56.8609	1.3300e-003	1.2900e-003	57.2784

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 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					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1067	11.8407	6.6317	0.0172		0.4823	0.4823		0.4437	0.4437	0.0000	1,665.8826	1,665.8826	0.5388		1,679.3521
Total	1.1067	11.8407	6.6317	0.0172	6.2662	0.4823	6.7485	3.0041	0.4437	3.4478	0.0000	1,665.8826	1,665.8826	0.5388		1,679.3521

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	0.0202	0.0111	0.1782	5.5000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		56.8609	56.8609	1.3300e-003	1.2900e-003	57.2784
Total	0.0202	0.0111	0.1782	5.5000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		56.8609	56.8609	1.3300e-003	1.2900e-003	57.2784

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

3.4 Grading - 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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3015	13.8178	8.6998	0.0206		0.5722	0.5722		0.5265	0.5265		1,995.580 3	1,995.580 3	0.6454		2,011.715 5
Total	1.3015	13.8178	8.6998	0.0206	7.0826	0.5722	7.6548	3.4247	0.5265	3.9512		1,995.580 3	1,995.580 3	0.6454		2,011.715 5

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	0.0253	0.0139	0.2228	6.9000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		71.0761	71.0761	1.6600e-003	1.6100e-003	71.5980
Total	0.0253	0.0139	0.2228	6.9000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		71.0761	71.0761	1.6600e-003	1.6100e-003	71.5980

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3015	13.8178	8.6998	0.0206		0.5722	0.5722		0.5265	0.5265	0.0000	1,995.580 3	1,995.580 3	0.6454		2,011.715 5
Total	1.3015	13.8178	8.6998	0.0206	7.0826	0.5722	7.6548	3.4247	0.5265	3.9512	0.0000	1,995.580 3	1,995.580 3	0.6454		2,011.715 5

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	0.0253	0.0139	0.2228	6.9000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		71.0761	71.0761	1.6600e-003	1.6100e-003	71.5980
Total	0.0253	0.0139	0.2228	6.9000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		71.0761	71.0761	1.6600e-003	1.6100e-003	71.5980

Chick-fil-A @ Sutter Boulevard - Bay Area 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 - 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	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.868 8	1,297.868 8	0.4114		1,308.154 7
Paving	0.1074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7254	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.868 8	1,297.868 8	0.4114		1,308.154 7

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	0.0329	0.0180	0.2896	9.0000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		92.3990	92.3990	2.1600e-003	2.1000e-003	93.0774
Total	0.0329	0.0180	0.2896	9.0000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		92.3990	92.3990	2.1600e-003	2.1000e-003	93.0774

Chick-fil-A @ Sutter Boulevard - Bay Area 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 - 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	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.868 8	1,297.868 8	0.4114		1,308.154 7
Paving	0.1074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7254	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.868 8	1,297.868 8	0.4114		1,308.154 7

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	0.0329	0.0180	0.2896	9.0000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		92.3990	92.3990	2.1600e-003	2.1000e-003	93.0774
Total	0.0329	0.0180	0.2896	9.0000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		92.3990	92.3990	2.1600e-003	2.1000e-003	93.0774

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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		2,001.921 4	2,001.921 4	0.3334		2,010.256 3
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.921 4	2,001.921 4	0.3334		2,010.256 3

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	4.2300e-003	0.1716	0.0536	8.0000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		85.6278	85.6278	1.7700e-003	0.0127	89.4438
Worker	0.0253	0.0139	0.2228	6.9000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		71.0761	71.0761	1.6600e-003	1.6100e-003	71.5980
Total	0.0295	0.1855	0.2764	1.4900e-003	0.1092	1.4400e-003	0.1107	0.0296	1.3600e-003	0.0310		156.7039	156.7039	3.4300e-003	0.0143	161.0418

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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	2,001.921 4	2,001.921 4	0.3334		2,010.256 3
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.921 4	2,001.921 4	0.3334		2,010.256 3

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	4.2300e-003	0.1716	0.0536	8.0000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		85.6278	85.6278	1.7700e-003	0.0127	89.4438
Worker	0.0253	0.0139	0.2228	6.9000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		71.0761	71.0761	1.6600e-003	1.6100e-003	71.5980
Total	0.0295	0.1855	0.2764	1.4900e-003	0.1092	1.4400e-003	0.1107	0.0296	1.3600e-003	0.0310		156.7039	156.7039	3.4300e-003	0.0143	161.0418

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Building Construction - 2025****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	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.1524	2,002.1524	0.3269		2,010.3248
Total	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.1524	2,002.1524	0.3269		2,010.3248

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	4.1300e-003	0.1710	0.0527	7.8000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		84.1039	84.1039	1.7600e-003	0.0124	87.8510
Worker	0.0237	0.0125	0.2088	6.7000e-004	0.0822	3.7000e-004	0.0825	0.0218	3.4000e-004	0.0221		69.3688	69.3688	1.5100e-003	1.5100e-003	69.8569
Total	0.0279	0.1835	0.2615	1.4500e-003	0.1092	1.4200e-003	0.1107	0.0296	1.3400e-003	0.0309		153.4727	153.4727	3.2700e-003	0.0139	157.7079

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Building Construction - 2025****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	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785	0.0000	2,002.1524	2,002.1524	0.3269		2,010.3248
Total	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785	0.0000	2,002.1524	2,002.1524	0.3269		2,010.3248

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	4.1300e-003	0.1710	0.0527	7.8000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		84.1039	84.1039	1.7600e-003	0.0124	87.8510
Worker	0.0237	0.0125	0.2088	6.7000e-004	0.0822	3.7000e-004	0.0825	0.0218	3.4000e-004	0.0221		69.3688	69.3688	1.5100e-003	1.5100e-003	69.8569
Total	0.0279	0.1835	0.2615	1.4500e-003	0.1092	1.4200e-003	0.1107	0.0296	1.3400e-003	0.0309		153.4727	153.4727	3.2700e-003	0.0139	157.7079

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 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	0.3006					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	0.4813	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	5.0500e-003	2.7700e-003	0.0446	1.4000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		14.2152	14.2152	3.3000e-004	3.2000e-004	14.3196
Total	5.0500e-003	2.7700e-003	0.0446	1.4000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		14.2152	14.2152	3.3000e-004	3.2000e-004	14.3196

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

3.7 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	0.3006					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	0.4813	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	5.0500e-003	2.7700e-003	0.0446	1.4000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		14.2152	14.2152	3.3000e-004	3.2000e-004	14.3196
Total	5.0500e-003	2.7700e-003	0.0446	1.4000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		14.2152	14.2152	3.3000e-004	3.2000e-004	14.3196

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2025****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	0.3006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	0.4714	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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	4.7500e-003	2.5000e-003	0.0418	1.3000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.8738	13.8738	3.0000e-004	3.0000e-004	13.9714
Total	4.7500e-003	2.5000e-003	0.0418	1.3000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.8738	13.8738	3.0000e-004	3.0000e-004	13.9714

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2025****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	0.3006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	0.4714	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

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	4.7500e-003	2.5000e-003	0.0418	1.3000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.8738	13.8738	3.0000e-004	3.0000e-004	13.9714
Total	4.7500e-003	2.5000e-003	0.0418	1.3000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.8738	13.8738	3.0000e-004	3.0000e-004	13.9714

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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	2.3673	2.2815	20.7417	0.0468	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,879.4818	4,879.4818	0.2687	0.2037	4,946.8904
Unmitigated	2.3673	2.2815	20.7417	0.0468	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,879.4818	4,879.4818	0.2687	0.2037	4,946.8904

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	910.98	910.98	910.98	2,436,714	2,436,714
Parking Lot	0.00	0.00	0.00		
Total	910.98	910.98	910.98	2,436,714	2,436,714

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive Thru	9.50	7.30	7.30	2.20	78.80	19.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.553839	0.058700	0.188468	0.120786	0.022796	0.005663	0.010629	0.007566	0.000983	0.000556	0.026354	0.000841	0.002820
Parking Lot	0.553839	0.058700	0.188468	0.120786	0.022796	0.005663	0.010629	0.007566	0.000983	0.000556	0.026354	0.000841	0.002820

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	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
NaturalGas Unmitigated	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	2855.22	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038

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	2.85522	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038

6.0 Area Detail

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Unmitigated	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Total	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119

Chick-fil-A @ Sutter Boulevard - Bay Area 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	0.0165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Total	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119

7.0 Water Detail**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

Chick-fil-A @ Sutter Boulevard - Bay Area 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
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Chick-fil-A @ Sutter Boulevard**

Bay Area AQMD Air District, Winter

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	46.00	Space	0.41	18,400.00	0
Fast Food Restaurant with Drive Thru	5.03	1000sqft	1.41	5,028.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	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 updated to represent total acreage of project site.

Construction Phase - Architectural coating assumed to start two weeks after building construction initiation and lasts for the same duration.

Demolition - Building square footage is equal to the existing building on-site.

Vehicle Trips - Updated to be consistent with the project-specific traffic report.

Water Mitigation - Compliant with MWELO.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblLandUse	LandUseSquareFeet	5,030.00	5,028.00
tblLandUse	LotAcreage	0.12	1.41

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PR_TP	29.00	100.00
tblVehicleTrips	ST_TR	616.12	181.11
tblVehicleTrips	SU_TR	472.58	181.11
tblVehicleTrips	WD_TR	470.95	181.11

2.0 Emissions Summary

Chick-fil-A @ Sutter Boulevard - Bay Area 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					
2024	1.9366	14.1233	14.6398	0.0266	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,511.245 4	2,511.245 4	0.6473	0.0183	2,531.563 1
2025	1.8294	11.7577	14.5445	0.0266	0.1257	0.4455	0.5712	0.0340	0.4315	0.4654	0.0000	2,445.195 4	2,445.195 4	0.3461	0.0146	2,458.180 7
Maximum	1.9366	14.1233	14.6398	0.0266	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,511.245 4	2,511.245 4	0.6473	0.0183	2,531.563 1

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					
2024	1.9366	14.1233	14.6398	0.0266	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,511.245 4	2,511.245 4	0.6473	0.0183	2,531.563 1
2025	1.8294	11.7577	14.5445	0.0266	0.1257	0.4455	0.5712	0.0340	0.4315	0.4654	0.0000	2,445.195 4	2,445.195 4	0.3461	0.0146	2,458.180 7
Maximum	1.9366	14.1233	14.6398	0.0266	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,511.245 4	2,511.245 4	0.6473	0.0183	2,531.563 1

Chick-fil-A @ Sutter Boulevard - Bay Area 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	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Chick-fil-A @ Sutter Boulevard - Bay Area 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	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Energy	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Mobile	2.1458	2.6201	22.0407	0.0442	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,606.9209	4,606.9209	0.3015	0.2226	4,680.7982
Total	2.3077	2.9001	22.2811	0.0459	5.1290	0.0539	5.1828	1.3661	0.0516	1.4177		4,942.8397	4,942.8397	0.3080	0.2288	5,018.7139

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	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Energy	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Mobile	2.1458	2.6201	22.0407	0.0442	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,606.9209	4,606.9209	0.3015	0.2226	4,680.7982
Total	2.3077	2.9001	22.2811	0.0459	5.1290	0.0539	5.1828	1.3661	0.0516	1.4177		4,942.8397	4,942.8397	0.3080	0.2288	5,018.7139

Chick-fil-A @ Sutter Boulevard - Bay Area 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	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/3/2024	6/28/2024	5	20	
2	Site Preparation	Site Preparation	6/29/2024	7/2/2024	5	2	
3	Grading	Grading	7/3/2024	7/8/2024	5	4	
4	Paving	Paving	7/9/2024	7/22/2024	5	10	
5	Building Construction	Building Construction	7/23/2024	4/28/2025	5	200	
6	Architectural Coating	Architectural Coating	8/6/2024	5/12/2025	5	200	

Acres of Grading (Site Preparation Phase): 1.88**Acres of Grading (Grading Phase): 4****Acres of Paving: 0.41****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,542; Non-Residential Outdoor: 2,514; Striped Parking Area: 1,104 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	31.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

3.2 Demolition - 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					
Fugitive Dust					0.3396	0.0000	0.3396	0.0514	0.0000	0.0514			0.0000			0.0000
Off-Road	1.4397	13.8867	13.4879	0.0241		0.6311	0.6311		0.5895	0.5895		2,324.945 9	2,324.945 9	0.5884		2,339.656 2
Total	1.4397	13.8867	13.4879	0.0241	0.3396	0.6311	0.9707	0.0514	0.5895	0.6409		2,324.945 9	2,324.945 9	0.5884		2,339.656 2

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	3.1000e-003	0.2144	0.0501	9.2000e-004	0.0271	1.7200e-003	0.0288	7.4300e-003	1.6400e-003	9.0700e-003		100.4362	100.4362	3.3500e-003	0.0159	105.2636
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	0.0338	0.0223	0.2784	8.3000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		85.8634	85.8634	2.4600e-003	2.4100e-003	86.6434
Total	0.0369	0.2366	0.3285	1.7500e-003	0.1339	2.2200e-003	0.1361	0.0358	2.1000e-003	0.0379		186.2995	186.2995	5.8100e-003	0.0183	191.9069

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

3.2 Demolition - 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					
Fugitive Dust					0.3396	0.0000	0.3396	0.0514	0.0000	0.0514			0.0000			0.0000
Off-Road	1.4397	13.8867	13.4879	0.0241		0.6311	0.6311		0.5895	0.5895	0.0000	2,324.945 9	2,324.945 9	0.5884		2,339.656 2
Total	1.4397	13.8867	13.4879	0.0241	0.3396	0.6311	0.9707	0.0514	0.5895	0.6409	0.0000	2,324.945 9	2,324.945 9	0.5884		2,339.656 2

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	3.1000e-003	0.2144	0.0501	9.2000e-004	0.0271	1.7200e-003	0.0288	7.4300e-003	1.6400e-003	9.0700e-003		100.4362	100.4362	3.3500e-003	0.0159	105.2636
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	0.0338	0.0223	0.2784	8.3000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		85.8634	85.8634	2.4600e-003	2.4100e-003	86.6434
Total	0.0369	0.2366	0.3285	1.7500e-003	0.1339	2.2200e-003	0.1361	0.0358	2.1000e-003	0.0379		186.2995	186.2995	5.8100e-003	0.0183	191.9069

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

3.3 Site Preparation - 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					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1067	11.8407	6.6317	0.0172		0.4823	0.4823		0.4437	0.4437		1,665.8826	1,665.8826	0.5388		1,679.3521
Total	1.1067	11.8407	6.6317	0.0172	6.2662	0.4823	6.7485	3.0041	0.4437	3.4478		1,665.8826	1,665.8826	0.5388		1,679.3521

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	0.0208	0.0137	0.1713	5.1000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		52.8390	52.8390	1.5200e-003	1.4800e-003	53.3190
Total	0.0208	0.0137	0.1713	5.1000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		52.8390	52.8390	1.5200e-003	1.4800e-003	53.3190

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

3.3 Site Preparation - 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					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1067	11.8407	6.6317	0.0172		0.4823	0.4823		0.4437	0.4437	0.0000	1,665.8826	1,665.8826	0.5388		1,679.3521
Total	1.1067	11.8407	6.6317	0.0172	6.2662	0.4823	6.7485	3.0041	0.4437	3.4478	0.0000	1,665.8826	1,665.8826	0.5388		1,679.3521

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	0.0208	0.0137	0.1713	5.1000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		52.8390	52.8390	1.5200e-003	1.4800e-003	53.3190
Total	0.0208	0.0137	0.1713	5.1000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		52.8390	52.8390	1.5200e-003	1.4800e-003	53.3190

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

3.4 Grading - 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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3015	13.8178	8.6998	0.0206		0.5722	0.5722		0.5265	0.5265		1,995.580 3	1,995.580 3	0.6454		2,011.715 5
Total	1.3015	13.8178	8.6998	0.0206	7.0826	0.5722	7.6548	3.4247	0.5265	3.9512		1,995.580 3	1,995.580 3	0.6454		2,011.715 5

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	0.0260	0.0171	0.2141	6.4000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.0487	66.0487	1.9000e-003	1.8500e-003	66.6488
Total	0.0260	0.0171	0.2141	6.4000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.0487	66.0487	1.9000e-003	1.8500e-003	66.6488

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

3.4 Grading - 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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3015	13.8178	8.6998	0.0206		0.5722	0.5722		0.5265	0.5265	0.0000	1,995.580 3	1,995.580 3	0.6454		2,011.715 5
Total	1.3015	13.8178	8.6998	0.0206	7.0826	0.5722	7.6548	3.4247	0.5265	3.9512	0.0000	1,995.580 3	1,995.580 3	0.6454		2,011.715 5

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	0.0260	0.0171	0.2141	6.4000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.0487	66.0487	1.9000e-003	1.8500e-003	66.6488
Total	0.0260	0.0171	0.2141	6.4000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.0487	66.0487	1.9000e-003	1.8500e-003	66.6488

Chick-fil-A @ Sutter Boulevard - Bay Area 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 - 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	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.868 ₈	1,297.868 ₈	0.4114		1,308.154 ₇
Paving	0.1074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7254	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.868₈	1,297.868₈	0.4114		1,308.154₇

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	0.0338	0.0223	0.2784	8.3000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		85.8634	85.8634	2.4600e-003	2.4100e-003	86.6434
Total	0.0338	0.0223	0.2784	8.3000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		85.8634	85.8634	2.4600e-003	2.4100e-003	86.6434

Chick-fil-A @ Sutter Boulevard - Bay Area 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 - 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	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.868 8	1,297.868 8	0.4114		1,308.154 7
Paving	0.1074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7254	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.868 8	1,297.868 8	0.4114		1,308.154 7

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	0.0338	0.0223	0.2784	8.3000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		85.8634	85.8634	2.4600e-003	2.4100e-003	86.6434
Total	0.0338	0.0223	0.2784	8.3000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		85.8634	85.8634	2.4600e-003	2.4100e-003	86.6434

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

3.6 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	4.0800e-003	0.1816	0.0555	8.0000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0100e-003	8.8100e-003		85.7531	85.7531	1.7600e-003	0.0127	89.5783
Worker	0.0260	0.0171	0.2141	6.4000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.0487	66.0487	1.9000e-003	1.8500e-003	66.6488
Total	0.0301	0.1987	0.2696	1.4400e-003	0.1092	1.4400e-003	0.1107	0.0296	1.3700e-003	0.0310		151.8018	151.8018	3.6600e-003	0.0145	156.2270

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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	2,001.921 4	2,001.921 4	0.3334		2,010.256 3
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.921 4	2,001.921 4	0.3334		2,010.256 3

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	4.0800e-003	0.1816	0.0555	8.0000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0100e-003	8.8100e-003		85.7531	85.7531	1.7600e-003	0.0127	89.5783
Worker	0.0260	0.0171	0.2141	6.4000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.0487	66.0487	1.9000e-003	1.8500e-003	66.6488
Total	0.0301	0.1987	0.2696	1.4400e-003	0.1092	1.4400e-003	0.1107	0.0296	1.3700e-003	0.0310		151.8018	151.8018	3.6600e-003	0.0145	156.2270

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

3.6 Building Construction - 2025

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	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.1524	2,002.1524	0.3269		2,010.3248
Total	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.1524	2,002.1524	0.3269		2,010.3248

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	3.9700e-003	0.1810	0.0545	7.8000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0100e-003	8.8000e-003		84.2294	84.2294	1.7500e-003	0.0125	87.9854
Worker	0.0245	0.0154	0.2013	6.2000e-004	0.0822	3.7000e-004	0.0825	0.0218	3.4000e-004	0.0221		64.4712	64.4712	1.7200e-003	1.7400e-003	65.0322
Total	0.0285	0.1964	0.2558	1.4000e-003	0.1092	1.4200e-003	0.1107	0.0296	1.3500e-003	0.0309		148.7006	148.7006	3.4700e-003	0.0142	153.0176

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Building Construction - 2025****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	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785	0.0000	2,002.1524	2,002.1524	0.3269		2,010.3248
Total	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785	0.0000	2,002.1524	2,002.1524	0.3269		2,010.3248

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	3.9700e-003	0.1810	0.0545	7.8000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0100e-003	8.8000e-003		84.2294	84.2294	1.7500e-003	0.0125	87.9854
Worker	0.0245	0.0154	0.2013	6.2000e-004	0.0822	3.7000e-004	0.0825	0.0218	3.4000e-004	0.0221		64.4712	64.4712	1.7200e-003	1.7400e-003	65.0322
Total	0.0285	0.1964	0.2558	1.4000e-003	0.1092	1.4200e-003	0.1107	0.0296	1.3500e-003	0.0309		148.7006	148.7006	3.4700e-003	0.0142	153.0176

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 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	0.3006					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	0.4813	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	5.2000e-003	3.4200e-003	0.0428	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.2098	13.2098	3.8000e-004	3.7000e-004	13.3298
Total	5.2000e-003	3.4200e-003	0.0428	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.2098	13.2098	3.8000e-004	3.7000e-004	13.3298

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 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	0.3006					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	0.4813	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	5.2000e-003	3.4200e-003	0.0428	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.2098	13.2098	3.8000e-004	3.7000e-004	13.3298
Total	5.2000e-003	3.4200e-003	0.0428	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.2098	13.2098	3.8000e-004	3.7000e-004	13.3298

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2025****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	0.3006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	0.4714	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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	4.9000e-003	3.0800e-003	0.0403	1.2000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		12.8942	12.8942	3.4000e-004	3.5000e-004	13.0065
Total	4.9000e-003	3.0800e-003	0.0403	1.2000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		12.8942	12.8942	3.4000e-004	3.5000e-004	13.0065

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2025****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	0.3006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	0.4714	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

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	4.9000e-003	3.0800e-003	0.0403	1.2000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		12.8942	12.8942	3.4000e-004	3.5000e-004	13.0065
Total	4.9000e-003	3.0800e-003	0.0403	1.2000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		12.8942	12.8942	3.4000e-004	3.5000e-004	13.0065

Chick-fil-A @ Sutter Boulevard - Bay Area 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	2.1458	2.6201	22.0407	0.0442	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,606.9209	4,606.9209	0.3015	0.2226	4,680.7982
Unmitigated	2.1458	2.6201	22.0407	0.0442	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,606.9209	4,606.9209	0.3015	0.2226	4,680.7982

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	910.98	910.98	910.98	2,436,714	2,436,714
Parking Lot	0.00	0.00	0.00		
Total	910.98	910.98	910.98	2,436,714	2,436,714

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.553839	0.058700	0.188468	0.120786	0.022796	0.005663	0.010629	0.007566	0.000983	0.000556	0.026354	0.000841	0.002820
Parking Lot	0.553839	0.058700	0.188468	0.120786	0.022796	0.005663	0.010629	0.007566	0.000983	0.000556	0.026354	0.000841	0.002820

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	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
NaturalGas Unmitigated	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	2855.22	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038

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	2.85522	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038

6.0 Area Detail

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

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	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Unmitigated	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Total	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119

Chick-fil-A @ Sutter Boulevard - Bay Area 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	0.0165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Total	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119

7.0 Water Detail**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Chick-fil-A @ Sutter Boulevard**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied****Bay Area 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
Demolition	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

Chick-fil-A @ Sutter Boulevard**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
Concrete/Industrial Saws	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
Generator Sets	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
Paving Equipment	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	3	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	8	No Change	0.00
Welders	Diesel	No Change	0	3	No Change	0.00

Chick-fil-A @ Sutter Boulevard**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	1.76100E-002	1.18440E-001	1.80970E-001	3.00000E-004	5.65000E-003	5.65000E-003	0.00000E+000	2.55325E+001	2.55325E+001	1.42000E-003	0.00000E+000	2.55680E+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
Concrete/Industrial Saws	3.13000E-003	2.41400E-002	3.65000E-002	6.00000E-005	1.11000E-003	1.11000E-003	0.00000E+000	5.37656E+000	5.37656E+000	2.60000E-004	0.00000E+000	5.38295E+000
Cranes	2.42800E-002	2.52230E-001	1.31900E-001	4.30000E-004	1.05800E-002	9.74000E-003	0.00000E+000	3.80212E+001	3.80212E+001	1.23000E-002	0.00000E+000	3.83286E+001
Forklifts	6.83000E-003	6.42200E-002	8.52700E-002	1.10000E-004	3.60000E-003	3.31000E-003	0.00000E+000	1.00719E+001	1.00719E+001	3.26000E-003	0.00000E+000	1.01533E+001
Generator Sets	2.77200E-002	2.48190E-001	3.66200E-001	6.60000E-004	1.04300E-002	1.04300E-002	0.00000E+000	5.65208E+001	5.65208E+001	2.20000E-003	0.00000E+000	5.65758E+001
Graders	1.06000E-003	1.24700E-002	4.97000E-003	2.00000E-005	4.00000E-004	3.70000E-004	0.00000E+000	1.74318E+000	1.74318E+000	5.60000E-004	0.00000E+000	1.75727E+000
Pavers	6.90000E-004	6.53000E-003	1.08500E-002	2.00000E-005	3.10000E-004	2.80000E-004	0.00000E+000	1.54844E+000	1.54844E+000	5.00000E-004	0.00000E+000	1.56096E+000
Paving Equipment	8.20000E-004	7.48000E-003	1.28500E-002	2.00000E-005	3.60000E-004	3.30000E-004	0.00000E+000	1.78927E+000	1.78927E+000	5.80000E-004	0.00000E+000	1.80373E+000
Rollers	6.40000E-004	6.67000E-003	8.09000E-003	1.00000E-005	3.50000E-004	3.20000E-004	0.00000E+000	1.00869E+000	1.00869E+000	3.30000E-004	0.00000E+000	1.01684E+000
Rubber Tired Dozers	8.95000E-003	9.17700E-002	4.03100E-002	1.10000E-004	4.13000E-003	3.80000E-003	0.00000E+000	9.65914E+000	9.65914E+000	3.12000E-003	0.00000E+000	9.73724E+000
Tractors/Loaders/Backhoes	1.61100E-002	1.62260E-001	2.55790E-001	3.60000E-004	7.22000E-003	6.64000E-003	0.00000E+000	3.13536E+001	3.13536E+001	1.01400E-002	0.00000E+000	3.16071E+001
Welders	6.87300E-002	4.09350E-001	4.97590E-001	7.70000E-004	1.34100E-002	1.34100E-002	0.00000E+000	5.64662E+001	5.64662E+001	5.60000E-003	0.00000E+000	5.66061E+001

Chick-fil-A @ Sutter Boulevard**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	1.76100E-002	1.18440E-001	1.80970E-001	3.00000E-004	5.65000E-003	5.65000E-003	0.00000E+000	2.55325E+001	2.55325E+001	1.42000E-003	0.00000E+000	2.55679E+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
Concrete/Industrial Saws	3.13000E-003	2.41400E-002	3.65000E-002	6.00000E-005	1.11000E-003	1.11000E-003	0.00000E+000	5.37656E+000	5.37656E+000	2.60000E-004	0.00000E+000	5.38294E+000
Cranes	2.42800E-002	2.52230E-001	1.31900E-001	4.30000E-004	1.05800E-002	9.74000E-003	0.00000E+000	3.80211E+001	3.80211E+001	1.23000E-002	0.00000E+000	3.83285E+001
Forklifts	6.83000E-003	6.42200E-002	8.52700E-002	1.10000E-004	3.60000E-003	3.31000E-003	0.00000E+000	1.00718E+001	1.00718E+001	3.26000E-003	0.00000E+000	1.01533E+001
Generator Sets	2.77200E-002	2.48190E-001	3.66200E-001	6.60000E-004	1.04300E-002	1.04300E-002	0.00000E+000	5.65207E+001	5.65207E+001	2.20000E-003	0.00000E+000	5.65758E+001
Graders	1.06000E-003	1.24700E-002	4.97000E-003	2.00000E-005	4.00000E-004	3.70000E-004	0.00000E+000	1.74317E+000	1.74317E+000	5.60000E-004	0.00000E+000	1.75727E+000
Pavers	6.90000E-004	6.53000E-003	1.08500E-002	2.00000E-005	3.10000E-004	2.80000E-004	0.00000E+000	1.54843E+000	1.54843E+000	5.00000E-004	0.00000E+000	1.56095E+000
Paving Equipment	8.20000E-004	7.48000E-003	1.28500E-002	2.00000E-005	3.60000E-004	3.30000E-004	0.00000E+000	1.78926E+000	1.78926E+000	5.80000E-004	0.00000E+000	1.80373E+000
Rollers	6.40000E-004	6.67000E-003	8.09000E-003	1.00000E-005	3.50000E-004	3.20000E-004	0.00000E+000	1.00869E+000	1.00869E+000	3.30000E-004	0.00000E+000	1.01684E+000
Rubber Tired Dozers	8.95000E-003	9.17700E-002	4.03100E-002	1.10000E-004	4.13000E-003	3.80000E-003	0.00000E+000	9.65913E+000	9.65913E+000	3.12000E-003	0.00000E+000	9.73723E+000
Tractors/Loaders/Balckhoes	1.61100E-002	1.62260E-001	2.55790E-001	3.60000E-004	7.22000E-003	6.64000E-003	0.00000E+000	3.13535E+001	3.13535E+001	1.01400E-002	0.00000E+000	3.16071E+001
Welders	6.87300E-002	4.09350E-001	4.97590E-001	7.70000E-004	1.34100E-002	1.34100E-002	0.00000E+000	5.64661E+001	5.64661E+001	5.60000E-003	0.00000E+000	5.66060E+001

Chick-fil-A @ Sutter Boulevard**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
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	1.17334E-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
Concrete/Industrial Saws	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	1.85772E-006
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	1.06052E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	5.73664E-006	5.73664E-006	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	6.45811E-006	6.45811E-006	0.00000E+000	0.00000E+000	6.40631E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	5.58887E-006	5.58887E-006	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	1.03529E-006	1.03529E-006	0.00000E+000	0.00000E+000	1.02699E-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	9.56829E-007	9.56829E-007	0.00000E+000	0.00000E+000	9.49154E-007
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	1.23662E-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	
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Chick-fil-A @ Sutter Boulevard**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
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				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		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	0.01	0.00	0.01	0.00	0.00	0.00
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	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

Chick-fil-A @ Sutter Boulevard**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	0.79	0.49	0.00	0.00	0.22
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	0.10	0.31		
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			

Chick-fil-A @ Sutter Boulevard**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

Chick-fil-A @ Sutter Boulevard**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)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
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		

Chick-fil-A @ Sutter Boulevard**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
Yes	Apply Water Conservation on Strategy	0.00	20.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
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	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Chick-fil-A @ Sutter Boulevard

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	

Appendix C

Environmental Noise and Vibration Assessment

Environmental Noise & Vibration Assessment

Chick-fil-A Restaurant

Morgan Hill, California

BAC Job # 2023-011

Prepared For:

Raney Planning & Management, Inc.

Attn: Malena Garcia
1501 Sports Drive, Suite A
Sacramento, CA, 95834

Prepared By:

Bollard Acoustical Consultants, Inc.



Dario Gotchet, Principal Consultant

May 1, 2023



CEQA Checklist

NOISE AND VIBRATION – Would the Project Result in:	NA – Not Applicable	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X	
b) Generation of excessive groundborne vibration or groundborne noise levels?				X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?					X

Introduction

The proposed Chick-fil-A Restaurant (project) is located at 18599 Sutter Boulevard in Morgan Hill, California. The project consists of the demolition of an existing building and construction of a new quick-service restaurant (QSR) building, a small outdoor patio dining area, a two-lane drive-thru lane, and associated parking stalls. Land uses in the immediate project vicinity include existing commercial/office to the north (financial institution), south (medical offices), and east (financial institution), and future commercial/transient lodging to the west (hotel). The project area with aerial imagery is shown in Figure 1. The project site plan is presented in Figure 2.

The purposes of this assessment are to quantify the existing noise and vibration environments, identify potential noise and vibration impacts resulting from the project, identify appropriate mitigation measures, and provide a quantitative and qualitative analysis of impacts associated with the project. Specifically, impacts are identified if project-related activities would cause a substantial increase in ambient noise levels at existing or future uses in the project vicinity, or if traffic or project-generated noise or vibration levels would exceed applicable federal, state, or City of Morgan Hill standards at nearby existing or future uses.

Noise and Vibration Fundamentals

Noise

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

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure) as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in decibel levels correspond closely to human perception of relative loudness. Noise levels associated with common noise sources are provided in Figure 3.

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 filtering the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels.

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}). The L_{eq} is the foundation of the day-night average noise descriptor, DNL (or L_{dn}), and shows very good correlation with community response to noise.

The Day-Night Average sound level (DNL) 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.

Vibration

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, while vibration is usually associated with transmission through the ground or structures. As with noise, vibration consists of an amplitude and frequency. A person's response to vibration will depend on their individual sensitivity as well as the amplitude and frequency of the source.

Vibration can be described in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of velocity in inches per second peak particle velocity (IPS, PPV) or root-mean-square (VdB, RMS). Standards pertaining to perception as well as damage to structures have been developed for vibration in terms of peak particle velocity as well as RMS velocities. As vibrations travel outward from the source, they excite the particles of rock and soil through which they pass and cause them to oscillate. Differences in subsurface geologic conditions and distance from the source of vibration will result in different vibration levels characterized by different frequencies and intensities. In all cases, vibration amplitudes will decrease with increasing distance. The maximum rate, or velocity of particle movement, is the commonly accepted descriptor of the vibration "strength".

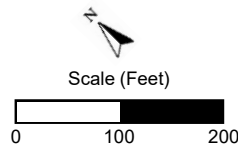
Human response to vibration is difficult to quantify. Vibration can be felt or heard well below the levels that produce any damage to structures. The duration of the event has an effect on human response, as does frequency. Generally, as the duration and vibration frequency increase, the potential for adverse human response increases.

According to the Transportation and Construction-Induced Vibration Guidance Manual (Caltrans, June 2004), operation of construction equipment and construction techniques generate ground vibration. Traffic traveling on roadways can also be a source of such vibration. At high enough amplitudes, ground vibration has the potential to damage structures and/or cause cosmetic damage. Ground vibration can also be a source of annoyance to individuals who live or work close to vibration-generating activities. However, traffic, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage.



Legend

- Project Parcel Boundary (Approximate)
- Ambient Noise & Vibration Survey Locations

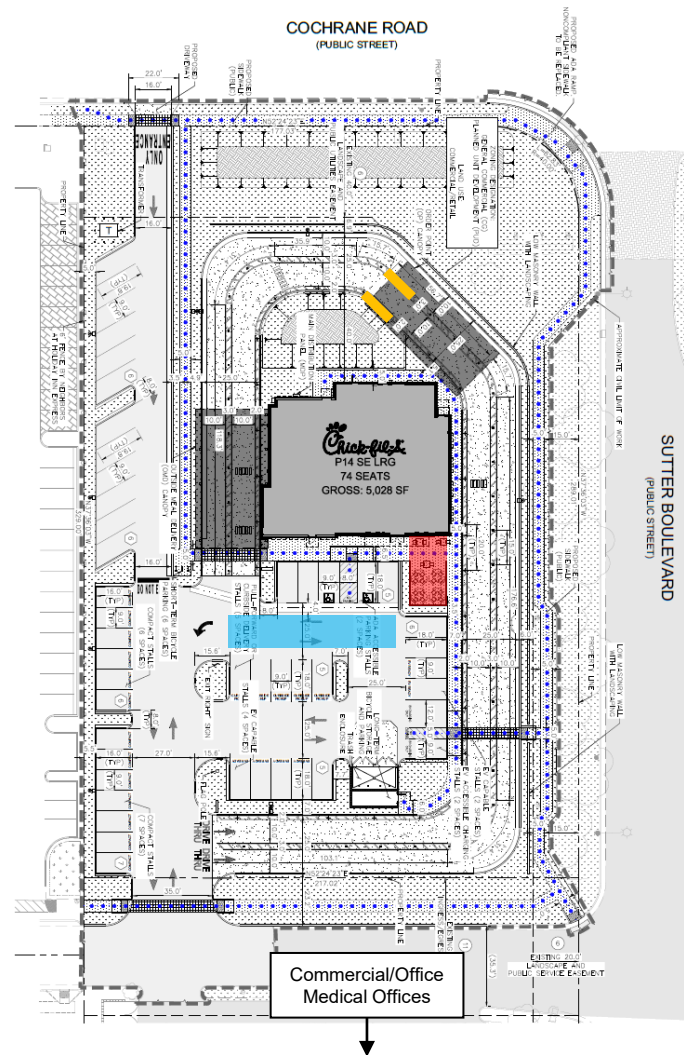


Chick-fil-A Restaurant
Morgan Hill, CA

Project Area

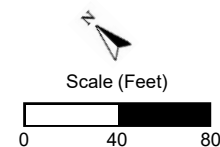
Figure 1

Future Hotel



Legend

- Drive-Thru Menu Speaker Boards (2)
- Outdoor Patio
- Truck Delivery Area (Assumed)

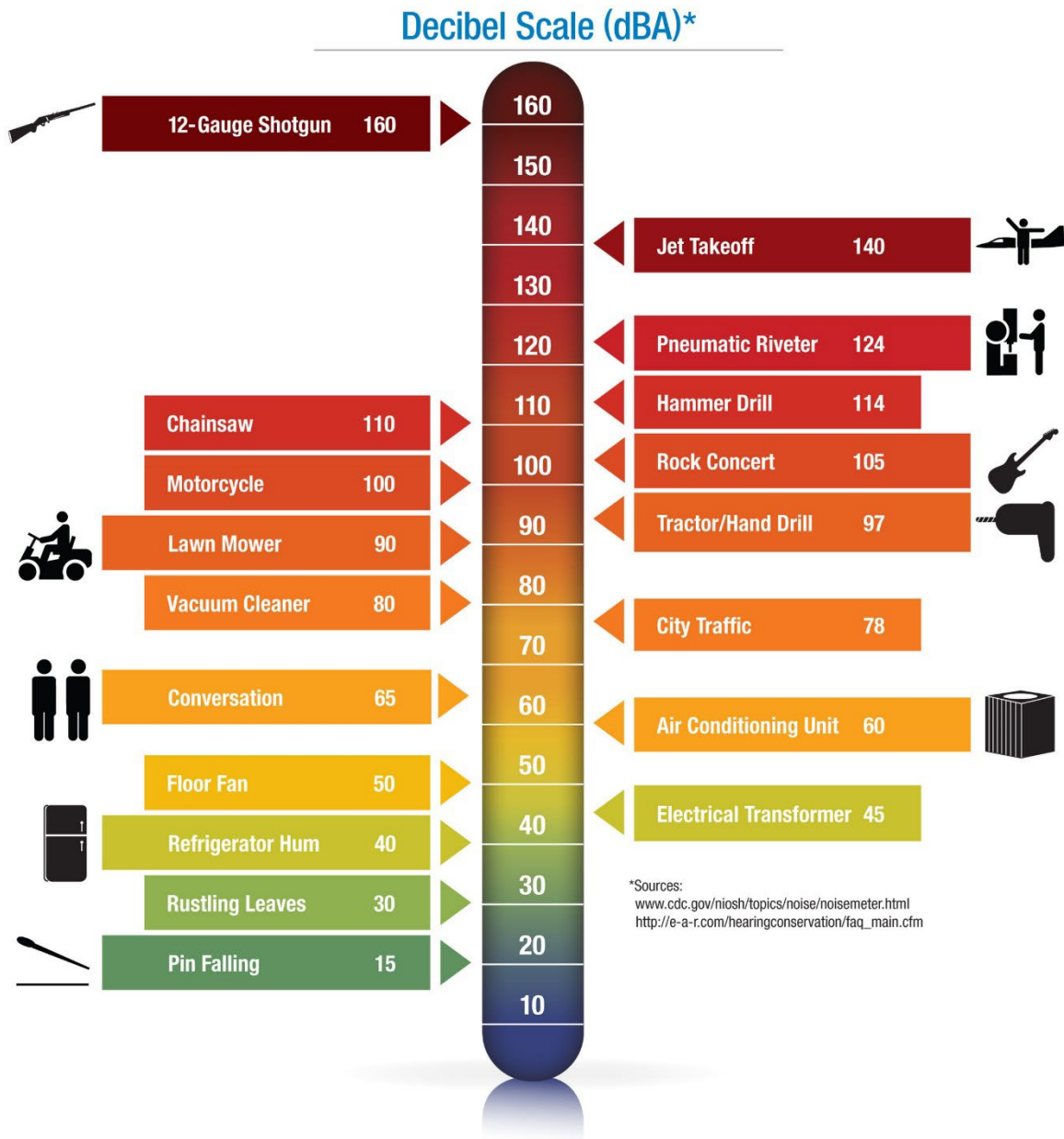


Chick-fil-A Restaurant
Morgan Hill, CA

Project Site Plan

Figure 2

Figure 3
Noise Levels Associated with Common Noise Sources



Regulatory Setting: Criteria for Acceptable Noise and Vibration Exposure

Federal

There are no federal noise or vibration criteria which would be directly applicable to this project. However, the City of Morgan Hill does not currently have adopted numeric standards for groundborne vibration. As a result, the following federal noise criteria was applied to the project.

Federal Transit Administration

Vibration impact criteria developed by the Federal Transit Administration (FTA) were applied to the project. The FTA criteria applicable to damage and annoyance from vibration typically associated with construction activities are presented in Tables 1 and 2.

Table 1
FTA Criteria for Assessing Vibration Damage to Structures

Building Category	Level (VdB) ¹
I. Reinforced-concrete, steel or timber (no plaster)	102
II. Engineered concrete and masonry (no plaster)	98
III. Non-engineered timber and masonry buildings	94
IV. Buildings extremely susceptible to vibration damage	90
¹ RMS velocity in decibels (VdB) re 1 micro-inch/second	

Source: Federal Transit Administration (FTA) Noise and Vibration Manual, Table 12-3

Table 2
Groundborne Vibration Impact Criteria for General Assessment

Land Use Category	Impact Levels (VdB)		
	Frequent Events ^a	Occasional Events ^b	Infrequent Events ^c
Category 1: Buildings where vibration would interfere with interior ops.	65 ^d	65 ^d	65 ^d
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83
a. "Frequent Events" is defined as more than 70 vibration events of the same source per day. b. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. c. "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day. d. This criterion limit is based on levels that are acceptable for most moderately-sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels.			

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

State of California

California Environmental Quality Act (CEQA)

The State of California has established regulatory criteria that are applicable to this assessment. Specifically, Appendix G of the State of California Environmental Quality Act (CEQA) Guidelines are used to assess the potential significance of impacts pursuant to local General Plan policies,

Municipal Code standards, or the applicable standards of other agencies. According to Appendix G of the CEQA guidelines, the project would result in a significant noise or vibration impact if the following occur:

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

It should be noted that audibility is not a test of significance according to CEQA. If this were the case, any project which added any audible amount of noise to the environment would be considered significant according to CEQA. Because every physical process creates noise, the use of audibility alone as significance criteria would be unworkable. CEQA requires a substantial increase in noise levels before noise impacts are identified, not simply an audible change.

Local

Morgan Hill 2035 General Plan

The Safety, Services, and Infrastructure Element of the Morgan Hill 2035 General Plan contains goals and policies to ensure that city residents are not subjected to noise beyond acceptable levels. The General Plan goals and policies which are applicable to the project are reproduced below.

GOAL SSI-8

Prevention of noise from interfering with human activities or causing health problems.

Policies

SSI-8.1 Exterior Noise Level Standards. Require new development projects to be designed and constructed to meet acceptable exterior noise level standards (Table 3 of this report), as follows:

- Apply a maximum exterior noise level of 60 dBA DNL in residential areas where outdoor use is a major consideration (e.g., backyards in single-family housing developments and recreation areas in multi-family housing projects). Where the City determines that providing a DNL of 60 dBA or lower cannot be achieved after the application of reasonable and feasible mitigation, a DNL of 65 dBA may be permitted.
- Indoor noise levels should not exceed a DNL of 45 dBA in new residential housing units.

- Noise levels in new residential development exposed to an exterior DNL of 60 dBA or greater should be limited to a maximum instantaneous noise level (e.g., trucks on busy streets, train warning whistles) in bedrooms of 50 dBA. Maximum instantaneous noise levels in all other habitable rooms should not exceed 55 dBA. The maximum outdoor noise level for new residences near the railroad shall be 70 dBA DNL, recognizing that train noise is characterized by relatively few loud events.

- SSI-8.2 **Impact Evaluation.** The impact of a proposed development project on existing land uses should be evaluated in terms of the potential for adverse community response based on significant increase in existing noise levels, regardless of compatibility guidelines.
- SSI-8.3 **Commercial and Industrial Noise Level Standards.** Evaluate interior noise levels in commercial and industrial structures on a case-by-case basis based on the use of the space.
- SSI-8.4 **Office Noise Level Standards.** Interior noise levels in office buildings should be maintained at 45 dB L_{eq} (hourly average) or less, rather than 45 dB DNL (daily average).
- SSI-8.5 **Traffic Noise Level Standards.** Consider noise level increases resulting from traffic associated with new projects significant if: a) the noise level increase is 5 dBA DNL or greater, with a future noise level of less than 60 dBA DNL, or b) the noise level increase is 3 dBA DNL or greater, with a future noise level of 60 dBA DNL or greater.
- SSI-8.6 **Stationary Noise Level Standards.** Consider noise levels produced by stationary noise sources associated with new projects significant if they substantially exceed existing ambient noise levels.
- SSI-8.7 **Other Noise Sources.** Consider noise levels produced by other noise sources (such as ballfields) significant if an acoustical study demonstrates they would substantially exceed ambient noise levels.
- SSI-8.9 **Site Planning and Design.** Require attention to site planning and design techniques other than sound walls to reduce noise impacts, including a) installing earth berms, b) increasing the distance between the noise source and the receiver, c) using non-sensitive structures such as parking lots, utility areas, and garages to shield noise-sensitive areas, d) orienting buildings to shield outdoor spaces from the noise source, and e) minimizing the noise at its source.

Table 3
State of California Land Use Compatibility Guidelines for Community Noise Environments

Land Uses	CNEL (dBA)					
	55	60	65	70	75	80
Residential – Low Density Single-Family, Duplex, Mobile Homes						
Residential – Multiple-Family						
Transient Lodging, Motels, Hotels						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arena, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Businesses, Commercial and Professional						
Industrial, Manufacturing, Utilities, Agricultural						

	Normally Acceptable: Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.		Normally Unacceptable: New construction or development should generally be discouraged. If new construction does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
	Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and the needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.		Clearly Unacceptable: New construction or development generally should not be undertaken.

Source: Governor's Office of Planning and Research, General Plan Guidelines 2003.

Morgan Hill Municipal Code

The provisions of the Morgan Hill Municipal Code which would be most applicable to this project are reproduced below.

Chapter 8.28 of the Municipal Code provides an enumeration of unlawful noise sources (i.e., animals, birds, auto body repairs, blowers, fans, combustion engines, construction activities, exhausts, loudspeakers). Chapter 8.28 does not, however, provide quantitative performance standards. Section 8.28.040(D) exempts construction noise provided the activities are limited to a specific time frame. Section 8.28.040(D) is reproduced below:

"Construction activities" are defined as including but not limited to excavation, grading, paving, demolition, construction, alteration or repair of any building, site, street or highway, delivery, or removal of construction material to a site, or movement of construction materials on a site. Construction activities are prohibited other than between the hours of seven a.m. and eight p.m., Monday through Friday and between the hours of nine a.m. to six p.m. on Saturday. Construction activities may not occur on Sundays or federal holidays. No third person, including but not limited to landowners, construction company owners, contractors,

subcontractors, or employers, shall permit or allow any person working on construction activities which are under their ownership, control, or direction to violate this provision.

Section 18.76.090 of the Municipal Code establishes acceptable noise level criteria for non-transportation noise sources. The City's quantitative exterior noise standards are provided below in Table 4. According to conversations with City of Morgan Hill planning staff in the preparation of noise assessments in previous years, the Table 4 standards are interpreted as being hourly average (L_{eq}) noise level standards.

Table 4
Noise Level Performance Standards

Receiving Land Use	Maximum Noise Level at Lot Line of Receiving Use ^{1,2}
Industrial and Wholesale	70 dBA
Commercial	65 dBA
Residential or Public/Quasi Public	60 dBA
¹ The planning commission may allow an additional 5 dBA noise level at the lot line if the maximum noise level shown above cannot be achieved with reasonable and feasible mitigation. ² Noise standards shown above do not apply to noise generated by vehicle traffic in the public right-of way or from temporary construction, demolition, and vehicles that enter or leave the site of the noise-generating use (e.g., construction equipment, trains, trucks).	

Source: Morgan Hill Municipal Code, Section 18.76.090, Table 18.76-1.

Finally, Municipal Code Section 18.76.130 states that vibration transmitted through the ground that is discernible without instruments at the lot line of the establishment or use is prohibited. However, vibrations from temporary construction, demolition, and vehicles that enter and leave the lot (e.g., construction equipment, trains, trucks, etc.) are exempt from this standard.

Environmental Setting – Existing Ambient Noise and Vibration Environment

Noise-Sensitive Land Uses in the Project Vicinity

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are generally considered to be sensitive to noise because intrusive noise can be disruptive to these activities.

The City of Morgan Hill has established noise level criteria for commercial uses, such as those located adjacent to the project (existing and future). At the direction of City planning staff, an analysis of project-generated noise and vibration level exposure has been requested at the existing commercial use to the south (medical offices) and future commercial/transient lodging use to the west (hotel). The project area and surrounding land uses are shown in Figure 1.

Existing Overall Ambient Noise Environment within the Project Vicinity

The existing ambient noise environment within the project vicinity is defined primarily by noise from traffic on Cochrane Road and Sutter Boulevard, and by activities at nearby commercial uses. To generally quantify existing ambient noise environment within the project vicinity, BAC conducted short-term (3-hour) ambient noise level measurements at two (2) locations on February 14th, 2023. The noise survey locations are shown in Figure 1, identified as Sites A and B. 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 noise level measurements. The meters were calibrated immediately before 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 ambient noise level survey results are summarized below in Table 5.

Table 5
Summary of Short-Term Ambient Noise Survey Results – February 14th, 2023

Survey Location ¹	Time Period	Average Measured Noise Levels (dBA)	
		L _{eq}	L _{max}
Site A: Along western project property line	10:00 a.m. to 11:00 a.m.	58.0	93.6
	11:00 a.m. to 12:00 p.m.	58.3	93.9
	12:00 p.m. to 1:00 p.m.	58.2	93.8
Site B: Along southern project property line	10:00 a.m. to 11:00 a.m.	60.3	77.5
	11:00 a.m. to 12:00 p.m.	58.3	86.8
	12:00 p.m. to 1:00 p.m.	58.4	78.2
¹ Noise survey site locations are shown in Figure 1.			

Source: Bollard Acoustical Consultants, Inc. 2023.

Noise level measurements obtained at Site A, located along the western project property boundary, are believed to be representative of the existing ambient noise level environment along the adjacent commercial boundary to the west. Noise level measurements obtained at Site B, located at the southern end of the project parcel, are believed to be representative of the ambient noise level environment at the existing commercial office uses to the south.

Existing Ambient Vibration Environment within the Project Vicinity

During a BAC site visit on February 14th, 2023, vibration levels were below the threshold of perception within the project area. Nonetheless, to quantify existing vibration levels in the project vicinity, BAC conducted a short-term (15-minute) vibration survey on February 14th, 2023, at Sites A and B in Figure 1. Photographs of the vibration survey equipment are provided in Appendix B. A Larson-Davis Laboratories Model LxT precision integrating sound level meter equipped with a vibration transducer was used to complete the measurements. The results are summarized in Table 6.

Table 6
Summary of Short-Term Ambient Vibration Survey Results – February 14th, 2023

Survey Location	Time	Average Measured Vibration Level (VdB)
Site A: Along western project property line	12:52 p.m.	35
Site B: Along southern project property line	12:32 p.m.	39

Source: Bollard Acoustical Consultants, Inc. 2023.

Table 6 data indicate that measured average vibration levels were well below the threshold of human perception (65 dB VdB), which is consistent with BAC field observations.

Existing Traffic Noise Levels along the Project Area Roadway Network

To predict traffic noise levels along existing roadway networks, modelling is commonly used rather than monitoring. The FHWA Traffic Noise Model (FHWA-RD-77-108) was used to quantify existing traffic noise levels at the existing sensitive land uses nearest to the project area roadway network. The FHWA Model was also used to quantify the distances to the 60, 65 and 70 dB DNL traffic noise contours for these roadways. The FHWA Model predicts hourly average (L_{eq}) values for free-flowing traffic conditions. Estimates of the hourly distribution of traffic for a typical 24-hour period were used to develop day-night average (DNL) values from L_{eq} values.

Existing traffic data in the form of AM and PM peak hour intersection turning movements were provided by the project transportation consultant (Hexagon Transportation Consultants). Those data were converted to Average Daily Traffic (ADT) segment volumes by applying a factor of 5 to the sum of AM and PM peak hour conditions. Other inputs were obtained from BAC field observations and aerial imagery. The existing traffic noise levels at the distances representing the nearest sensitive land uses to the project area roadways and distances from the centerlines of selected roadways to the 60 dB, 65 dB and 70 dB DNL contours are summarized in Table 7. Appendix C contains the FHWA Model inputs for existing conditions.

Table 7
Existing Traffic Noise Levels at Nearest Sensitive Receptors and Distances to DNL Contours

#	Roadway	Segment Description	DNL at Nearest Sensitive Receptor	Distance to Contour (ft)		
				70 dB DNL	65 dB DNL	60 dB DNL
1	Monterey Rd	North of Cochrane Rd	63	54	115	249
2	Monterey Rd	South of Cochrane Rd	67	69	148	319
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	64	56	120	259
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	64	61	131	282
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	64	60	129	278
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	66	79	170	367
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	67	66	141	304
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	61	81	176	378
9	Cochrane Rd	East of US 101 NB Ramps	64	51	111	239
10	Butterfield Blvd	South of Cochrane Rd	--	--	--	--
11	Woodview Ave	North of Cochrane Rd	53	8	17	38
12	Evergreen Vlg	South of Cochrane Rd	49	4	8	17
13	Sutter Blvd	North of Cochrane Rd	62	21	46	99
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	60	23	50	108
15	Sutter Blvd	South of Cochrane Plza	62	21	46	100
16	Madrone Pkwy	North of Cochrane Rd	59	14	30	64
17	Cochrane Plza	South of Cochrane Rd	63	18	40	85
18	Cochrane Plza	West of Sutter Blvd	50	9	19	40
19	Cochrane Plza	East of Sutter Blvd	49	2	4	9
20	US 101 SB Ramps	South of Cochrane Rd	69	85	184	397
21	US 101 NB Ramps	North of Cochrane Rd	61	51	110	238

Source: FHWA-RD-77-108 and Hexagon. Appendix C contains FHWA Model inputs for existing conditions.

Impacts and Mitigation Measures

Thresholds of Significance

For the purposes of this report, a noise and vibration impact is considered significant if the project would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or other applicable standards of other agencies; or
- Generation of excessive groundborne vibration or groundborne noise levels; or
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use

airport, the project would expose people residing or working in the project area to excessive noise levels.

The project area is not within the vicinity of a private airstrip, an airport land use plan, or within two miles of a public airport. Therefore, the last threshold listed above is not discussed further.

The following criteria established by the Federal Transit Administration (FTA), Morgan Hill General Plan, and Morgan Hill Municipal Code were used to evaluate the significance of environmental noise and vibration resulting from the project:

- A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise criteria presented in the Morgan Hill General Plan or Morgan Hill Municipal Code.
- A significant impact would be identified if project-generated off-site traffic, on-site commercial operations, or on-site demolition/construction activities would substantially increase noise levels at existing sensitive receptors in the vicinity. A substantial increase from project-generated off-site traffic noise levels would be identified relative to the numeric increase significance criteria contained in Policy SSI-8.5 of the Morgan Hill General Plan.

General Plan Policy SSI-8.6 states that noise levels produced by stationary noise sources associated with new projects shall be considered significant if they substantially exceed existing ambient noise levels. However, Policy SSI-8.6 does not contain numeric increase significance criteria. In terms of determining the temporary noise increase due to project on-site operations and demolition/construction activities (non-transportation noise sources) at existing sensitive receptors in the vicinity, an impact would occur if those activities would noticeably increase ambient noise levels above background levels at those locations. The threshold of perception of the human ear is approximately 3 to 5 dB – a 5 dB change is considered to be clearly noticeable. For the analysis of project on-site commercial operations and demolition/construction activity noise level increases at existing sensitive receptors, a noticeable increase in ambient noise levels is assumed to occur where those activities would result in an increase by 5 dB or more over existing ambient noise levels.

- A significant impact would be identified if on-site project demolition/construction activities or project operations would expose existing or proposed sensitive receptors to excessive groundborne vibration levels. Specifically, an impact would be identified if groundborne vibration levels due to these sources would exceed FTA vibration impact criteria.

Noise Impacts Associated with Project-Generated Increases in Off-Site Traffic

With development of the project, traffic volumes on the local roadway network will increase. Those increases in daily traffic volumes will result in a corresponding increase in traffic noise levels at existing uses located along those roadways. Impacts 1 and 2 evaluate increases in off-site traffic noise levels which would result from the project.

Pursuant to Policy SSI-8.5 of the Morgan Hill General Plan, traffic noise level increases from new projects are considered significant if: a) the noise level increase is 5 dB DNL or greater, with a future noise level of less than 60 dB DNL, or b) the noise level increase is 3 dB DNL or greater, with a future noise level of 60 dB DNL or greater.

Impact 1: Increases in Existing Traffic Noise Levels due to the Project

The FHWA Traffic Noise Model (FHWA-RD-77-108) was used to quantify increases in existing traffic noise levels at the existing sensitive land uses nearest to the project area roadway network. The FHWA Model predicts hourly L_{eq} values for free-flowing traffic conditions. Estimates of the hourly distribution of traffic for a typical 24-hour period were used to develop DNL values from L_{eq} values.

Traffic data in the form of peak hour intersection turning movements were provided by the project transportation consultant (Hexagon Transportation Consultants). Those data were converted to Average Daily Traffic (ADT) segment volumes by applying a factor of 5 to the sum of AM and PM peak hour conditions. Other inputs were obtained from BAC field observations and aerial imagery. Appendices C and D contain the FHWA Model inputs for existing and existing plus project conditions, respectively. The existing and existing plus project traffic noise levels at the distances representing the nearest sensitive land uses to the project area roadways are summarized in Table 8. Table 8 also shows the thresholds for determination of a significant traffic noise increase, whether the roadway segment contains sensitive uses, and whether or not significant noise impacts are identified for each segment.

It should be noted that the FHWA Model predictions presented in Table 8 are based on inputs that include weekday peak hour traffic volumes, day/night, and truck type percentages (e.g., medium and heavy trucks), vehicle speed, and distance from roadway centerlines. The FHWA Model does not account for non-traffic ambient noise sources such as nearby wildlife (e.g., birds chipping) or other anthropogenic noise sources within an area (e.g., distant traffic from other roadways, recreational activities, commercial or industrial operations, etc.).

Table 8
Predicted Traffic Noise Level Increases at Existing Sensitive Receptors – Existing vs. Existing Plus Project Conditions

#	Roadway	Segment Description	Predicted DNL (dB)			Significance Threshold ¹	Threshold Exceeded?	Sensitive Receptors Present? ²	Significant Impact Identified? ³
			E	E+P	Increase				
1	Monterey Rd	North of Cochrane Rd	63.3	63.3	0.0	3.0	No	Yes	No
2	Monterey Rd	South of Cochrane Rd	66.9	66.9	0.0	3.0	No	Yes	No
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	63.6	63.6	0.0	3.0	No	Yes	No
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	64.1	64.2	0.1	3.0	No	No	No
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	64.0	64.1	0.1	3.0	No	No	No
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	65.8	65.9	0.0	3.0	No	No	No
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	67.2	67.3	0.0	3.0	No	No	No
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	61.2	61.2	0.0	3.0	No	No	No
9	Cochrane Rd	East of US 101 NB Ramps	64.2	64.3	0.0	3.0	No	Yes	No
10	Butterfield Blvd	South of Cochrane Rd	--	--	--	--	--	--	--
11	Woodview Ave	North of Cochrane Rd	53.0	53.5	0.5	5.0	No	No	No
12	Evergreen Vlg	South of Cochrane Rd	48.5	48.5	0.0	5.0	No	No	No
13	Sutter Blvd	North of Cochrane Rd	61.8	62.2	0.4	3.0	No	No	No
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	60.5	60.6	0.1	3.0	No	No	No
15	Sutter Blvd	South of Cochrane Plza	61.9	62.2	0.4	3.0	No	No	No
16	Madrone Pkwy	North of Cochrane Rd	59.0	59.0	0.0	5.0	No	No	No
17	Cochrane Plza	South of Cochrane Rd	63.5	63.5	0.0	3.0	No	No	No
18	Cochrane Plza	West of Sutter Blvd	49.6	49.6	0.0	5.0	No	No	No
19	Cochrane Plza	East of Sutter Blvd	48.7	54.1	5.4	5.0	Yes	No	No
20	US 101 SB Ramps	South of Cochrane Rd	69.0	69.0	0.0	3.0	No	No	No
21	US 101 NB Ramps	North of Cochrane Rd	61.1	61.2	0.1	3.0	No	No	No

¹ Significance thresholds contained in General Plan Policy SSI-8.5.

² Sensitive receptors identified in this analysis include residences and churches.

³ A significant impact is identified only along segments where the project-related traffic noise level increase would exceed applicable significance threshold AND where sensitive receptors are present along the roadway segment.

Source: FHWA-RD-77-108 with inputs from Hexagon. Appendices C & D contain FHWA Model inputs.

As indicated in Table 8, project-generated traffic noise level increases would not result in significant noise impacts at existing sensitive receptors located along the project area roadway network relative to increase significance criteria contained in Policy SSI-8.5 of the Morgan Hill General Plan. As a result, this impact is identified as being ***less than significant***.

Impact 2: Increases in Cumulative Traffic Noise Levels due to the Project

The FHWA Traffic Noise Model (FHWA-RD-77-108) was used to quantify increases in future (cumulative) traffic noise levels at the nearest existing sensitive land uses to the project area roadway network. This analysis first assesses whether a cumulative roadway noise impact would occur by comparing the cumulative with project conditions to existing conditions. If a cumulative roadway noise impact is identified, it is further evaluated to assess whether the proposed project would make a cumulatively considerable contribution to the cumulative impact. This process is completed through a comparison of the roadway noise associated with the cumulative with project scenario against the cumulative no-project scenario. Appendices E and F contain the FHWA Model inputs for cumulative and cumulative plus project conditions, respectively.

Table 9 compares the cumulative with project traffic noise levels against existing no project traffic noise levels and includes a determination regarding whether the corresponding increase in traffic noise exposure over time is considerable. Table 10 compares cumulative with project against cumulative no-project conditions to determine if the project's contribution to the cumulative noise environment is considerable.

Table 9
Predicted Traffic Noise Level Increases at Existing Sensitive Receptors – Existing vs. Cumulative Plus Project Conditions

#	Roadway	Segment Description	Predicted DNL (dB)			Significance Threshold ¹	Threshold Exceeded?	Sensitive Receptors Present? ²	Significant Impact Identified? ³
			E	C+P	Increase				
1	Monterey Rd	North of Cochrane Rd	63.3	64.4	1.1	3.0	No	Yes	No
2	Monterey Rd	South of Cochrane Rd	66.9	68.3	1.3	3.0	No	Yes	No
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	63.6	64.5	1.0	3.0	No	Yes	No
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	64.1	65.3	1.2	3.0	No	No	No
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	64.0	65.0	1.0	3.0	No	No	No
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	65.8	66.7	0.9	3.0	No	No	No
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	67.2	68.5	1.2	3.0	No	No	No
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	61.2	62.0	0.9	3.0	No	No	No
9	Cochrane Rd	East of US 101 NB Ramps	64.2	65.9	1.7	3.0	No	Yes	No
10	Butterfield Blvd	South of Cochrane Rd	--	--	--	--	--	--	--
11	Woodview Ave	North of Cochrane Rd	53.0	56.7	3.7	5.0	No	No	No
12	Evergreen Vlg	South of Cochrane Rd	48.5	48.5	0.0	5.0	No	No	No
13	Sutter Blvd	North of Cochrane Rd	61.8	63.0	1.2	3.0	No	No	No
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	60.5	61.4	0.9	3.0	No	No	No
15	Sutter Blvd	South of Cochrane Plza	61.9	63.0	1.2	3.0	No	No	No
16	Madrone Pkwy	North of Cochrane Rd	59.0	59.0	0.0	5.0	No	No	No
17	Cochrane Plza	South of Cochrane Rd	63.5	64.5	1.0	3.0	No	No	No
18	Cochrane Plza	West of Sutter Blvd	49.6	49.6	0.0	5.0	No	No	No
19	Cochrane Plza	East of Sutter Blvd	48.7	54.1	5.4	5.0	Yes	No	No
20	US 101 SB Ramps	South of Cochrane Rd	69.0	70.0	1.0	3.0	No	No	No
21	US 101 NB Ramps	North of Cochrane Rd	61.1	61.7	0.5	3.0	No	No	No

¹ Significance thresholds contained in General Plan Policy SSI-8.5.

² Sensitive receptors identified in this analysis include residences and churches.

³ A significant impact is identified only along segments where the project-related traffic noise level increase would exceed applicable significance threshold AND where sensitive receptors are present along the roadway segment.

Source: FHWA-RD-77-108 with inputs from Hexagon. Appendices C & F contain FHWA Model inputs.

Table 10
Predicted Traffic Noise Level Increases at Existing Sensitive Receptors – Cumulative vs. Cumulative Plus Project Conditions

#	Roadway	Segment Description	Predicted DNL (dB)			Significance Threshold ¹	Threshold Exceeded?	Sensitive Receptors Present? ²	Significant Impact Identified? ³
			C	C+P	Increase				
1	Monterey Rd	North of Cochrane Rd	64.3	64.4	0.0	3.0	No	Yes	No
2	Monterey Rd	South of Cochrane Rd	68.3	68.3	0.0	3.0	No	Yes	No
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	64.5	64.5	0.0	3.0	No	Yes	No
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	65.3	65.3	0.0	3.0	No	No	No
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	65.0	65.0	0.1	3.0	No	No	No
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	66.7	66.7	0.0	3.0	No	No	No
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	68.5	68.5	0.0	3.0	No	No	No
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	62.0	62.0	0.0	3.0	No	No	No
9	Cochrane Rd	East of US 101 NB Ramps	65.9	65.9	0.0	3.0	No	Yes	No
10	Butterfield Blvd	South of Cochrane Rd	--	--	--	--	--	--	--
11	Woodview Ave	North of Cochrane Rd	56.4	56.7	0.3	5.0	No	No	No
12	Evergreen Vlg	South of Cochrane Rd	48.5	48.5	0.0	5.0	No	No	No
13	Sutter Blvd	North of Cochrane Rd	62.7	63.0	0.3	3.0	No	No	No
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	61.3	61.4	0.1	3.0	No	No	No
15	Sutter Blvd	South of Cochrane Plza	62.7	63.0	0.3	3.0	No	No	No
16	Madrone Pkwy	North of Cochrane Rd	59.0	59.0	0.0	5.0	No	No	No
17	Cochrane Plza	South of Cochrane Rd	64.5	64.5	0.0	3.0	No	No	No
18	Cochrane Plza	West of Sutter Blvd	49.6	49.6	0.0	5.0	No	No	No
19	Cochrane Plza	East of Sutter Blvd	48.7	54.1	5.4	5.0	Yes	No	No
20	US 101 SB Ramps	South of Cochrane Rd	70.0	70.0	0.0	3.0	No	No	No
21	US 101 NB Ramps	North of Cochrane Rd	61.6	61.7	0.0	3.0	No	No	No

¹ Significance thresholds contained in General Plan Policy SSI-8.5.

² Sensitive receptors identified in this analysis include residences and churches.

³ A significant impact is identified only along segments where the project-related traffic noise level increase would exceed applicable significance threshold AND where sensitive receptors are present along the roadway segment.

Source: FHWA-RD-77-108 with inputs from Hexagon. Appendices E & F contain FHWA Model inputs.

Based on the analysis presented in Tables 9 and 10, off-site traffic noise impacts related to project-generated increases in traffic are identified as **less than significant** relative to increase significance criteria contained in Policy SSI-8.5 of the Morgan Hill General Plan.

Off-Site Noise Impacts Associated with On-Site Operational Noise Sources

The project consists of the construction and operation of a Chick-fil-A restaurant with drive-through services. It is the understanding of BAC that the project proposes restaurant operations (including drive-through services) during the hours of 6:00 a.m. to 10:00 p.m. The primary noise sources associated with project on-site operations have been identified as parking lot movements, drive-thru operations (vehicle passages and amplified menu speaker board), on-site vehicle circulation, outdoor patio noise (patrons conversing), delivery truck circulation and delivery activities, and mechanical equipment (HVAC). Analyses of each of the identified project noise sources at the future commercial use to the west (hotel) and existing commercial use to the south (medical offices) are provided in the following section.

For noise generated by on-site operations, Section 18.76.090 of the Morgan Hill Municipal Code establishes a property line exterior noise level standard of 65 dB L_{eq} for commercial uses. Additionally, Policy SSI-8.4 of the Morgan Hill General Plan states that interior noise levels in office buildings should be maintained at 45 dB L_{eq} . Satisfaction of the City's noise level criteria at the closest commercial uses would ensure compliance with the City's noise level limits at commercial uses located farther away.

Impact 3: Parking Area Noise at Adjacent Commercial Land Uses

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.

To compute hourly average (L_{eq}) noise levels generated by parking lot activities, the approximate number of hourly operations and distance to parking stalls is required. According to the project site plan, the project proposes parking stalls on the west and south sides of the project property (Figure 2). The hourly average noise level generated by parking lot movements is computed using the following formula:

$$\text{Peak Hour } L_{eq} = 70 + 10 \cdot \log(N) - 35.6$$

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. Using the information provided above, the provided project site plan, and assuming standard spherical spreading loss (-6 dB per doubling of distance), project parking activity noise exposure at the adjacent future and existing commercial uses was calculated and the results of those calculations are presented in Table 11.

The results presented in Table 11 include an analysis of noise exposure associated with a portion of the closest parking stalls to the adjacent commercial uses. It was conservatively assumed for the purposes of this analysis that those nearest parking stalls could either fill or empty during a given peak hour (although it is likely that parking area activity would be more spread out). The number of parking stalls utilized in the analysis are footnoted in Table 11.

Table 11
Predicted Parking Area Noise Levels at Adjacent Commercial Uses

Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L_{eq} (dB) ²
Future Commercial – Hotel	West	Property Line	54
Existing Commercial – Medical Offices	South	Property Line	45
Existing Commercial – Medical Offices	South	Building Facade	33
¹ Locations of commercial land uses are shown in Figure 1.			
² Number of parking stalls included in analysis: Future Commercial-Hotel (15), Existing Commercial-Offices (25).			

Source: Bollard Acoustical Consultants, Inc. 2023.

As shown in Table 11, project parking area movements are predicted to satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses.

Standard building construction (e.g., stucco siding, STC-27 windows, door weather-stripping, exterior wall insulation, composition plywood roof), typically results in an exterior to interior noise reduction of approximately 25 dB with windows closed and approximately 15 dB with windows open. Given the predicted noise level at the building facade of the existing office building to the south shown in Table 11, and after consideration of the above-mentioned exterior to interior noise level reduction typically provided by standard building construction, project parking area noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

Table 5 of this report contains the results from the BAC ambient noise survey at Site B, which is believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, ambient plus project parking area noise level increases were calculated at the existing offices to the south. According to the results from that exercise, the project-generated increase in ambient daytime noise levels is calculated to be less than 0.1 dB L_{eq} at the closest medical office buildings to the south (Note: For the purposes of this analysis, it is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only). The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because noise exposure from project parking area activities is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because noise level exposure from those activities is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being **less than significant**.

Impact 4: Drive-Thru Operations Noise at Adjacent Commercial Land Uses

According to the project site plan, the proposed drive-through will have two (2) amplified menu speaker posts. Specifically, it is the understanding of BAC that the project proposes two (2) HME SPP2 speaker posts.

To quantify the noise emissions of the proposed drive-through speaker usage, BAC utilized noise level measurement data published by the speaker manufacturer (HM Electronics, Inc.). According to the manufacturers noise level data sheet, presented as Appendix G, the proposed HME SPP2 speaker post can incorporate automatic volume control (AVC), which adjusts outbound volume based on the ambient noise level environment. For example, assuming an outdoor ambient noise level of 45 dB, the speaker will adjust the volume of the system to 45 dB for a resulting overall sound level of 48 dB at a distance of 4 feet. Without the AVC option, the speaker reference noise level is 72 dB at 4 feet. To quantify the noise emissions of the proposed drive-through vehicle passages, BAC utilized noise measurement data collected for similar drive-through operations in the greater Sacramento area in recent years. BAC file data indicates that drive-through vehicle passages, including vehicle idling, have median and maximum noise levels of 60 dB L_{eq} at a distance of 5 feet.

Using the BAC drive-through vehicle passby data and speaker manufacturer noise level measurements presented above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), data were projected from the proposed drive-through lane and speaker posts to the adjacent future and existing commercial uses. The results of those projections are provided in Table 12. The results presented in Table 12 include conservative predictions of project drive-through speaker noise levels (i.e., AVC option not enabled).

Table 12
Predicted Drive-Through Noise Levels at Adjacent Commercial Uses

Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L_{eq} (dB) ²	
			Speakers ³	Vehicles
Future Commercial – Hotel	West	Property Line	44	37
Existing Commercial – Medical Offices	South	Property Line	34	50
Existing Commercial – Medical Offices	South	Building Facade	29	26
¹ Locations of commercial land uses are shown in Figure 1. ² Combined noise level from two speakers in operation simultaneously (worst-case). ³ Predicted speaker noise level with AVC option not enabled.				

Source: Bollard Acoustical Consultants, Inc. 2023.

The Table 12 data indicate that project drive-through operations noise levels are predicted to satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses. It should be noted that activation of the drive-through speaker model's AVC option would further reduce speaker noise level exposure at adjacent commercial uses.

Based on the predicted exterior noise levels shown in Table 12, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (i.e.,

at least 25 dB with windows closed and approximately 15 dB with windows open), project drive-through operations noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

As discussed previously, BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, ambient plus project drive-through operations noise level increases were calculated at the existing offices to the south. According to the results from that exercise, project-generated increases in ambient daytime noise levels are calculated to be less than 0.1 dB L_{eq} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because noise exposure from project drive-through operations is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because noise level exposure from those operations is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being ***less than significant***.

Impact 5: On-Site Vehicle Circulation Noise at Adjacent Commercial Land Uses

To quantify project on-site passenger vehicle circulation noise exposure, BAC utilized specific automobile passby 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. The results of those measurements revealed that individual vehicle passbys generated mean noise levels of approximately 70 dB SEL at a reference distance of 50 feet.

To compute hourly average (L_{eq}) noise levels generated by project on-site vehicle circulation, the approximate number of hourly operations is required. According to the project traffic memorandum (prepared by Hexagon Transportation Consultants, Inc.), the project is estimated to generate up to 101 vehicle trips during an AM peak hour and as many as 201 vehicle trips during a PM peak hour. Based on a conservative 201 vehicle trips per hour, and assuming standard spherical spreading loss (-6 dB per doubling of distance), worst-case project on-site passenger vehicle circulation noise exposure at the adjacent future and existing commercial uses was calculated and the results of those calculations are presented in Table 13.

It should be noted that the results presented in Table 13 conservatively assume that worse-case busy hour vehicle trip generation could all occur within an on-site drive lane located closest to an adjacent commercial use. However, it is more likely that on-site vehicle circulation would be more evenly distributed.

Table 13
Predicted On-Site Passenger Vehicle Circulation Noise Levels at Adjacent Commercial Uses

Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB) ²
Future Commercial – Hotel	West	Property Line	61
Existing Commercial – Medical Offices	South	Property Line	61
Existing Commercial – Medical Offices	South	Building Facade	46
¹ Locations of commercial land uses are shown in Figure 1.			
² Predicted noise level based on 201 vehicle trips during a given worst-case busy hour.			

Source: Bollard Acoustical Consultants, Inc. 2023.

As indicated in Table 13, predicted worst-case project on-site vehicle circulation noise levels would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses.

Given the predicted exterior noise levels presented in Table 13, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (i.e., at least 25 dB with windows closed and approximately 15 dB with windows open), project on-site vehicle circulation noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

As noted previously, BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, ambient plus project on-site vehicle circulation noise level increases were calculated at the existing offices to the south. According to the results from that exercise, project-generated increases in ambient daytime noise levels are calculated to be 0.3 dB L_{eq} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because noise exposure from project worst-case on-site vehicle circulation is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because noise level exposure from this noise source is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being **less than significant**.

Impact 6: Outdoor Patio Noise at Adjacent Commercial Land Uses

According to the provided site plans, the project proposes a small outdoor seating area (patio) for patrons. It is estimated the outdoor patio area could accommodate approximately 25 people at full capacity. To quantify outdoor patio area noise levels, 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).

Given the restaurant use type, it is assumed that patrons would generally occupy the outdoor patio areas 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 areas for a minimum of 30 minutes of a given hour.

Based on worse-case outdoor patio occupancy of 25 people (assumed full capacity), the cited BAC file data above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), outdoor seating area patron noise was projected at the adjacent future and existing commercial uses. The results of those projections are presented in Table 14.

Table 14
Predicted Outdoor Patio Patron Noise Levels at Adjacent Commercial Uses

Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB) ²
Future Commercial – Hotel	West	Property Line	40
Existing Commercial – Medical Offices	South	Property Line	40
Existing Commercial – Medical Offices	South	Building Facade	32
¹ Locations of commercial land uses are shown in Figure 1.			
² Predicted noise level based on 25 people conversing simultaneously (20 normal speaking voice; 5 raised voice).			

Source: Bollard Acoustical Consultants, Inc. 2023.

Table 14 data indicate that predicted worst-case patio conversation noise levels would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses.

Based on the predicted exterior noise levels presented in Table 14, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (i.e., at least 25 dB with windows closed and approximately 15 dB with windows open), project patio noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

As discussed previously, BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, ambient plus project patio noise level increases were calculated at the existing offices to the south. According to the results from that exercise, project-generated increases in ambient daytime noise levels are calculated to be less than 0.1 dB L_{eq} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because noise exposure from the proposed outdoor patio is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because noise level exposure from this noise source is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being **less than significant**.

Impact 7: On-Site Truck Circulation Noise at Adjacent Commercial Land Uses

Based on the project site design, deliveries of product to the proposed restaurant will likely occur at the front of the building with medium-duty trucks/vans. However, for the purposes of this analysis, it was conservatively assumed that the project could also receive deliveries from heavy trucks.

On-site truck passbys are expected to be relatively brief and will occur at low speeds. To predict noise levels generated by on-site truck circulation, BAC utilized file data obtained from measurements conducted by BAC of heavy and medium duty truck passbys. According to BAC file data, single-event heavy and medium truck passby noise levels are approximately 83 and 76 dB SEL (respectively) at a reference distance of 50 feet.

To calculate hourly average (L_{eq}) noise level exposure from truck circulation, it was assumed that the project could conservatively have 1 heavy truck and 1 medium duty truck delivery during the same worst-case busy hour. Based on the hourly delivery truck assumptions above, and SEL's of 83 and 76 dB per passby, the combined hourly average noise level generated by project on-site delivery truck circulation computes to 51 dB L_{eq} at a reference distance of 50 feet from the passby route during the worst-case hour of deliveries.

Based on the reference noise level data and operations assumptions presented above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), worst-case project on-site truck circulation noise exposure at the adjacent future and existing commercial uses was calculated and the results of those calculations are presented in Table 15.

Table 15
Predicted On-Site Truck Circulation Noise Levels at Adjacent Commercial Uses

Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L_{eq} (dB) ²
Future Commercial – Hotel	West	Property Line	53
Existing Commercial – Medical Offices	South	Property Line	53
Existing Commercial – Medical Offices	South	Building Facade	33
¹ Locations of commercial land uses are shown in Figure 1.			
² Predicted noise level based on 1 heavy truck and 1 medium truck delivery within the same hour.			

Source: Bollard Acoustical Consultants, Inc. 2023.

As shown in Table 15, predicted on-site truck circulation noise levels would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses.

Given the predicted exterior noise levels presented in Table 15, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (i.e., at least 25 dB with windows closed and approximately 15 dB with windows open), project on-site truck circulation noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

As noted previously, BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, ambient plus project on-site truck circulation noise level increases were calculated at the existing offices to the south. According to the results from that exercise, project-generated increases in ambient daytime noise levels are calculated to be less than 0.1 dB L_{eq} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because noise exposure from project on-site truck circulation is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because noise level exposure from this noise source is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being ***less than significant***.

Impact 8: Truck Delivery Noise at Adjacent Commercial Land Uses

As mentioned previously, deliveries of product to the proposed restaurant will likely occur at the front of the building with medium-duty trucks/vans. However, for the purposes of this analysis, it was conservatively assumed that the project could also receive deliveries from heavy trucks. The location of the assumed truck delivery area is illustrated in Figure 2.

The primary noise sources associated with delivery activities are trucks stopping (air brakes), trucks backing into position (back-up alarms), and trucks pulling away from the unloading area (revving engines). BAC file data indicate that noise levels associated with medium- (including side-step vans) and heavy-duty truck deliveries are approximately 76 dB SEL at a distance of 100 feet.

To calculate hourly average (L_{eq}) noise level exposure from truck deliveries, it was assumed that the project could conservatively have 1 heavy truck and 1 medium duty truck delivery during the same worst-case busy hour. Based on the hourly delivery trucks assumptions above and an SEL of 76 dB, the hourly average noise level computes to 43 dB L_{eq} at a reference distance of 100 feet during the worst-case hour of deliveries.

Using the reference noise level data and operations assumptions presented above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), worst-case project truck delivery noise exposure at the adjacent future and existing commercial uses was calculated and the results of those calculations are presented in Table 16.

Table 16
Predicted Truck Delivery Noise Levels at Adjacent Commercial Uses

Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB) ²
Future Commercial – Hotel	West	Property Line	43
Existing Commercial – Medical Offices	South	Property Line	43
Existing Commercial – Medical Offices	South	Building Facade	33
¹ Locations of commercial land uses are shown in Figure 1.			
² Predicted noise level based on 1 heavy truck and 1 medium truck delivery within the same hour.			

Source: Bollard Acoustical Consultants, Inc. 2023.

Table 16 data indicate that predicted truck delivery noise levels would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses.

Based on the predicted exterior noise levels shown in Table 16, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (i.e., at least 25 dB with windows closed and approximately 15 dB with windows open), project truck delivery noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

As mentioned previously, BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, ambient plus project truck delivery noise level increases were calculated at the existing offices to the south. According to the results from that exercise, project-generated increases in ambient daytime noise levels are calculated to be less than 0.1 dB L_{eq} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because noise exposure from project truck deliveries is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because noise level exposure from those activities is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being **less than significant**.

Impact 9: Mechanical Equipment (HVAC) Noise at Adjacent Commercial Land Uses

Heating, ventilating, and air conditioning (HVAC) requirements for the proposed QSR building will most likely be met using packaged roof-mounted systems. As a means of determining noise exposure due to rooftop mechanical equipment, BAC utilized reference file data collected for previous studies. BAC reference file data for HVAC systems indicate that a 12.5-ton packaged unit can be expected to generate an A-weighted sound power level of 85 dB.

Using the sound power data stated above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), project HVAC equipment noise exposure at the adjacent future and existing commercial uses was calculated and the results of those calculations are presented in Table 17.

Table 17
Predicted HVAC Equipment Noise Levels at Adjacent Commercial Uses

Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB)
Future Commercial – Hotel	West	Property Line	45
Existing Commercial – Medical Offices	South	Property Line	41
Existing Commercial – Medical Offices	South	Building Facade	33
¹ Locations of commercial land uses are shown in Figure 1.			

Source: Bollard Acoustical Consultants, Inc. 2023.

As shown in Table 17, project HVAC equipment noise levels are predicted to satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses.

Given the predicted exterior noise levels presented in Table 17, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (i.e., at least 25 dB with windows closed and approximately 15 dB with windows open), project HVAC equipment noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

As noted previously, BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, ambient plus project HVAC equipment noise level increases were calculated at the existing offices to the south. According to the results from that exercise, project-generated increases in ambient daytime noise levels are calculated to be less than 0.1 dB L_{eq} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because noise exposure from project HVAC equipment is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because noise level exposure from this noise source is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being **less than significant**.

Impact 10: Cumulative On-Site Operations Noise at Adjacent Commercial Land Uses

The calculated cumulative (combined) noise levels from analyzed on-site operations at the adjacent future and existing commercial uses are presented in Table 18. It should be noted that due to the logarithmic nature of the decibel scale, the sum of two noise values which differ by 10 dB equates to an overall increase in noise levels of 0.4 dB. When the noise sources are equivalent, the sum would result in an overall increase in noise levels of 3 dB.

Table 18
Calculated Cumulative On-Site Noise Levels at Adjacent Commercial Uses

Commercial Receiver	Direction	Predicted Exterior Noise Levels, L _{eq} (dB)								Cumulative, L _{eq} (dB) ¹
		Parking	Drive-Through		On-Site Vehicle Circ.	Outdoor Patio	On-Site Truck Circ.	Truck Deliveries	HVAC	
			Speakers	Vehicles						
Future Hotel	West	54	44	37	61	40	53	43	45	62
Existing Medical Offices	South	45	34	50	61	40	53	43	41	62
Existing Medical Offices	South	33	29	26	46	32	33	33	33	47
¹ Calculated cumulative noise levels based on predicted noise levels presented in Impacts 3-9.										

Source: Bollard Acoustical Consultants, Inc. 2023.

Table 18 data indicate that calculated cumulative (combined) noise level exposure from analyzed project on-site operations would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses.

Based on the predicted exterior noise levels presented in Table 18, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (i.e., at least 25 dB with windows closed and approximately 15 dB with windows open), combined project on-site operations noise level exposure is expected to satisfy the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, cumulative increases in ambient noise levels were calculated at the existing offices to the south. According to the results from that exercise, cumulative project-generated increases in ambient daytime noise levels are calculated to be 0.3 dB L_{eq} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because cumulative (combined) noise exposure from on-site operations is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because cumulative noise level exposure from those operations is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being ***less than significant***.

Noise Impacts Associated with Project Construction Activities

Impact 11: Project Demolition & Construction Noise at Adjacent Commercial Land Uses

During project demolition and construction activities, heavy equipment would be used for grading excavation, paving, and building construction, which would increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how it is operated, and how well it is maintained. Noise exposure at any single point outside the project work area would also vary depending upon the proximity of equipment activities to that point.

Table 19 includes the range of maximum noise levels for equipment commonly used in general construction projects at full-power operation at a distance of 50 feet. Not all of these construction activities would be required of this project. Table 19 data also include predicted maximum (L_{max}) equipment noise levels at the adjacent future and existing commercial uses, which assume a standard spherical spreading loss of 6 dB per doubling of distance.

Table 19
Reference and Projected Noise Levels for Typical Residential Construction Equipment

Equipment	Reference Noise	Projected Noise Level, L _{max} (dB)		
	Level at 50 Feet, L _{max} (dB)	Future Commercial PL (Hotel)	Existing Commercial PL (Medical Offices)	Existing Commercial Bldg (Medical Offices)
Air compressor	80	90	90	66
Backhoe	80	90	90	66
Ballast equalizer	82	92	92	68
Ballast tamper	83	93	93	69
Compactor	82	92	92	68
Concrete mixer	85	95	95	71
Concrete pump	82	92	92	68
Concrete vibrator	76	86	86	62
Crane, mobile	83	93	93	69
Dozer	85	95	95	71
Excavator	85	95	95	71
Generator	82	92	92	68
Grader	85	95	95	71
Impact wrench	85	95	95	71
Loader	80	90	90	66
Paver	85	95	95	71
Pneumatic tool	85	95	95	71
Pump	77	87	87	63
Saw	76	86	86	62
Scarifier	83	93	93	69
Scraper	85	95	95	71
Shovel	82	92	92	68
Spike driver	77	87	87	63
Tie cutter	84	94	94	70
Tie handler	80	90	90	66
Tie inserter	85	95	95	71
Truck	84	94	94	70
Low		86	86	62
High		95	95	71
Average		91	91	67

Source: 2018 FTA Noise and Vibration Impact Assessment Manual, Table 7-1 and BAC calculations.

As noted in the Regulatory Setting Section of this report, Section 8.28.040(D) of the Morgan Hill Municipal Code exempts construction noise provided that such activities do not occur during set hours. Specifically, construction activities are prohibited other than between the hours of 7:00 a.m. and 8:00 p.m., Monday through Friday and between the hours of 9:00 a.m. to 6:00 p.m. on Saturday. Further, construction activities may not occur on Sundays or federal holidays. It is reasonably assumed for the purposes of this analysis that all on-site noise-generating project construction equipment and activities would occur pursuant to Municipal Code Section 8.28.040(D) and would thereby be exempt from Municipal Code noise level criteria.

However, noise from heavy equipment operations during on-site demolition/construction activities would add to the noise environment in the immediate vicinity of the work area. In terms of determining the temporary noise increase due to project-related demolition/construction activities, an impact would occur if those activities were to noticeably increase ambient noise levels above background levels at nearby existing commercial uses. As mentioned previously in this report,

the threshold of perception of the human ear is approximately 3 to 5 dB – a 5 dB change is considered to be clearly noticeable. For this analysis, a noticeable increase in ambient noise levels is assumed to occur where noise levels increase by 5 dB or more over existing ambient noise levels.

As mentioned previously, BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured maximum (L_{max}) noise levels at Site B during the survey (presented in Table 5 of this report), and the highest predicted construction equipment maximum noise levels shown in Table 19, ambient plus project demolition/construction equipment noise level increases were calculated at the existing offices to the south. According to the results from that exercise, project-generated increases in ambient daytime noise levels are calculated to be 0.9 dB L_{max} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Based on the analysis and results provided above, this impact is identified as being ***less than significant***. Nonetheless, to reduce the potential for annoyance at nearby existing uses, the following measures should be incorporated into project on-site construction operations:

- All on-site noise-generating construction activities shall occur pursuant to Section 8.28.040(D) of the Morgan Hill Municipal Code.
- The project shall utilize temporary construction noise control measures including the use of temporary noise barriers, or other appropriate measures as mitigation for noise generated during construction of projects.
- All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition.
- All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.
- Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
- Project area and site access road speed limits shall be established and enforced during the construction period.

Vibration Impacts Associated with Project Activities

Impact 12: Vibration Generated by On-Site Project Demolition/Construction/Operations

During project demolition and construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of the construction. The nearest existing structures have been identified as relatively newer engineered commercial buildings (not highly susceptible to damage by vibration).

Table 20 includes the range of vibration levels for equipment commonly used in general residential construction projects at a distance of 25 feet. Table 20 data also include projected equipment vibration levels at the nearest off-site existing structures to the project area.

Table 20
Reference and Projected Vibration Source Amplitudes for Construction Equipment

Equipment	Reference Maximum Vibration Level at 25 feet, VdB (rms)	Projected Maximum Vibration Level, VdB (rms) ¹		
		Existing Commercial Bldg (East)	Existing Medical Office Bldg (South)	Future Hotel Bldg (West) ²
Vibratory Roller	94	63	60	73
Hoe Ram	87	<55	<55	63
Large bulldozer	87	<55	<55	63
Caisson drilling	87	<55	<55	63
Loaded trucks	86	<55	<55	62
Jackhammer	79	<55	<55	58
Small bulldozer	58	<55	<55	<55
¹ RMS velocity in decibels (VdB) re 1 micro-inch/second.				
² An analysis of project-generated vibration levels at the future hotel building to the west in the event construction and operation of the hotel use is complete before project construction begins.				

Source: 2018 FTA Transit Noise and Vibration Impact Assessment Manual and BAC calculations.

Section 18.76.130 of the Morgan Hill Municipal Code states that vibration transmitted through the ground that is discernible without instruments at the lot line of the establishment or use is prohibited. However, vibrations from temporary construction, demolition, and vehicles that enter and leave the lot (e.g., construction equipment, trucks, etc.) are exempt from this standard.

Based on the data presented in Table 20, vibration levels generated from on-site demolition/construction activities are predicted to be below the FTA threshold for damage to engineered structures (98 VdB) at a distance of 25 feet from those activities. At the closest existing commercial building (east) and nearest existing medical building (south), demolition/construction-related vibration levels are predicted to be below the 65 VdB threshold of human perception (Table 20). It is the understanding of BAC that the existing medical buildings to the south of the project may contain equipment sensitive to vibration. Table 20 data indicate that predicted demolition/construction-related vibration levels at the closest medical building (south) would be below the FTA threshold of 65 VdB for buildings where vibration would interfere with interior operations/equipment.

It should be noted that an analysis of project-generated vibration levels was also conducted at the future off-site hotel building (west) in the event the structure is completed and operational before project construction activities commence. As indicated in Table 20, construction-related vibration levels are predicted to be below levels considered to be annoying (75 VdB) at the future hotel building. Based on the analysis provided above, on-site construction within the project area is not expected to result in excessive groundborne vibration levels at nearby off-site structures.

Results from the ambient vibration level monitoring within the project area (Table 6) indicate that average measured vibration levels were below the 65 VdB threshold of perception. Therefore, it is expected that the project would not result in the exposure of persons to excessive groundborne vibration levels at proposed uses of the project.

Finally, the project proposes the construction of commercial uses. It is the experience of BAC that these uses do not typically have equipment that generates appreciable vibration.

Because vibration levels due to and upon the project are expected to be satisfactory relative to the applied FTA vibration impact criteria, this impact is considered to be ***less than significant***.

This concludes BAC's noise and vibration assessment of the Chick-fil-A Restaurant project in Morgan Hill, California. Please contact BAC at (530) 537-2328 or info@bacnoise.com if you have any comments or questions regarding this report.

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.
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Masking	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.
Noise	Unwanted sound.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the "Maximum" level, which is the highest RMS level.
RT₆₀	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
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** Site A: Along western project property line, facing east
- B** Site B: Along southern project property line, facing south towards medical offices

Chick-fil-A Restaurant
Morgan Hill, CA

Noise & Vibration Survey Photographs

Appendix C-1 of 1
 FHWA Highway Traffic Noise Prediction Model Inputs
 Chick-fil-A Restaurant
 File Name: Existing
 Run Date: 4/19/2023



#	Roadway	Description	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance to Receptor	Offset (dB)
1	Monterey Rd	North of Cochrane Rd	15,445	80	20	2	2	45	150	0
2	Monterey Rd	South of Cochrane Rd	22,475	80	20	2	2	45	110	0
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	16,410	80	20	2	2	45	150	0
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	18,630	80	20	2	2	45	150	0
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	18,220	80	20	2	2	45	150	0
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	27,665	80	20	2	2	45	150	0
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	20,900	80	20	2	2	45	100	0
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	28,960	80	20	2	2	45	315	0
9	Cochrane Rd	East of US 101 NB Ramps	14,525	80	20	2	2	45	125	0
10	Butterfield Blvd	South of Cochrane Rd								
11	Woodview Ave	North of Cochrane Rd	1,560	80	20	2	2	35	110	0
12	Evergreen Vlg	South of Cochrane Rd	760	80	20	2	2	25	100	0
13	Sutter Blvd	North of Cochrane Rd	6,650	80	20	2	2	35	75	0
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	7,555	80	20	2	2	35	100	0
15	Sutter Blvd	South of Cochrane Plza	6,750	80	20	2	2	35	75	0
16	Madrone Pkwy	North of Cochrane Rd	3,500	80	20	2	2	35	75	0
17	Cochrane Plza	South of Cochrane Rd	8,480	80	20	2	2	25	50	0
18	Cochrane Plza	West of Sutter Blvd	2,740	80	20	2	2	25	200	0
19	Cochrane Plza	East of Sutter Blvd	395	80	20	2	2	20	50	0
20	US 101 SB Ramps	South of Cochrane Rd	10,735	80	20	2	2	70	100	0
21	US 101 NB Ramps	North of Cochrane Rd	4,980	80	20	2	2	70	200	0

Appendix D-1 of 1
FHWA Highway Traffic Noise Prediction Model Inputs
Chick-fil-A Restaurant
File Name: Existing+Project
Run Date: 4/19/2023



#	Roadway	Description	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance to Receptor	Offset (dB)
1	Monterey Rd	North of Cochrane Rd	15,560	80	20	2	2	45	150	0
2	Monterey Rd	South of Cochrane Rd	22,510	80	20	2	2	45	110	0
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	16,595	80	20	2	2	45	150	0
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	18,865	80	20	2	2	45	150	0
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	18,510	80	20	2	2	45	150	0
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	27,960	80	20	2	2	45	150	0
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	21,060	80	20	2	2	45	100	0
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	29,255	80	20	2	2	45	315	0
9	Cochrane Rd	East of US 101 NB Ramps	14,645	80	20	2	2	45	125	0
10	Butterfield Blvd	South of Cochrane Rd								
11	Woodview Ave	North of Cochrane Rd	1,770	80	20	2	2	35	110	0
12	Evergreen Vlg	South of Cochrane Rd	760	80	20	2	2	25	100	0
13	Sutter Blvd	North of Cochrane Rd	7,250	80	20	2	2	35	75	0
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	7,730	80	20	2	2	35	100	0
15	Sutter Blvd	South of Cochrane Plza	7,350	80	20	2	2	35	75	0
16	Madrone Pkwy	North of Cochrane Rd	3,500	80	20	2	2	35	75	0
17	Cochrane Plza	South of Cochrane Rd	8,480	80	20	2	2	25	50	0
18	Cochrane Plza	West of Sutter Blvd	2,740	80	20	2	2	25	200	0
19	Cochrane Plza	East of Sutter Blvd	1,380	80	20	2	2	20	50	0
20	US 101 SB Ramps	South of Cochrane Rd	10,800	80	20	2	2	70	100	0
21	US 101 NB Ramps	North of Cochrane Rd	5,050	80	20	2	2	70	200	0

Appendix E-1 of 1
FHWA Highway Traffic Noise Prediction Model Inputs
Chick-fil-A Restaurant
File Name: Cumulative
Run Date: 4/19/2023



#	Roadway	Description	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance to Receptor	Offset (dB)
1	Monterey Rd	North of Cochrane Rd	19,585	80	20	2	2	45	150	0
2	Monterey Rd	South of Cochrane Rd	30,385	80	20	2	2	45	110	0
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	20,420	80	20	2	2	45	150	0
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	24,365	80	20	2	2	45	150	0
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	22,820	80	20	2	2	45	150	0
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	33,590	80	20	2	2	45	150	0
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	27,565	80	20	2	2	45	100	0
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	35,065	80	20	2	2	45	315	0
9	Cochrane Rd	East of US 101 NB Ramps	21,355	80	20	2	2	45	125	0
10	Butterfield Blvd	South of Cochrane Rd								
11	Woodview Ave	North of Cochrane Rd	3,420	80	20	2	2	35	110	0
12	Evergreen Vlg	South of Cochrane Rd	760	80	20	2	2	25	100	0
13	Sutter Blvd	North of Cochrane Rd	8,180	80	20	2	2	35	75	0
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	9,080	80	20	2	2	35	100	0
15	Sutter Blvd	South of Cochrane Plza	8,275	80	20	2	2	35	75	0
16	Madrone Pkwy	North of Cochrane Rd	3,520	80	20	2	2	35	75	0
17	Cochrane Plza	South of Cochrane Rd	10,575	80	20	2	2	25	50	0
18	Cochrane Plza	West of Sutter Blvd	2,740	80	20	2	2	25	200	0
19	Cochrane Plza	East of Sutter Blvd	395	80	20	2	2	20	50	0
20	US 101 SB Ramps	South of Cochrane Rd	13,495	80	20	2	2	70	100	0
21	US 101 NB Ramps	North of Cochrane Rd	5,585	80	20	2	2	70	200	0

Appendix F-1 of 1
FHWA Highway Traffic Noise Prediction Model Inputs
Chick-fil-A Restaurant
File Name: Cumulative+Project
Run Date: 4/19/2023



#	Roadway	Description	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance to Receptor	Offset (dB)
1	Monterey Rd	North of Cochrane Rd	19,765	80	20	2	2	45	150	0
2	Monterey Rd	South of Cochrane Rd	30,440	80	20	2	2	45	110	0
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	20,605	80	20	2	2	45	150	0
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	24,600	80	20	2	2	45	150	0
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	23,110	80	20	2	2	45	150	0
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	33,885	80	20	2	2	45	150	0
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	27,670	80	20	2	2	45	100	0
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	35,255	80	20	2	2	45	315	0
9	Cochrane Rd	East of US 101 NB Ramps	21,430	80	20	2	2	45	125	0
10	Butterfield Blvd	South of Cochrane Rd								
11	Woodview Ave	North of Cochrane Rd	3,630	80	20	2	2	35	110	0
12	Evergreen Vlg	South of Cochrane Rd	760	80	20	2	2	25	100	0
13	Sutter Blvd	North of Cochrane Rd	8,780	80	20	2	2	35	75	0
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	9,255	80	20	2	2	35	100	0
15	Sutter Blvd	South of Cochrane Plza	8,875	80	20	2	2	35	75	0
16	Madrone Pkwy	North of Cochrane Rd	3,520	80	20	2	2	35	75	0
17	Cochrane Plza	South of Cochrane Rd	10,575	80	20	2	2	25	50	0
18	Cochrane Plza	West of Sutter Blvd	2,740	80	20	2	2	25	200	0
19	Cochrane Plza	East of Sutter Blvd	1,380	80	20	2	2	20	50	0
20	US 101 SB Ramps	South of Cochrane Rd	13,535	80	20	2	2	70	100	0
21	US 101 NB Ramps	North of Cochrane Rd	5,630	80	20	2	2	70	200	0

Appendix G

Drive-Through Speaker Reference Noise Level Data

HME

Customer Driven

Memo

Re: Drive-Thru Sound Pressure Levels From the Menu Board or Speaker Post

The sound pressure levels from the menu board or speaker post are as follows:

1. Sound pressure level (SPL) contours (A weighted) were measured on a typical HME SPP2 speaker post. The test condition was for pink noise set to 84 dBA at 1 foot in front of the speaker. All measurements were conducted outside with the speaker post placed 8 feet from a non-absorbing building wall and at an oblique angle to the wall. These measurements should not be construed to guarantee performance with any particular speaker post in any particular environment. They are typical results obtained under the conditions described above.
2. The SPL levels are presented for different distances from the speaker post:

Distance from the Speaker (Feet)	SPL (dBA)
1 foot	84 dBA
2 feet	78 dBA
4 feet	72 dBA
8 feet	66 dBA
16 feet	60 dBA
32 feet	54 dBA

3. The above levels are based on factory recommended operating levels, which are preset for HME components and represent the optimum level for drive-thru operations in the majority of the installations.

Also, HME incorporates automatic volume control (AVC) into many of our Systems. AVC will adjust the outbound volume based on the outdoor, ambient noise level. When ambient noise levels naturally decrease at night, AVC will reduce the outbound volume on the system. See below for example:

Distance from Outside Speaker	Decibel Level of standard system with 45 dB of outside noise <u>without</u> AVC	Decibel level of standard system with 45 dB of outside noise <u>with</u> AVC active
1 foot	84 dBA	60 dBA
2 feet	78 dBA	54 dBA
4 feet	72 dBA	48 dBA
8 feet	66 dBA	42 dBA
16 feet	60 dBA	36 dBA

If there are any further questions regarding this issue please contact HME customer service at 1-800-848-4468.

Thank you for your interest in HME's products.

Appendix D

VMT Assessment



Memorandum

Date: April 24, 2023
To: Nick Pappani, Raney Planning & Management
From: Robert Del Rio, T.E., Luis Descanzo
Subject: VMT Assessment for the Proposed 18599 Sutter Boulevard Chick-Fil-A in Morgan Hill, California

Hexagon Transportation Consultants, Inc. has completed a vehicle-miles traveled (VMT) assessment for the proposed Chick-Fil-A restaurant located at 18599 Sutter Boulevard (APN 726-32-005) in Morgan Hill, California (see Figure 1). The site is currently occupied by a vacant restaurant. As proposed, the project would consist of a 5,028 s.f. Chick-Fil-A restaurant with two drive-through lanes. The purpose of this memorandum is to provide an assessment of the project's effect on VMT. The VMT assessment methodology and results are discussed below.

VMT Assessment Methodology and Results

Pursuant to Senate Bill (SB) 743, the California Environmental Quality Act (CEQA) 2019 Update Guidelines Section 15064.3, subdivision (b) states that VMT will be the metric in analyzing transportation impacts for land use projects for CEQA purposes. VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT measures the full distance of personal motorized vehicle-trips with one end within the project.

The City of Morgan Hill, at the time of this report, is undertaking a process of updating its transportation policies to incorporate VMT methodologies and significance thresholds to be consistent with SB 743 but has not released draft thresholds. In the absence of an adopted City policy with impact standards and thresholds, this assessment relies on the Governor's Office of Planning and Research (OPR) guidelines in analyzing the project's effects on VMT.

OPR Screening Recommendations

The *Technical Advisory on Evaluating Transportation Impacts in CEQA* published by OPR in December 2018 provides recommendations regarding VMT evaluation methodology, significance thresholds, and screening thresholds for the evaluation of land use projects.

The OPR provides screening threshold recommendations that are intended to identify when a project can be determined to cause a less-than-significant impact without conducting a detailed VMT evaluation. The OPR screening thresholds recommendations are based on project size, maps, transit availability, and provision of affordable housing. The OPR recommendations include the screening threshold criteria listed below:

Figure 1
Site Location

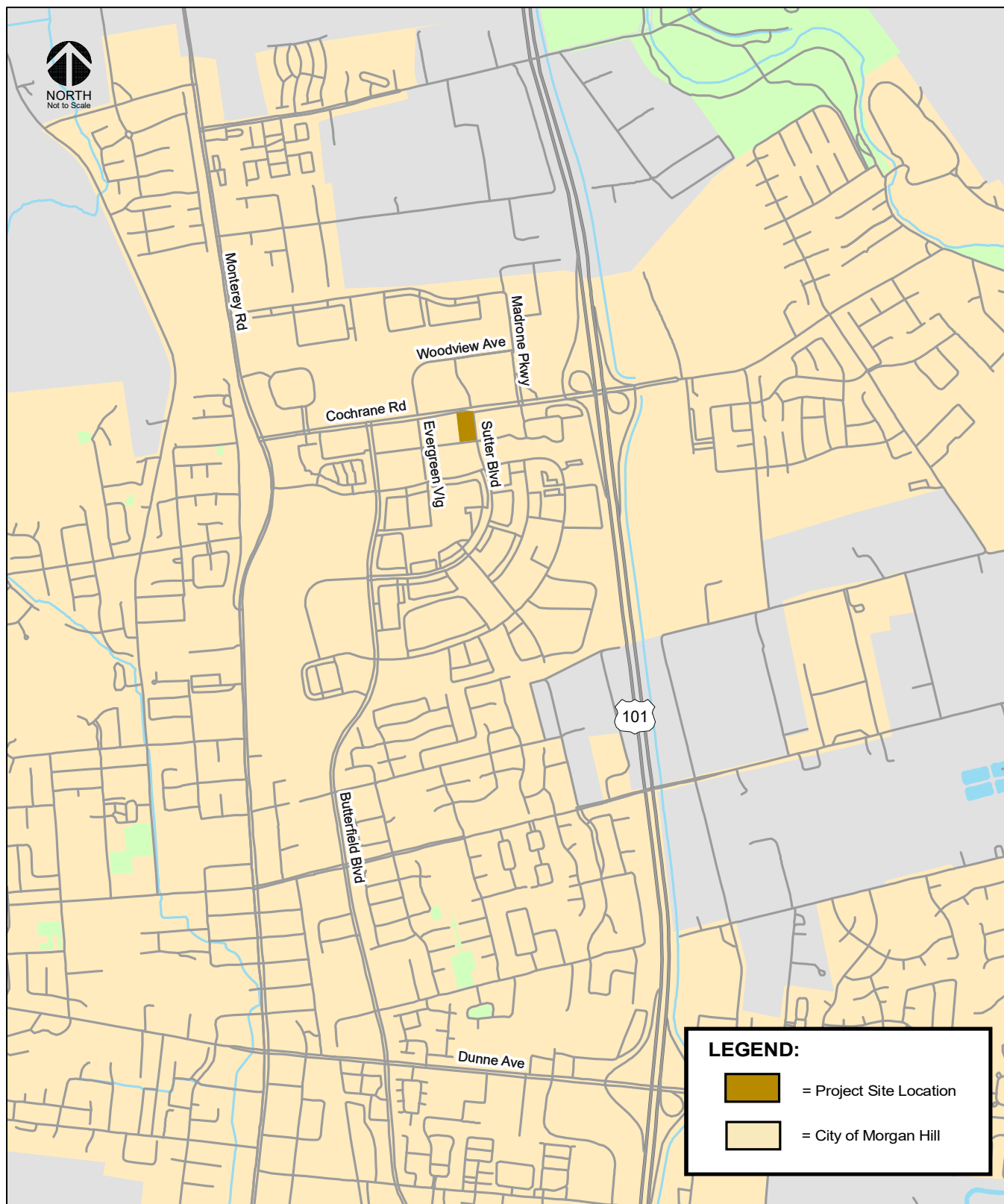
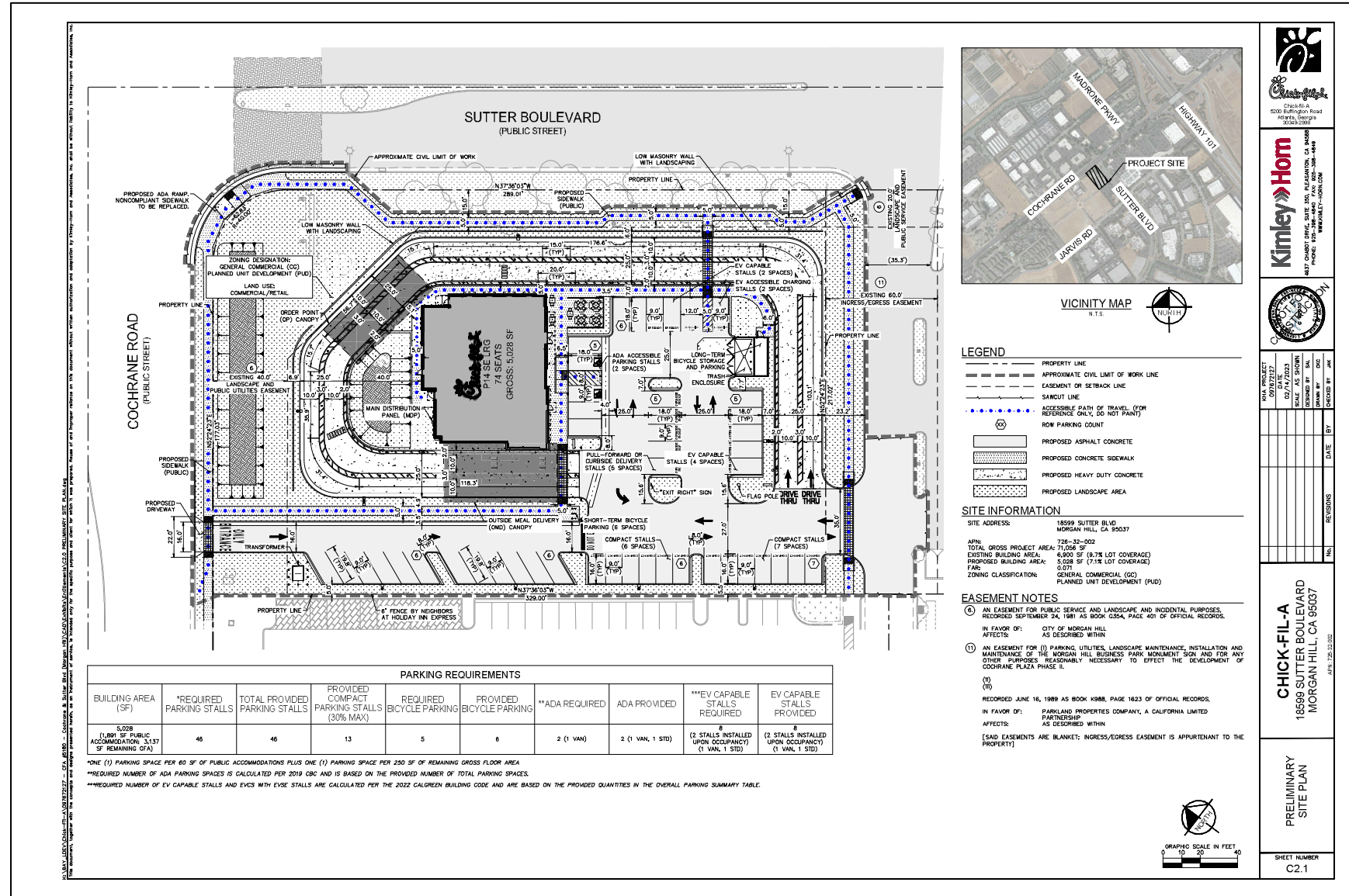


Figure 2
Site Plan



- OPR recommends that office or residential projects not exceeding a level of 15 percent below existing VMT per capita and employee may indicate a less-than-significant impact on VMT.
- OPR recommends that projects (including office, residential, retail, and mixed-use developments) proposed within ½ mile of an existing major transit stop or within ¼ mile of an existing stop along a high-quality transit corridor may be presumed to have a less-than-significant impact on VMT.
- OPR recommends that 100 percent affordable residential development in infill locations be presumed to have a less-than-significant impact on VMT.
- OPR recommends that projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant impact on VMT.
- ***OPR recommends that local-serving retail developments (considered to be less than 50,000 s.f. in size) may be assumed to cause a less-than-significant impact on VMT.***

However, the guidelines for the evaluation of VMT for development projects is limited to general land use categories such as residential, office, industrial, and retail. Therefore, the assessment of VMT for the proposed fast-food restaurant required a conversion to an equivalent amount of one of the general land uses that has similar trip generating and trip origin/destination characteristics. The number and origination/destination of daily trips and resulting VMT generated by the proposed fast-food restaurant available within the City would be similar to that of local-serving retail since there is not another Chick Fil A restaurant located within the City. As such, the proposed project would provide service to City residents that does not exist today. Therefore, the proposed fast-food restaurant was converted to an equivalent amount of local-serving retail space based on a comparison of estimated daily trips using ITE trip rates for the proposed fast-food restaurant and typical retail uses.

Daily Trip Generation Estimates

Site-generated vehicular traffic for the proposed restaurant was estimated utilizing trip generation rates that were determined based on vehicular counts at three existing Chick-fil-A restaurants with two drive-through lanes and of comparable square footage as that of the proposed project. The trip surveys were completed between February 18, 2023 and February 25, 2023 at the following three locations:

- Pittsburg, CA – 4717 Century Boulevard (4.99 k.s.f.)
- Milpitas, CA – 755 E. Calaveras Boulevard (4.96 k.s.f.)
- Daly City, CA – 6 Serramonte Center (4.92 k.s.f.)

Daily trip generation was estimated based on the surveyed peak-hour trips and the ratio of peak-hour trips to daily trips for a fast-food restaurant with drive-through window (Land Use 934) published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. The results of each survey, shown on Table 1, were utilized to calculate average trip rates. Using these average rates, the project is estimated to produce 1,822 daily vehicle trips prior to any trip reductions (see Table 1).

Fast-food restaurants with drive-through windows attract a substantial number of pass-by trips, which are trips made by drivers who already pass by the project site on an adjacent street en- route to another destination, such as a trip from work to home. In contrast, primary (non-pass-by) trips are new trips made for the sole purpose of visiting the project site. Thus, pass-by trips are not considered new trips that are generated by the project site. However, the attraction of pass-by trips does result in a reassignment of existing traffic passing-by the project site on adjacent streets at site driveways and intersections immediately adjacent to the project site. Surveys of fast-food restaurants with a drive-through window at various sites around the country exhibited an average pass-by rate of 55 percent.

Table 1
Trip Survey Summary

Survey Location ¹	Size (ksf)	AM Peak-Hour				PM Peak-Hour			
		Rate	In	Out	Total	Rate	In	Out	Total
Pittsburg - 4717 Century Blvd	4.99	19.86	54	45	99	34.90	89	85	174
Milpitas - 755 E Calaveras Blvd	4.96	13.30	30	36	66	31.24	92	63	155
Daly City - 6 Serramonte Center	4.92	27.03	69	64	133	54.07	126	140	266
Survey Average	4.96	20.06	51	48	99	40.07	102	96	198
<i>ITE 934: Fast-Food Restaurant with Drive-Through</i>	<i>4.96</i>	<i>44.61</i>	<i>113</i>	<i>108</i>	<i>221</i>	<i>33.03</i>	<i>85</i>	<i>79</i>	<i>164</i>
Notes: ¹ Peak-hour trips are based on trip survey counts conducted February 18, 2023 to February 25, 2023.									

during the PM peak hour (*Trip Generation Manual, 11th Edition*). Therefore, a 55 percent reduction was assumed for the estimated daily trips. After subtracting pass-by trips, the project is expected to generate 820 primary vehicle trips per day. Because the existing commercial building on the project site is currently vacant, no trip credits are applied for the existing commercial space. Trip generation estimates for the proposed project are shown in Table 2.

VMT Assessment Results

VMT Evaluation Using OPR Screening Criteria

The proposed project consists of a 5,028 s.f. fast food restaurant. The proposed project was converted to an equivalent amount of retail/commercial use for the purpose of the VMT assessment since the OPR screening criteria outlined above are not directly applicable to fast food restaurant uses. The results of the conversion of the proposed fast-food restaurant to an equivalent amount of retail/commercial space, shown on Table 3, indicate that the proposed fast food restaurant would generate net new daily trips equivalent to that of an approximately 22,500 s.f. retail development. If no pass-by reduction is applied, the proposed fast food restaurant would generate daily trips equivalent to that of an approximately 49,500 s.f. retail development.

Since the project's converted retail size, with or without pass-by reductions, would be less than 50,000 s.f., the proposed project may be presumed to be a local-serving facility and would therefore have a less-than-significant impact on VMT. The OPR guidelines suggest that by adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. Chick-Fil-A, in particular, does not have a significant presence in the Southern Santa Clara Valley region, with restaurants in South San Jose and Salinas being the closest to Morgan Hill. The proposed new Morgan Hill location will provide a proximate location for City residents to a Chick-Fil-A restaurant, thus resulting in shorter trips and subsequent reduction in VMT generated by Morgan Hill residents for the purpose of visiting a Chick-Fil-A location. Moreover, the trip generation estimates assume a significant number of trips will be pass-by trips, which are based on pass-by rates derived from the ITE *Trip Generation Manual, 11th Edition*. As discussed above, pass-by trips are not considered new trips and merely result in a reassignment of existing through traffic (i.e. along Cochrane Road and Sutter Boulevard) at site driveways and intersections immediately adjacent to the project site. These pass-by trips are already accounted for in the baseline VMT and are not new VMT generated by the proposed project.

As a result of the project having trip-making characteristics of a local-serving retail facility, it can be presumed that the proposed project would have a less-than-significant impact on VMT based on OPR's VMT screening criteria.

Quantitative VMT Evaluation

For informational purposes, the VMT assessment was supplemented with a quantitative analysis of the project's effects on VMT. The VTA Countywide transportation model was used to estimate VMT for the proposed retail/fast-food use of the project site since it can estimate the diversion of traffic and change in traffic patterns due to land use changes/additions like those proposed by the project. The VTA model is a mathematical representation of travel within Santa Clara County and is mainly composed of four components: 1) trip generation, 2) trip distribution, 3) mode choice, and 4) trip assignment. The model uses socioeconomic inputs (i.e. households, number of jobs, travel mode-share defaults) to estimate travel within Santa Clara County. Socioeconomic inputs are aggregated into geographic areas or traffic analysis zones (TAZs). The underlying premise of the VMT evaluation is that the proposed retail/fast-food uses would not cause an increase in trips but rather result in a change in trip-making

Table 2
Trip Generation Summary

Land Use	Size (ksf)	Daily		AM Peak-Hour				PM Peak-Hour			
		Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total
Proposed Project											
Chick-Fil-A with Drive-Through ¹	5.03	362.34	1,822	20.06	52	49	101	40.07	104	97	201
Pass-by Reduction (55% Daily/50% AM/55 %PM) ²			-1002		-26	-24	-50		-57	-54	-111
Net Project Trips			820		26	25	51		47	43	90
Notes:											
¹ Peak-hour trips are based on trip survey counts conducted February 18, 2023 to February 25, 2023.											
Daily trips are based on surveyed peak-hour trips and the ratio of peak-hour trips to daily trips published in the ITE <i>Trip Generation Manual</i> , 11 th Edition for Land Use Code 934: Fast-Food Restaurant with Drive-Through.											
² Peak-hour pass-by trip reduction percentage based on data contained in the ITE <i>Trip Generation Manual</i> , 11 th Edition.											
Daily pass-by rate is assumed to be the same as PM pass-by rate.											

Table 3
Conversion to Equivalent Retail Space

Land Use	Size	Daily	
		Rate	Trips
Proposed Chick-fil-A Restaurant (with pass-by reduction) ^{1, 2}			820
Retail (ITE #820) ³	Equivalent Retail Space⁴ = 22,500 Square Feet	37.01	820
Proposed Chick-fil-A Restaurant (without pass-by reduction) ¹			1,822
Retail (ITE #820) ³	Equivalent Retail Space⁴ = 49,500 Square Feet	37.01	1,822
Notes: 1. Daily trips are based on observed peak-hour trips and the ratio of peak-hour trips to daily trips published in the ITE <i>Trip Generation Manual</i> , 11 th Edition for Land Use Code 934: Fast-Food Restaurant with Drive-Through. 2. Peak-hour pass-by trip reduction percentage based on data contained in the ITE <i>Trip Generation Manual</i> , 11 th Edition. Daily pass-by rate is assumed to be the same as PM pass-by rate. 3. ITE <i>Trip Generation Manual</i> , 11 th Edition 2021. 4. The equivalent retail space were rounded up to the next 500 square feet.			

characteristics because some people would visit the proposed project instead of other nearby fast-food establishments.

The VTA model is general in its categorization of commercial, restaurant, retail type of land uses. Therefore, in order to estimate the effects on VMT for the fast-food use of the proposed project with the model, the qualitative evaluation utilizes a converted square footage of 49,500 s.f. of commercial space (based on 1,822 daily trips) as described previously. The equivalent retail space was then converted to 124 retail jobs using a ratio of one retail job per 400 square feet.

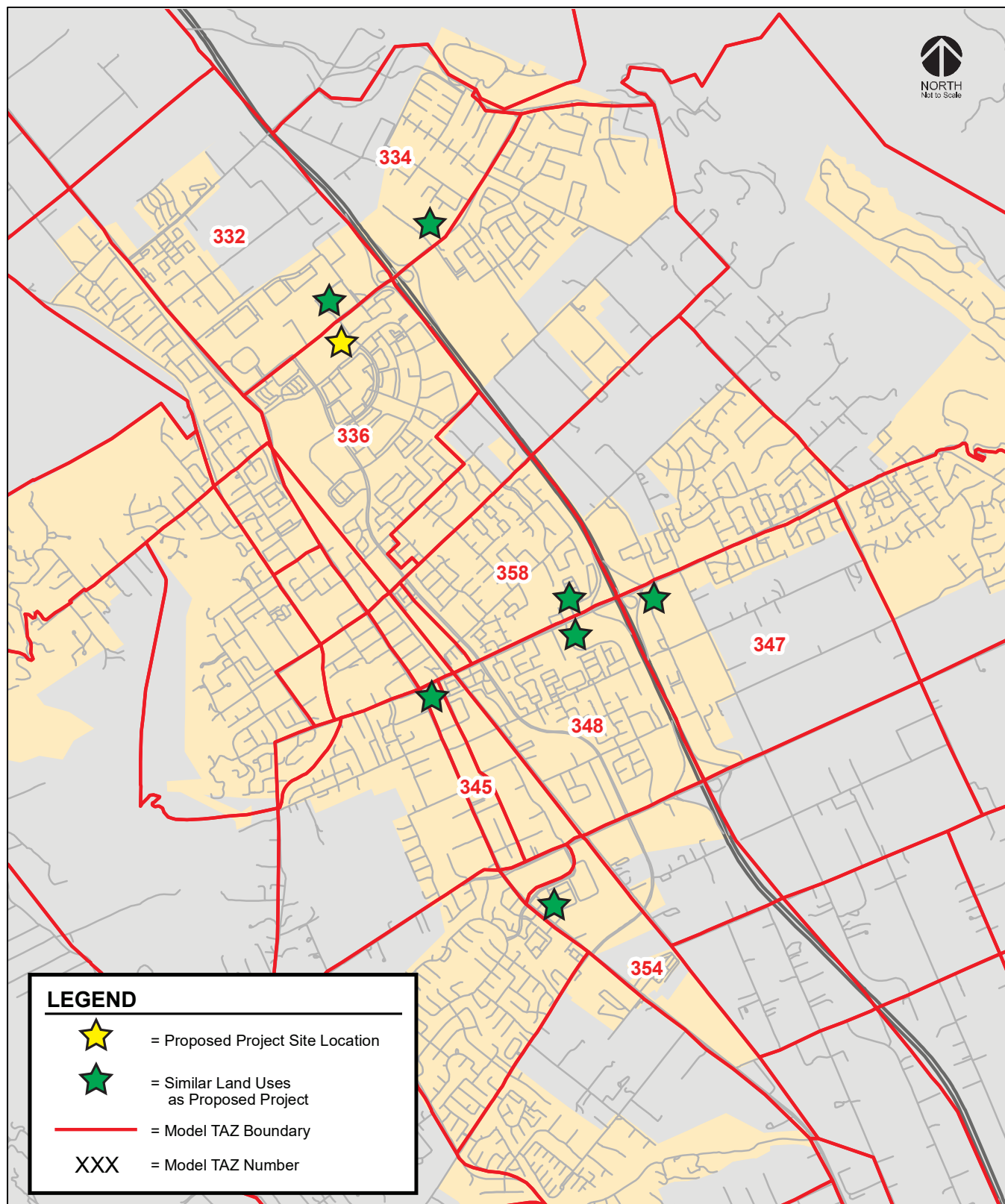
Hexagon selected Traffic Analysis Zones (TAZ) within the model that included similar fast-food uses as the proposed project (see Figure 3). For the purpose of modeling VMT, some employees were assumed to leave their jobs at these nearby shopping centers and instead work at the proposed project site. In order to reflect this, an equivalent number of retail jobs from TAZs (334, 332, 358, 348, 345, 347, 354) were shifted to the project TAZ (336). These job changes were made in the 2015 base year land use file. The VTA model was then used to generate projected daily VMT without and with the project for the selected TAZs to estimate the change in daily VMT. The analysis includes an estimate of home-based work VMT (VMT generated by restaurant employees) and home-based shopping VMT (VMT generated by customers).

VMT Policies and Impact Criteria

To adhere to the state's legislation, the City of Morgan Hill is currently developing the framework for new transportation policies based on the implementation of VMT as the primary measure of transportation impacts for CEQA purposes. The new policies will replace the City's current transportation policies that are based on levels of service. However, since the City has not formally adopted its own City-specific VMT policies, this evaluation utilizes VMT analysis methodology and impact thresholds recommended in the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018.

The thresholds of significance for retail development projects, as recommended in the OPR technical advisory, are based on the existing regional average total VMT. Per the technical advisory, projects that include retail uses are said to create a significant adverse impact on VMT when the project results in any increase in the total VMT.

Figure 3
Similar Land Uses in the Project Vicinity



The model results summarized in Table 4 show that the proposed project would result in an increase of 205 home-based work VMT and a decrease of 607 home-based shopping VMT, resulting in a net decrease of 402 daily VMT. The net reduction in VMT is the result of the project providing a new fast-food option in northern Morgan Hill proximate to nearby residents and employment areas, thus resulting in shorter trips and subsequent reduction in VMT generated by customers. Therefore, the qualitative analysis shows that the proposed project would not result in an impact on the transportation system based on OPR's recommended VMT impact criteria.

Table 4
Retail VMT Analysis

VMT Analysis	No Project	Project	Project - No Project
Home-Based Work VMT	178,223	178,428	205
Home-Based Shop/Other VMT	122,170	121,563	-607
Total VMT	300,393	299,991	-402



HEXAGON TRANSPORTATION CONSULTANTS, INC.

Memorandum

Date: June 23, 2023
To: Nick Pappani, Raney Planning & Management
From: Robert Del Rio, T.E., Luis Descanzo
Subject: Trip Generation and Operations Analysis for the Proposed 18599 Sutter Boulevard Chick-Fil-A in Morgan Hill, California

Hexagon Transportation Consultants, Inc. has completed a trip generation and operations analysis for the proposed Chick-Fil-A restaurant located at 18599 Sutter Boulevard (APN 726-32-002) in Morgan Hill, California (see Figure 1). The site is currently occupied by a vacant restaurant. As proposed, the project would consist of a 5,028 s.f. Chick-Fil-A restaurant with two drive-through lanes. Vehicular access would be provided via an existing full-access driveway along Sutter Boulevard and a proposed right-in-only access driveway along Cochrane Road.

The methodology, results, and recommendations of the analysis are discussed below.

Scope of Study

The current General Plan, *Morgan Hill 2035 General Plan*, adopted in July 2016 uses Level of Service (LOS) as its primary metric for the evaluation of the projected operation of the City's roadway system. Therefore, this traffic operations analysis which includes a peak hour intersection level of service analysis is included for consistency with the General Plan goals and policies. The traffic operations analysis supplements the California Environmental Quality Act (CEQA) required VMT analysis provided in a separate memorandum. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis.

The purposes of the trip generation and operations analysis is to evaluate the magnitude of traffic that would be added to the roadway system due to the proposed project and to determine whether a comprehensive traffic study is required for the proposed project. The analysis consists of an estimation of project trip generation and evaluation peak-hour intersection level of service analysis at intersections in the immediate vicinity of the project site. A review of the project's site access per the proposed site plan also is included. Traffic conditions were evaluated for the scenarios listed below.

Existing Conditions. Existing conditions represent the existing peak-hour traffic volumes on the existing roadway network. Existing traffic volumes at the study intersections (except for three intersections) were derived from traffic counts collected in May 2018, to which a 1.5% annual growth factor was applied to represent existing conditions in 2023. New turning movement counts were conducted at three study intersections (Sutter Boulevard/Cochrane Road, Woodview Avenue/Cochrane Road, Sutter Boulevard/Cochrane Plaza) in March 2023, to account for traffic generated by newly-built commercial uses within the Evergreen Village development. The new counts also account for changes to the roadway network since 2018 as a result of access improvements to Evergreen Village, such as signalization of the Woodview Avenue/Cochrane Road

Figure 1
Site Location

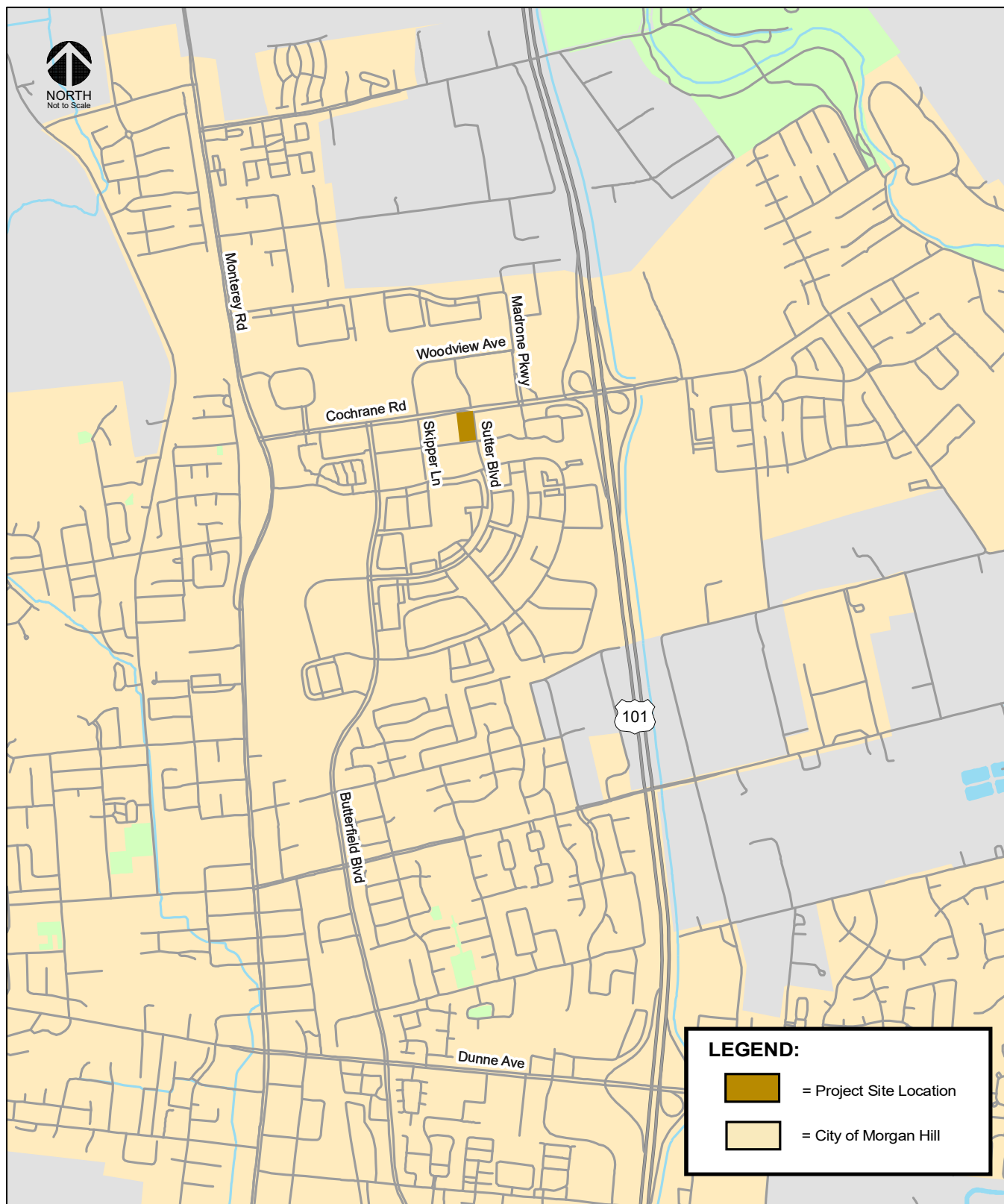
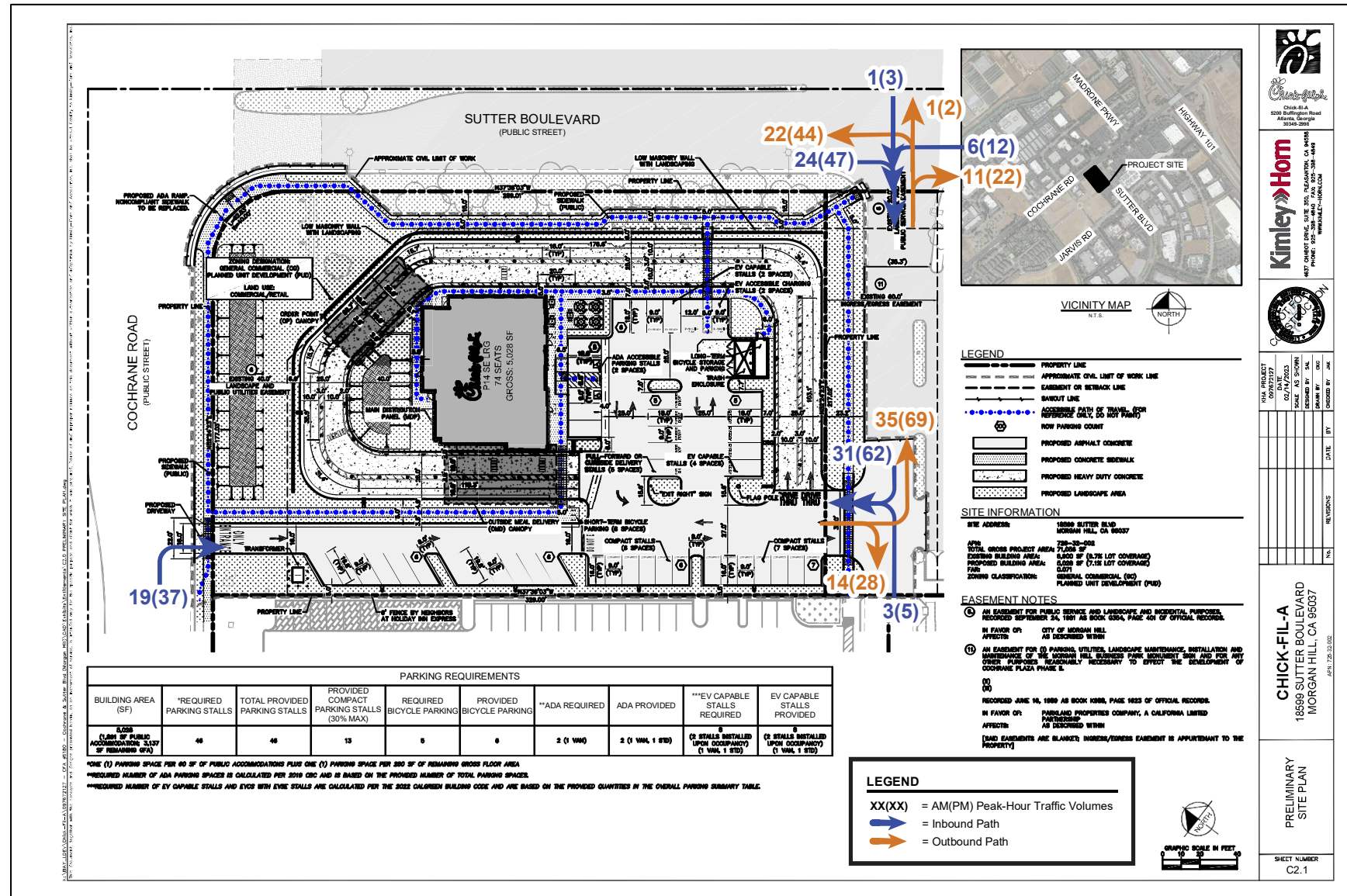


Figure 2
Site Plan and Project Trips at Site Access Points



Intersection, a new internal drive aisle connection to the Sutter Boulevard/Cochrane Plaza intersection, and new driveways along Jarvis Drive and Butterfield Boulevard.

A comparison of factored volumes and new counts showed that factored volumes along eastbound and westbound Cochrane Road were generally higher than the new counts during the AM and PM peak-hours. It can therefore be assumed that factored volumes are a conservative estimate of 2023 traffic volumes. However, factored volumes at the intersection of Madrone Parkway/Cochrane Road showed 150 fewer vehicles in the eastbound direction during the AM peak-hour compared to the new counts collected at the upstream intersection of Sutter Boulevard/Cochrane Road. Therefore, volumes at the intersections of Madrone Parkway/Cochrane Road, US 101 Southbound Ramps/Cochrane Road, and US 101 Northbound Ramps/Cochrane Road were adjusted by adding 150 vehicles in the eastbound direction during the AM peak-hour.

Existing Plus Project Conditions. Existing plus project peak-hour traffic volumes were estimated by adding to the existing traffic volumes the additional traffic that would be generated by the proposed project. Existing plus project conditions were evaluated relative to existing conditions in order to determine the effects of the proposed project on existing traffic conditions.

Year 2030 Cumulative Conditions. Year 2030 Cumulative conditions represent future traffic volumes on the existing transportation network. Year 2030 Cumulative conditions include traffic growth projected to occur in the Year 2030 without the proposed project.

Year 2030 Cumulative with Project Conditions. Year 2030 Cumulative with Project conditions consists of 2030 Cumulative traffic conditions with the addition of project traffic.

Project Trip Generation Estimates and Assignment

In determining the project trip generation, the magnitude of traffic entering and existing the site is estimated for the AM and PM peak hours. Peak-hour trip generation for the proposed fast-food restaurant with drive-through window was estimated utilizing trip generation rates that were determined based on vehicular counts at three existing Chick-fil-A restaurants with two drive-through lanes and of comparable square footage as that of the proposed project. The trip surveys were completed between February 18, 2023 and February 25, 2023 at the following three locations:

- Pittsburg, CA – 4717 Century Boulevard (4.99 k.s.f.)
- Milpitas, CA – 755 E. Calaveras Boulevard (4.96 k.s.f.)
- Daly City, CA – 6 Serramonte Center (4.92 k.s.f.)

Daily trip generation was estimated based on the surveyed peak-hour trips and the ratio of peak-hour trips to daily trips for a fast-food restaurant with drive-through window (Land Use 934) published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. The results of each survey, shown on Table 1, were utilized to calculate average peak hour trip rates. Using these average rates, the project is estimated to produce 1,822 daily vehicle trips with 101 AM peak-hour trips (52 inbound and 49 outbound) and 201 PM peak-hour trips (101 inbound and 97 outbound) before any reductions.

Fast-food restaurants with drive-through windows attract a substantial number of pass-by trips, which are trips made by drivers who already pass by the project site on an adjacent street en route to another destination, such as work to home. In contrast, primary (non-pass-by) trips are new trips made for the sole purpose of visiting the project site. Thus, pass-by trips are not considered new trips that are generated by the project site. However, the attraction of pass-by trips does result in a reassignment of existing through traffic (i.e. along Cochrane Road and Sutter Boulevard) at site driveways and

Table 1
Trip Survey Summary

Survey Location ¹	Size (ksf)	AM Peak-Hour				PM Peak-Hour			
		Rate	In	Out	Total	Rate	In	Out	Total
Pittsburg - 4717 Century Blvd	4.99	19.86	54	45	99	34.90	89	85	174
Milpitas - 755 E Calaveras Blvd	4.96	13.30	30	36	66	31.24	92	63	155
Daly City - 6 Serramonte Center	4.92	27.03	69	64	133	54.07	126	140	266
Survey Average	4.96	20.06	51	48	99	40.07	102	96	198
<i>ITE 934: Fast-Food Restaurant with Drive-Through</i>	<i>4.96</i>	<i>44.61</i>	<i>113</i>	<i>108</i>	<i>221</i>	<i>33.03</i>	<i>85</i>	<i>79</i>	<i>164</i>
Notes: ¹ Peak-hour trips are based on trip survey counts conducted February 18, 2023 to February 25, 2023.									

intersections immediately adjacent to the project site. A 50 percent pass-by reduction was assumed for the estimated daily, AM peak-hour, and PM peak-hour trips. After subtracting pass-by trips, the project is expected to generate 911 primary vehicle trips per day, with 51 primary vehicle trips (26 inbound and 25 outbound) in the AM peak hour and 100 primary vehicle trips (52 inbound and 48 outbound) in the PM peak hour. Because the existing commercial building on the project site is currently vacant, no trip credits are applied for the existing commercial space. Trip generation estimates for the proposed project are shown in Table 2.

The directional distribution of site-generated traffic to and from the project site was estimated based on the existing travel patterns on the surrounding roadway network that reflect typical weekday AM and PM peak commute patterns, the location of the project driveways, freeway access points, and the locations of complimentary land uses. The peak-hour project trips associated with the proposed project were added to the transportation network in accordance with the distribution pattern. The project trip distribution pattern and assignment of project trips at the study intersections under existing plus project conditions are shown on Figure 3.

Year 2030 Cumulative Conditions Project Trip Generation Estimates

Analysis under cumulative conditions is based on the General Plan traffic model which assumes no new development on the project site.

Intersection Level of Service Analysis

Traffic conditions at the following study intersections were analyzed for the weekday AM and PM peak hours of traffic:

1. Monterey Road and Cochrane Road
2. Butterfield Boulevard and Cochrane Road
3. Woodview Avenue/Skipper Lane and Cochrane Road
4. Sutter Boulevard and Cochrane Road
5. Madrone Parkway/Cochrane Plaza and Cochrane Road
6. US 101 Southbound Ramps and Cochrane Road
7. US 101 Northbound Ramps and Cochrane Road
8. Sutter Boulevard and Cochrane Plaza

Other intersections in the project area were not studied because the addition of project trips will be minimal, less than 10 peak hour trips per lane. The weekday AM peak hour of traffic generally falls within the 7:00 AM to 9:00 AM period and the weekday PM peak hour is typically in the 4:00 PM to 6:00 PM period. It is during these times that the most congested traffic conditions occur on a typical weekday.

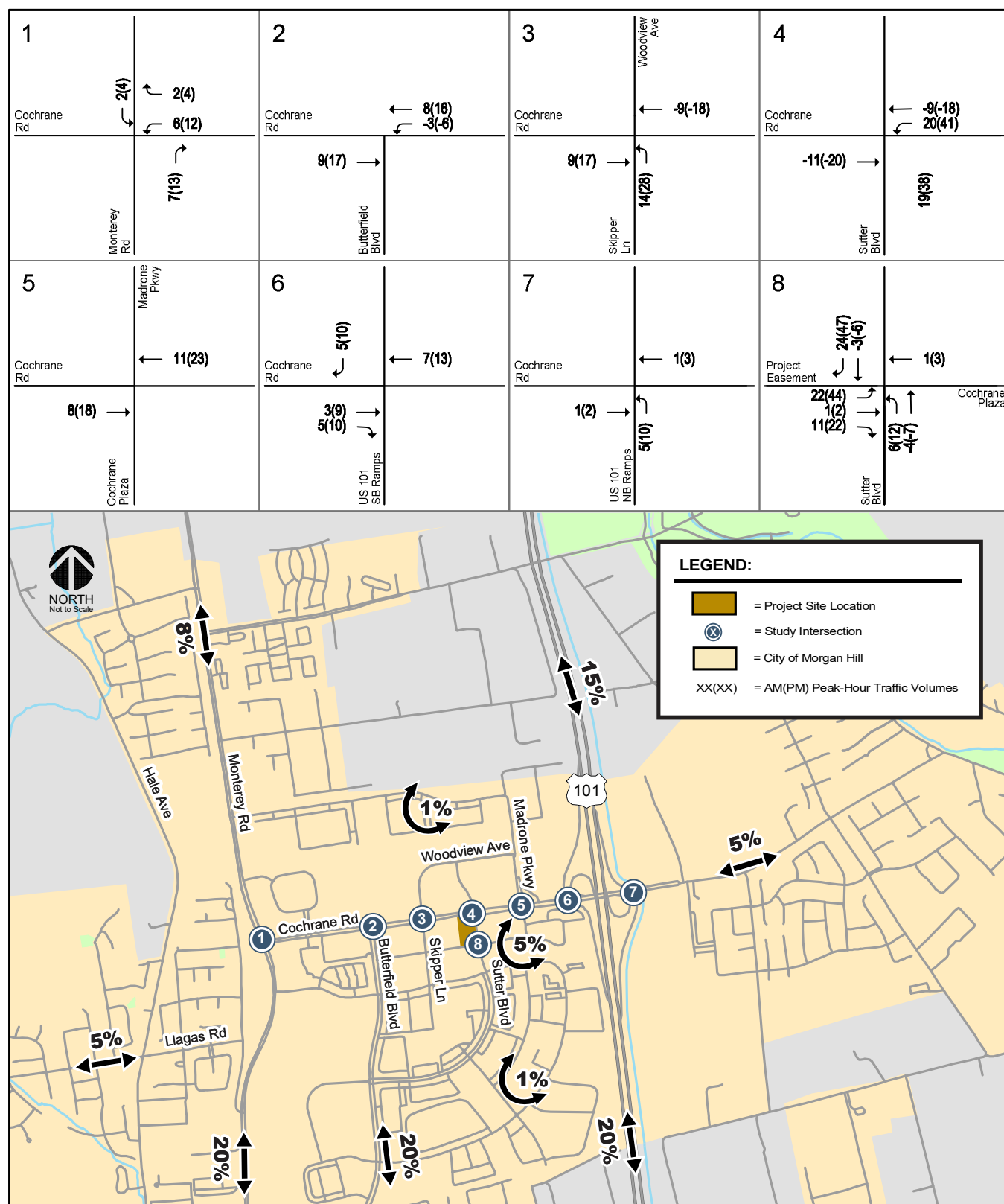
Signalized Intersection Analysis

Signalized study intersections are subject to the City of Morgan Hill's level of service standards. The City of Morgan Hill's level of service methodology is TRAFFIX, which is based on the 2000 *Highway Capacity Manual* (HCM) method for signalized intersections. TRAFFIX evaluates signalized intersections operations based on average delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersection level of service methodology, the City of Morgan Hill methodology employs the CMP defaults values for the analysis parameters, which include adjusted saturation flow rates to reflect conditions in Santa Clara County. All intersections within the City of Morgan Hill are required to meet the City's LOS standard of LOS D, with the exception of the following:

Table 2
Trip Generation Summary

Land Use	Size (ksf)	Daily		AM Peak-Hour				PM Peak-Hour			
		Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total
Proposed Project											
Chick-Fil-A with Drive-Through ¹	5.03	362.34	1,822	20.06	52	49	101	40.07	104	97	201
Pass-by Reduction (50%) ²			-911		-26	-24	-50		-52	-49	-101
Net Project Trips			911		26	25	51		52	48	100
Notes:											
¹ Peak-hour trips are based on trip survey counts conducted February 18, 2023 to February 25, 2023.											
Daily trips are based on surveyed peak-hour trips and the ratio of peak-hour trips to daily trips published in the ITE <i>Trip Generation Manual</i> , 11 th Edition for Land Use Code 934: Fast-Food Restaurant with Drive-Through.											
² Peak-hour pass-by trip reduction percentage assumed to be 50% of daily, AM peak-hour, and PM peak-hour trips.											

Figure 3
Project Trip Distribution and Project Trip Assignment



- **LOS F** for Downtown intersections and segments including at Main/Monterey, along Monterey Road between Main and Fifth Street, and along Depot Street at First through Fifth Street;
- **LOS E** for the following intersections and freeway zones:
 - Main Avenue and Del Monte Avenue
 - Main Avenue and Depot Street
 - Dunne Avenue and Del Monte Avenue
 - Dunne Avenue and Monterey Avenue
 - Dunne Avenue and Church Street
 - Dunne Avenue and Depot Street
 - Cochrane Road and Monterey Road
 - Tennant Avenue and Monterey Road
 - Tennant Avenue and Butterfield Boulevard
 - Cochrane Road Freeway Zone: from Madrone Parkway/Cochrane Plaza to Cochrane Road/DePaul Drive
 - Dunne Avenue Freeway Zone: from Walnut Grove Drive/East Dunne Avenue to Condit Road/East Dunne Avenue
 - Tennant Avenue Freeway Zone: from Butterfield Boulevard/Tennant Avenue to Condit Road/Tennant Avenue

According to the City of Morgan Hill level of service guidelines, a development is said to create a significant adverse effect on traffic conditions at a signalized intersection if for either peak hour:

1. The level of service at the intersection degrades from an acceptable level (LOS D or LOS E as identified above) under no project conditions to an unacceptable level (LOS E or F) under project conditions, or
2. The level of service at the intersection is an unacceptable level (LOS E or F as identified above) under no project conditions and the addition of project trips causes the average critical delay to increase by four (4) or more seconds *and* the volume-to-capacity ratio (V/C) to increase by 0.01.

An exception to this rule applies when the addition of project traffic reduces the amount of average delay for critical movements (i.e., the change in average delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by 0.01 or more.

Unsignalized Intersection Analysis

Unsignalized intersections within the City of Morgan Hill have a minimum operating level of LOS D. According to the City of Morgan Hill level of service guidelines, a development is said to have a significant adverse impact on traffic conditions at an unsignalized intersection if for either peak hour the addition of project traffic causes the worst approach delay to degrade to LOS E or F *and* the traffic volumes at the intersection are sufficiently high to satisfy the peak hour volume warrant.

Level of Service Results

The results of the intersection level of service analysis show that all study intersections currently operate at an acceptable LOS D or better conditions under existing conditions, and the addition of project traffic would not result in the degradation of the study intersections' levels of service during the AM and PM peak hours under existing plus project conditions. In addition, the unsignalized study intersection of Sutter Boulevard and Cochrane Plaza is projected to have traffic volumes that fall below the thresholds that warrant signalization under existing plus project conditions.

Under Year 2030 Cumulative conditions, all signalized study intersections would continue to operate at an acceptable level of service, and the addition of project traffic would not result in the degradation of

the study intersections' levels of service during the AM and PM peak hours. Although the unsignalized study intersection of Sutter Boulevard and Cochrane Plaza is projected to have a worst approach delay corresponding to an unacceptable LOS E during the PM peak-hour, traffic volumes would fall below the thresholds that warrant signalization under cumulative plus project conditions.

Based on the results of the intersection level of service analysis, the project would not have an adverse effect on operations at the study intersections. The results of level of service analysis are summarized in Table 3.

The poor operations at the Sutter Boulevard and Cochrane Plaza intersection are reflective of delays experienced by drivers exiting the Cochrane Plaza (Walmart) parking lot and project driveway due to insufficient gaps in traffic flow along Sutter Boulevard during the peak hours. Turn movements from each of the driveways are inhibited given that there is no control of Sutter Boulevard traffic flow.

Recommendation: Operations could be improved at the Sutter Boulevard and Cochrane Plaza intersection by restricting left-turns and through movements from each of the driveways at the intersection (east and west legs) by closing the median gap along Sutter Boulevard. As shown on Figure 4, the median could be constructed to maintain left-turns from Sutter Boulevard to each of the driveways.

Intersection Queueing Analysis

The analysis of intersection level of service was supplemented with an analysis of intersection operations for selected intersections where the project would add a significant number of left-turning vehicles. The operations analysis is based on vehicle queueing for high demand left-turn movements at intersections. Vehicle queues were estimated using a Poisson probability distribution, which estimates the probability of “n” vehicles for a vehicle movement using the following formula:

$$P(x=n) = \frac{\lambda^n e^{-\lambda}}{n!}$$

Where:

P (x=n) = probability of “n” vehicles in queue per lane

n = number of vehicles in the queue per lane

λ = Average number of vehicles in the queue per lane (vehicles per hour per lane/signal cycles per hour)

The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95th percentile maximum number of queued vehicles per cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement. This analysis thus provides a basis for estimating future left-turn storage requirements at intersections. The 95th percentile queue length value indicates that during the peak hour, a queue of this length or less would occur on 95 percent of the signal cycles. Likewise, a queue length larger than the 95th percentile queue would only occur on 5 percent of the signal cycles (about 3 cycles during the peak hour for a signal with a 60-second cycle length). Therefore, left-turn storage pocket designs based on the 95th percentile queue length would ensure that storage space would be exceeded only 5 percent of the time. The 95th percentile queue length is also known as the “design queue length”.

The vehicle queue estimates and a tabulated summary of the findings are provided in Table 4. The queueing analysis shows that all high-demand movements would continue to have sufficient queueing storage space with the addition of project traffic.

Table 3
Intersection Level of Service Summary

														Year 2030 without Project			Year 2030 with Project				
Int. #	Intersection	Int. Control	LOS Std	Peak Hour	Count Date	Existing			Existing Plus Project			Project			with Project						
						Warrant Met?	Delay ¹	LOS	Warrant Met?	Delay ¹	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C	Warrant Met?	Delay ¹	LOS	Warrant Met?	Delay ¹	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
1	Monterey Road and Cochrane Road	Signal	E	AM	05/08/18	--	37.7	D	--	37.7	D	0.1	0.002	--	71.2	E	--	71.6	E	0.7	0.002
				PM	05/08/18	--	26.5	C	--	26.7	C	1.2	0.038	--	44.4	D	--	45.0	D	1.2	0.004
2	Butterfield Boulevard and Cochrane Road	Signal	D	AM	05/08/18	--	12.5	B	--	12.5	B	0.0	0.001	--	13.0	B	--	13.0	B	0.0	0.001
				PM	05/08/18	--	12.1	B	--	12.0	B	-0.1	-0.002	--	15.5	B	--	15.4	B	-0.1	-0.002
3	Woodview Avenue/Skipper Lane and Cochrane Road	Signal	D	AM	03/07/23	--	17.2	B	--	17.3	B	0.2	0.007	--	16.4	B	--	16.4	B	0.1	0.007
				PM	03/07/23	--	17.0	B	--	17.2	B	0.7	0.013	--	16.6	B	--	16.8	B	0.3	0.013
4	Sutter Boulevard and Cochrane Road	Signal	D	AM	03/07/23	--	16.8	B	--	17.0	B	0.4	0.006	--	17.8	B	--	18.0	B	0.4	0.006
				PM	03/07/23	--	17.7	B	--	18.1	B	1.0	0.012	--	17.6	B	--	19.9	B	2.8	0.207
5	Madrone Parkway/Cochrane Plaza and Cochrane Road	Signal	E	AM	05/08/18	--	19.2	B	--	19.1	B	-0.1	0.003	--	19.4	B	--	19.4	B	0.0	0.000
				PM	05/08/18	--	32.1	C	--	32.0	C	-0.1	0.004	--	33.2	C	--	33.5	C	0.6	-0.009
6	US 101 Southbound Ramps and Cochrane Road	Signal	E	AM	05/08/18	--	13.4	B	--	13.4	B	0.0	0.002	--	16.2	B	--	16.3	B	0.1	0.002
				PM	05/08/18	--	17.2	B	--	17.3	B	0.1	0.006	--	26.1	C	--	26.6	C	0.9	0.006
7	US 101 Northbound Ramps and Cochrane Road	Signal	E	AM	05/08/18	--	8.8	A	--	8.8	A	0.0	0.002	--	8.0	A	--	8.1	A	0.1	0.002
				PM	05/08/18	--	11.5	B	--	11.6	B	0.1	0.004	--	12.4	B	--	12.5	B	0.1	0.004
8	Sutter Boulevard and Cochrane Plaza	TWSC	D	AM	03/07/23	No	14.0	B	No	14.3	B	N/A	N/A	No	15.6	C	No	16.1	C	N/A	N/A
				PM	03/07/23	No	22.2	C	No	24.5	C	N/A	N/A	No	33.9	D	No	39.4	E	N/A	N/A
Notes:																					
¹ The reported delay and corresponding level of service for signalized intersections represent the average delay for all approaches at the intersection.																					
The reported delay and corresponding level of service for one- and two-way stop-controlled intersections are based on the stop-controlled approach with the highest delay.																					

Figure 4
Proposed Sutter Boulevard Median Closure

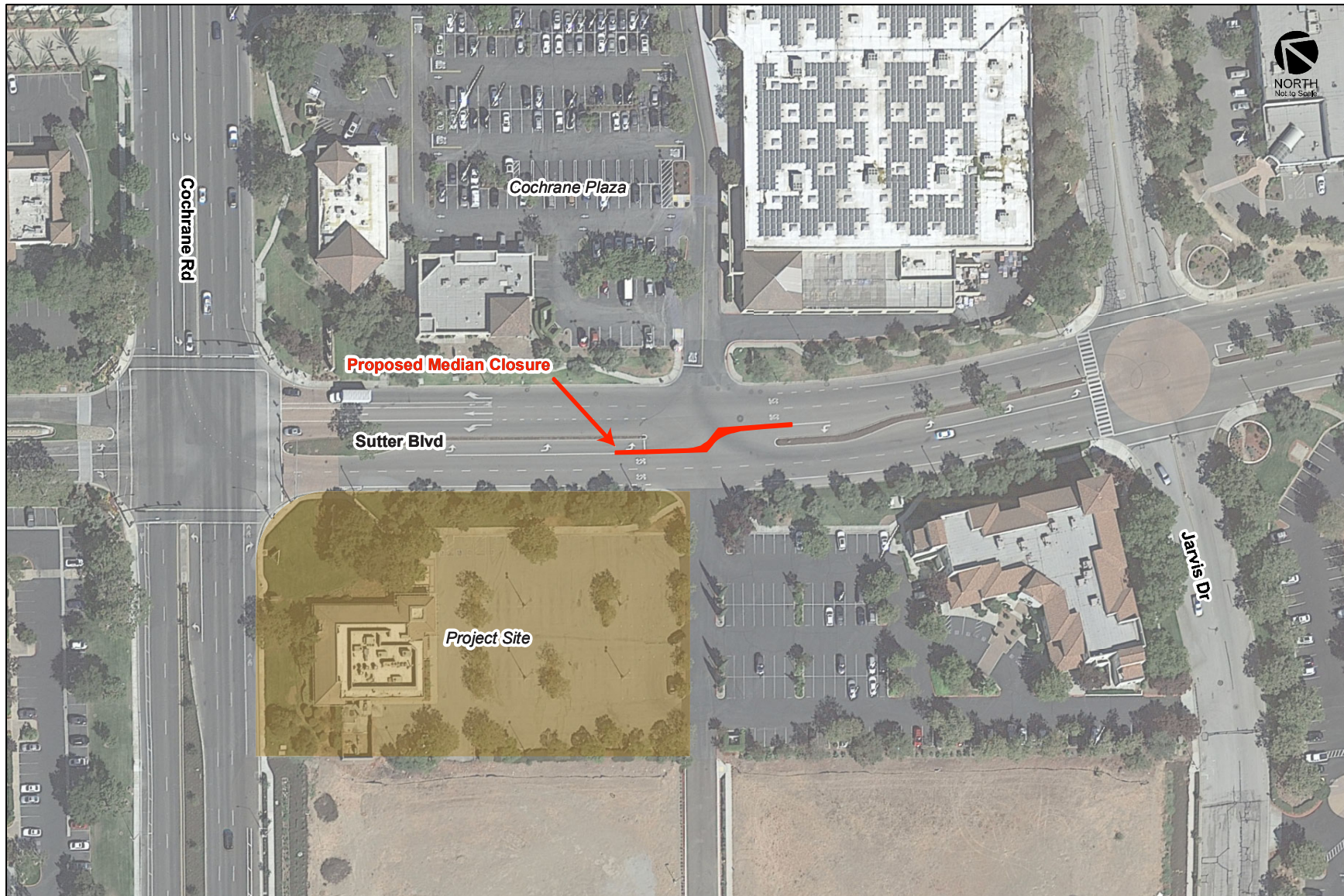


Table 4
Intersection Queueing Summary

Measurement	Sutter Boulevard and Cochrane Road				Woodview Avenue/Skipper Lane and Cochrane Road		Sutter Boulevard and Cochrane Plaza			
	Westbound Left		Northbound Right		Northbound Left/Through		Northbound Left		Eastbound	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Existing Conditions										
Cycle Length/Control Delay (sec) ¹	60	60	60	60	60	75	7.7	7.5	9.9	13.4
Lanes	2	2	1	1	1	1	1	1	1	1
Volume (vph)	204	151	359	378	50	25	8	4	8	35
Volume (vphpl)	102	76	359	378	50	25	8	4	8	35
95 th % Queue (veh/ln.)	4	3	10	11	2	2	0	0	0	1
95 th % Queue (ft./ln.) ²	100	75	250	275	50	50	0	0	0	25
Storage (ft./ln.)	375	375	325	325	150	150	50	50	50	50
Adequate (Y/N)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Existing Plus Project Conditions (with Evergreen Plaza)										
Cycle Length/Control Delay (sec) ¹	60	60	60	60	60	75	7.9	7.8	13.4	18.8
Lanes	2	2	1	1	1	1	1	1	1	1
Volume (vph)	277	234	407	471	145	145	17	19	74	143
Volume (vphpl)	139	117	407	471	145	145	17	19	74	143
95 th % Queue (veh/ln.)	5	5	11	13	5	6	0	0	1	2
95 th % Queue (ft./ln.) ²	125	125	275	325	125	150	0	0	25	50
Storage (ft./ln.)	375	375	325	325	150	150	50	50	50	50
Adequate (Y/N)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Notes:										
¹ Cycle length for signalized intersections and control delay for stop-controlled intersections.										
² Assumes 25 feet per vehicle queued										

Site Access

The evaluation of site access is based on the site plan prepared by Kimley-Horn dated February 14, 2023. Site access was evaluated to determine the adequacy of the site's access points with regard to the following: traffic volume, geometric design, and sight distance. Site access was evaluated in accordance with generally accepted traffic engineering standards and transportation planning principles.

As shown on Figure 2, primary vehicular access to the project site would be provided via an existing full-access driveway located at the west leg of the Sutter Boulevard/Cochrane Plaza intersection. The driveway along Sutter Boulevard currently serves the subject property and an existing commercial/office use located southeast of the project site (18525 Sutter Boulevard) via a shared easement drive aisle. As proposed, a two-way access point to the project site would be constructed along the easement drive aisle, approximately 190 feet west of Sutter Boulevard. The access point would be directly opposite from the westernmost access point to 18525 Sutter Boulevard. It should be noted that the shared easement drive aisle also provides vehicular access to the Evergreen Village development, located west of the project site. Therefore, project traffic would have access to roadways and intersections within and adjacent to Evergreen Village. Trips generated by Evergreen Village are included in this site access analysis, based on trips published in the *Cochrane & Butterfield Mixed-Use Development TIA* by Hexagon, dated June 7, 2018. It should be noted that the study did not assume a direct connection between Evergreen Village and the Sutter Boulevard/Cochrane Plaza intersection. Therefore, trips published in the *Cochrane & Butterfield Mixed-Use Development TIA* were manually adjusted to reflect usage of the Sutter Boulevard/Cochrane Plaza driveway.

A secondary ingress-only access point is proposed along Cochrane Road, approximately 190 feet west of Sutter Boulevard and 190 feet east of an existing right-in/right-out only driveway. An existing landscaped median along Cochrane Road would prohibit inbound and outbound left-turns to and from the proposed project driveway.

Driveway Operations

Sutter Boulevard Driveway

The project parcel is currently served by three access points along the shared easement drive aisle. The proposed project will eliminate the two easternmost access points and condense access to the project site to one point at its western boundary from the drive aisle.

The project trip estimates and assignment indicates a maximum of 17 PM peak-hour trips would make inbound left-turns from northbound Sutter Boulevard into the project's easement driveway. As shown in the queueing analysis, the northbound left-turn pocket at the Sutter Boulevard/Cochrane Plaza intersection would have adequate storage space to serve traffic volumes under existing plus project conditions.

A maximum of 68 PM peak-hour project trips (103 trips including existing trips and 143 trips including Evergreen Village trips) would exit via the project's easement driveway onto Sutter Boulevard. As shown in the queueing analysis, the outbound (eastbound) movement would have a maximum queue length of 2 vehicles. Therefore, there would be adequate storage space to serve outbound traffic volumes without blocking access to the 18525 Sutter Boulevard parking lot under existing plus project conditions.

However, as noted in the intersection level of service discussion above, it is recommended that the closure of the median gap along Sutter Boulevard be implemented to improve operations at the Sutter Boulevard/Cochrane Plaza intersection (see Figure 4). The median gap closure would restrict turn

movements from the Sutter Boulevard driveway to right-turns only and require project trips that are bound for northbound Sutter Boulevard and Cochrane Road to utilize Skipper Lane rather than Sutter Boulevard. Thus, right-turn only signs should be placed at the project site driveway along the drive aisle.

In addition, the project should coordinate with the City to determine if closure of the drive aisle access to 18525 Sutter Boulevard directly across from the project site entrance would be feasible. Doing so would restrict project trips from utilizing 18525 Sutter Boulevard as a cut-through route to/from Jarvis Drive. However, implementation of a median within the shared drive aisle easement may require additional roadway width than currently provided and may also restrict vehicular access between the surrounding roadway network and 18525 Sutter Boulevard.

Cochrane Road Driveway

The Cochrane Road driveway is not anticipated to experience operational issues due to being an ingress-only driveway. Providing egress from the Cochrane Road driveway is not recommended due to the following:

- adequate outbound access from the project site onto eastbound Cochrane Road would be provided via Sutter Boulevard and Skipper Lane
- outbound vehicles would turn onto a right-turn only lane along Cochrane Road and would need to merge into the adjacent travel lane to continue eastbound along Cochrane Road
- an existing bike lane merges with the right-turn lane at the location of the proposed driveway

Driveway Design

The City's Design Standards specify a minimum driveway width of 16 feet and a maximum driveway width of 36 feet for commercial uses. The site plan indicates that the ingress-only Cochrane Road project driveway would be 22 feet wide, and would thus meet City standards. The proposed 35-foot wide two-way access point along the southern project frontage would fall within the acceptable range of standard driveway widths. However, the access point is along a shared easement and is not subject to the City's standard driveway requirements.

Drive-Through Operations

The proposed drive-through is comprised of two lanes, with each lane having its own ordering point. During non-peak periods, customers will merge into a single lane as they proceed past the ordering canopy towards the pick-up window. During peak demand periods, customers will remain in two-lane configuration as staff members are deployed to deliver food to customers in the outside lane. When needed, the outside lane also would be used as a by-pass lane to prioritize customers with smaller orders through the drive-through sequence.

Each lane is shown to be 10 feet wide and will have their own entrance and exit points. The lanes will be separated by pavement markings and removable bollards. The site plan shows a maximum capacity for approximately 24 vehicles per lane, assuming 20 feet per car and full utilization of each lane.

Conformance with City Requirements for Drive-Through Facilities

As proposed, the drive-through lanes will meet the City's standard requirements for drive-through facilities (Morgan Hill Code of Ordinances, Chapter 18.92.040).

- Drive-through lanes for fast food restaurants shall have a capacity for at least eight vehicles, at 20 feet per vehicle.

The site plan shows storage space for approximately 24 vehicles per lane (48 vehicles total), assuming 20 feet per car. Thus, the proposed capacity would exceed minimum requirements.

- Drive-through lanes shall be separate from the circulation lanes necessary for entering and exiting the property and providing access to parking.

The drive-through lanes are separate from the drive aisles serving the project's surface parking lot. Drive-through operations would not interfere with ingress and egress of vehicles to/from the project site.

- Pedestrian access routes shall not cross a drive-through lane within the minimum stacking space distance (8 vehicles).

As shown on the site plan, pedestrian access routes will be located across the drive-through exits (past the drive-through window) and across both lanes, approximately 17 car-lengths back from the drive-through exits. Thus, the location of the proposed pedestrian access routes would meet minimum requirements.

- Vehicular entrance or exit to a drive-through establishment shall be setback from the nearest public street intersection.

The proposed Cochrane Road driveway would be located approximately 190 feet east of an existing right-in/right-out only driveway and 190 feet west of Sutter Boulevard. This meets the required separation of at least 115 feet for roadways with a posted speed limit of 45 mph without a median opening. The existing Sutter Boulevard driveway is located approximately 340 feet south of Cochrane Road and 340 feet north of Jarvis Drive. This meets the required separation of at least 150 feet for roadways with a posted speed limit of 35 mph with a median opening.

Queueing Observations

Vehicle queues were observed at three Chick-fil-A restaurants with two drive-through lanes during the weekday AM and PM peak-hours, as well as the Saturday lunchtime period, to confirm that the proposed drive-through storage would meet demand. The maximum queue observed during weekdays was a total of 29 vehicles across two drive-through lanes during the PM peak-hour, while the maximum queue observed during the Saturday lunchtime period was 38 vehicles. Thus, the proposed drive-through with a total capacity for up to 48 vehicles is expected to have adequate capacity to accommodate expected queues during peak periods.

Based on the observed drive-through queues, it is unlikely that queues would exceed the planned drive-through capacity and queues are not expected to spill over onto Sutter Boulevard or Cochrane Road. However, Chick-Fil-A should develop a drive-through queue management plan that can be implemented during abnormally high demand periods to ensure that circulation within the site parking lot and on adjacent drive aisles would not be negatively affected by drive-through operations. The queue management plan could include but not be limited to measures utilized at other Chick-Fil-A locations:

- Having staff members monitor the drive-through queues and direct traffic as necessary if queues extend beyond the drive-through lanes.
- Implementing face-to-face ordering via an iPad ordering system during peak periods.
- Utilizing the secondary drive-through lane as a by-pass lane to expedite service for customers with smaller orders.

Recommendation: The proposed drive-through is expected to have adequate capacity to accommodate the expected queues during peak periods. Drive-through queues are not expected to spill over onto Sutter Boulevard or Cochrane Road. However, it is recommended Chick-Fil-A develop a

queue management plan that can be implemented during abnormally high demand periods to prevent the potential for the drive-through queues to inhibit circulation within the project parking lot and access of adjacent properties.

Parking

Vehicular Parking

According to the Planned Unit Development for the Morgan Hill Business Park, of which the project site is included, sites are required to provide on-site vehicular parking at a rate of 1 space per 60 s.f. of public accommodation and one space per 250 gross floor area of additional area.

Therefore, the proposed 5,028 s.f. fast-food restaurant would require a total of 45 vehicular parking spaces. Per the site plan, the project proposes a total of 46 on-site parking spaces. Therefore, vehicle parking as proposed by the project will meet the off-street parking requirement for the site.

Bicycle Parking

According to the City of Morgan Hill Zoning Regulations (Table 18.72-7), non-residential uses are required to provide on-site bicycle parking as specified below:

- Short-term spaces – 10% of required automobile spaces
- Long-term spaces – 1 per 20 required automobile spaces for uses 10,000 s.f. or greater

Based on these requirements, the project will be required to provide a total of 6 short-term bicycle parking spaces. The site plan shows bike lockers provided for at least 6 bicycles, located adjacent to the trash enclosure. Pedestrian access routes are provided between the bike lockers and the project frontages along Sutter Boulevard and Cochrane Road. Therefore, bicycle parking as proposed by the project will meet City bicycle parking requirements.

Transit, Pedestrian, and Bicycle Facility Evaluation

Transit Facilities

The project site is served by VTA bus routes that run along Cochrane Road.

- Rapid Route 568 (Gilroy Transit Center to San Jose Diridon Transit Center) serves bus stops at the intersection of Cochrane Road and Cochrane Circle, approximately 1/3-mile walking distance from the project site.
- Express Route 121 (Gilroy/Morgan Hill to Lockheed Martin) serves bus stops at the intersection of Cochrane Road and Sutter Boulevard, less than 200 feet walking distance from the project site.
- Local Route 87 (Morgan Hill Civic Center to Burnett Avenue) serves bus stops at the intersection of Cochrane Road and Sutter Boulevard, less than 200 feet walking distance from the project site.

The transit ridership demands of the proposed project can be accommodated by the existing transit facilities.

Pedestrian Facilities

In the vicinity of the project site, there are existing sidewalks along all public roadways, including Sutter Boulevard and Cochrane Road. Sidewalks along roadways within Evergreen Village are currently missing along undeveloped parcels but will be constructed with their development.

Crosswalks with protected crossing phases are provided along all four legs of the Sutter Boulevard/Cochrane Road intersection. No crosswalks or ADA-compliant curb ramps are provided along any of the approaches at the Sutter Boulevard/Cochrane Plaza intersection. However, a crosswalk across Sutter Boulevard is provided at the Sutter Boulevard/Jarvis Drive intersection, approximately 340 feet south of the project site.

Project Improvements

The project proposes to reconstruct existing sidewalks along the Cochrane Road and Sutter Boulevard project frontages. A new sidewalk will be constructed along the easement drive to the south of the project site, providing a continuous pedestrian route between Sutter Boulevard and Evergreen Village. Multiple access points from the sidewalks are provided to on-site walkways. All sidewalks are shown on the site plan to measure at least 5 feet wide.

Additionally, new ADA-compliant curb ramps will be installed at the southwest corner of the Sutter Boulevard/Cochrane Road intersection, at the northwest corner of the Sutter Boulevard/Cochrane Plaza intersection, along the proposed project driveways, and at on-site pedestrian crossings across drive-through lanes.

Overall, the proposed sidewalks and curb ramps create an accessible network of pedestrian pathways to/from the project site and surrounding uses. A continuous, accessible pedestrian route would be provided between the project site and bus stops at the intersection of Cochrane Road/Sutter Boulevard. However, It should be noted that pedestrian access to areas south and east of the project site would be constrained due to missing crosswalks and ADA-compliant curb ramps along any of the approaches at the Sutter Boulevard/Cochrane Plaza intersection. The proposed new curb ramp located at the northwest corner of the intersection cannot serve as part of an accessible route due to the missing facilities which are not the responsibility of the proposed project.

Bicycle Facilities

In the project vicinity, there are bike lanes located along Sutter Boulevard and Cochrane Road. The demand generated by the proposed project could be accommodated by the existing bicycle facilities in the vicinity of the project site. Additionally, the project as proposed will not conflict with any existing or planned bicycle facilities.

CalEEMod Version: CalEEMod.2020.4.0

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Date: 6/5/2023 9:24 AM

Chick-fil-A @ Sutter Boulevard

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

Bay Area 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
Demolition	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

Chick-fil-A @ Sutter Boulevard**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
Concrete/Industrial Saws	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
Generator Sets	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
Paving Equipment	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	3	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	8	No Change	0.00
Welders	Diesel	No Change	0	3	No Change	0.00

Chick-fil-A @ Sutter Boulevard**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	1.76100E-002	1.18440E-001	1.80970E-001	3.00000E-004	5.65000E-003	5.65000E-003	0.00000E+000	2.55325E+001	2.55325E+001	1.42000E-003	0.00000E+000	2.55680E+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
Concrete/Industrial Saws	3.13000E-003	2.41400E-002	3.65000E-002	6.00000E-005	1.11000E-003	1.11000E-003	0.00000E+000	5.37656E+000	5.37656E+000	2.60000E-004	0.00000E+000	5.38295E+000
Cranes	2.42800E-002	2.52230E-001	1.31900E-001	4.30000E-004	1.05800E-002	9.74000E-003	0.00000E+000	3.80212E+001	3.80212E+001	1.23000E-002	0.00000E+000	3.83286E+001
Forklifts	6.83000E-003	6.42200E-002	8.52700E-002	1.10000E-004	3.60000E-003	3.31000E-003	0.00000E+000	1.00719E+001	1.00719E+001	3.26000E-003	0.00000E+000	1.01533E+001
Generator Sets	2.77200E-002	2.48190E-001	3.66200E-001	6.60000E-004	1.04300E-002	1.04300E-002	0.00000E+000	5.65208E+001	5.65208E+001	2.20000E-003	0.00000E+000	5.65758E+001
Graders	1.06000E-003	1.24700E-002	4.97000E-003	2.00000E-005	4.00000E-004	3.70000E-004	0.00000E+000	1.74318E+000	1.74318E+000	5.60000E-004	0.00000E+000	1.75727E+000
Pavers	6.90000E-004	6.53000E-003	1.08500E-002	2.00000E-005	3.10000E-004	2.80000E-004	0.00000E+000	1.54844E+000	1.54844E+000	5.00000E-004	0.00000E+000	1.56096E+000
Paving Equipment	8.20000E-004	7.48000E-003	1.28500E-002	2.00000E-005	3.60000E-004	3.30000E-004	0.00000E+000	1.78927E+000	1.78927E+000	5.80000E-004	0.00000E+000	1.80373E+000
Rollers	6.40000E-004	6.67000E-003	8.09000E-003	1.00000E-005	3.50000E-004	3.20000E-004	0.00000E+000	1.00869E+000	1.00869E+000	3.30000E-004	0.00000E+000	1.01684E+000
Rubber Tired Dozers	8.95000E-003	9.17700E-002	4.03100E-002	1.10000E-004	4.13000E-003	3.80000E-003	0.00000E+000	9.65914E+000	9.65914E+000	3.12000E-003	0.00000E+000	9.73724E+000
Tractors/Loaders/Backhoes	1.61100E-002	1.62260E-001	2.55790E-001	3.60000E-004	7.22000E-003	6.64000E-003	0.00000E+000	3.13536E+001	3.13536E+001	1.01400E-002	0.00000E+000	3.16071E+001
Welders	6.87300E-002	4.09350E-001	4.97590E-001	7.70000E-004	1.34100E-002	1.34100E-002	0.00000E+000	5.64662E+001	5.64662E+001	5.60000E-003	0.00000E+000	5.66061E+001

Chick-fil-A @ Sutter Boulevard**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	1.76100E-002	1.18440E-001	1.80970E-001	3.00000E-004	5.65000E-003	5.65000E-003	0.00000E+000	2.55325E+001	2.55325E+001	1.42000E-003	0.00000E+000	2.55679E+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
Concrete/Industrial Saws	3.13000E-003	2.41400E-002	3.65000E-002	6.00000E-005	1.11000E-003	1.11000E-003	0.00000E+000	5.37656E+000	5.37656E+000	2.60000E-004	0.00000E+000	5.38294E+000
Cranes	2.42800E-002	2.52230E-001	1.31900E-001	4.30000E-004	1.05800E-002	9.74000E-003	0.00000E+000	3.80211E+001	3.80211E+001	1.23000E-002	0.00000E+000	3.83285E+001
Forklifts	6.83000E-003	6.42200E-002	8.52700E-002	1.10000E-004	3.60000E-003	3.31000E-003	0.00000E+000	1.00718E+001	1.00718E+001	3.26000E-003	0.00000E+000	1.01533E+001
Generator Sets	2.77200E-002	2.48190E-001	3.66200E-001	6.60000E-004	1.04300E-002	1.04300E-002	0.00000E+000	5.65207E+001	5.65207E+001	2.20000E-003	0.00000E+000	5.65758E+001
Graders	1.06000E-003	1.24700E-002	4.97000E-003	2.00000E-005	4.00000E-004	3.70000E-004	0.00000E+000	1.74317E+000	1.74317E+000	5.60000E-004	0.00000E+000	1.75727E+000
Pavers	6.90000E-004	6.53000E-003	1.08500E-002	2.00000E-005	3.10000E-004	2.80000E-004	0.00000E+000	1.54843E+000	1.54843E+000	5.00000E-004	0.00000E+000	1.56095E+000
Paving Equipment	8.20000E-004	7.48000E-003	1.28500E-002	2.00000E-005	3.60000E-004	3.30000E-004	0.00000E+000	1.78926E+000	1.78926E+000	5.80000E-004	0.00000E+000	1.80373E+000
Rollers	6.40000E-004	6.67000E-003	8.09000E-003	1.00000E-005	3.50000E-004	3.20000E-004	0.00000E+000	1.00869E+000	1.00869E+000	3.30000E-004	0.00000E+000	1.01684E+000
Rubber Tired Dozers	8.95000E-003	9.17700E-002	4.03100E-002	1.10000E-004	4.13000E-003	3.80000E-003	0.00000E+000	9.65913E+000	9.65913E+000	3.12000E-003	0.00000E+000	9.73723E+000
Tractors/Loaders/Balckhoes	1.61100E-002	1.62260E-001	2.55790E-001	3.60000E-004	7.22000E-003	6.64000E-003	0.00000E+000	3.13535E+001	3.13535E+001	1.01400E-002	0.00000E+000	3.16071E+001
Welders	6.87300E-002	4.09350E-001	4.97590E-001	7.70000E-004	1.34100E-002	1.34100E-002	0.00000E+000	5.64661E+001	5.64661E+001	5.60000E-003	0.00000E+000	5.66060E+001

Chick-fil-A @ Sutter Boulevard**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
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	1.17334E-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
Concrete/Industrial Saws	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	1.85772E-006
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	1.06052E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	5.73664E-006	5.73664E-006	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	6.45811E-006	6.45811E-006	0.00000E+000	0.00000E+000	6.40631E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	5.58887E-006	5.58887E-006	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	1.03529E-006	1.03529E-006	0.00000E+000	0.00000E+000	1.02699E-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	9.56829E-007	9.56829E-007	0.00000E+000	0.00000E+000	9.49154E-007
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	1.23662E-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	
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Chick-fil-A @ Sutter Boulevard**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
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				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		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	0.01	0.00	0.01	0.00	0.00	0.00
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	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

Chick-fil-A @ Sutter Boulevard**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	0.79	0.49	0.00	0.00	0.22
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	0.10	0.31		
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			

Chick-fil-A @ Sutter Boulevard**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

Chick-fil-A @ Sutter Boulevard**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)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
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		

Chick-fil-A @ Sutter Boulevard**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
Yes	Apply Water Conservation on Strategy	0.00	20.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
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	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Chick-fil-A @ Sutter Boulevard

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	

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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

Chick-fil-A @ Sutter Boulevard

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	46.00	Space	0.41	18,400.00	0
Fast Food Restaurant with Drive Thru	5.03	1000sqft	1.41	5,028.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	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 updated to represent total acreage of project site.

Construction Phase - Architectural coating assumed to start two weeks after building construction initiation and lasts for the same duration.

Demolition - Building square footage is equal to the existing building on-site.

Vehicle Trips - Updated to be consistent with the project-specific traffic report.

Water Mitigation - Compliant with MWELO.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblLandUse	LandUseSquareFeet	5,030.00	5,028.00
tblLandUse	LotAcreage	0.12	1.41

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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

tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PR_TP	29.00	100.00
tblVehicleTrips	ST_TR	616.12	181.11
tblVehicleTrips	SU_TR	472.58	181.11
tblVehicleTrips	WD_TR	470.95	181.11

2.0 Emissions Summary

Chick-fil-A @ Sutter Boulevard - Bay Area 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					
2024	0.1321	0.9278	1.0475	1.9200e-003	0.0328	0.0388	0.0716	0.0128	0.0372	0.0500	0.0000	161.8868	161.8868	0.0274	9.6000e-004	162.8573
2025	0.0791	0.4993	0.6197	1.1300e-003	5.1600e-003	0.0190	0.0241	1.4000e-003	0.0184	0.0198	0.0000	94.5228	94.5228	0.0133	5.5000e-004	95.0181
Maximum	0.1321	0.9278	1.0475	1.9200e-003	0.0328	0.0388	0.0716	0.0128	0.0372	0.0500	0.0000	161.8868	161.8868	0.0274	9.6000e-004	162.8573

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					
2024	0.1321	0.9278	1.0475	1.9200e-003	0.0328	0.0388	0.0716	0.0128	0.0372	0.0500	0.0000	161.8866	161.8866	0.0274	9.6000e-004	162.8572
2025	0.0791	0.4993	0.6197	1.1300e-003	5.1600e-003	0.0190	0.0241	1.4000e-003	0.0184	0.0198	0.0000	94.5227	94.5227	0.0133	5.5000e-004	95.0180
Maximum	0.1321	0.9278	1.0475	1.9200e-003	0.0328	0.0388	0.0716	0.0128	0.0372	0.0500	0.0000	161.8866	161.8866	0.0274	9.6000e-004	162.8572

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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
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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-3-2024	9-2-2024	0.4365	0.4365
2	9-3-2024	12-2-2024	0.4685	0.4685
3	12-3-2024	3-2-2025	0.4454	0.4454
4	3-3-2025	6-2-2025	0.2846	0.2846
		Highest	0.4685	0.4685

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0239	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Energy	5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	71.1749	71.1749	3.5800e-003	1.3200e-003	71.6593
Mobile	0.3895	0.4511	3.7695	8.0800e-003	0.8982	5.9200e-003	0.9041	0.2400	5.5100e-003	0.2455	0.0000	764.2708	764.2708	0.0472	0.0354	775.9924
Waste						0.0000	0.0000		0.0000	0.0000	11.7613	0.0000	11.7613	0.6951	0.0000	29.1381
Water						0.0000	0.0000		0.0000	0.0000	0.4844	0.7959	1.2803	0.0499	1.1900e-003	2.8820
Total	0.4190	0.5022	3.8128	8.3900e-003	0.8982	9.8000e-003	0.9080	0.2400	9.3900e-003	0.2494	12.2457	836.2426	848.4883	0.7957	0.0379	879.6728

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0239	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Energy	5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	71.1749	71.1749	3.5800e-003	1.3200e-003	71.6593
Mobile	0.3895	0.4511	3.7695	8.0800e-003	0.8982	5.9200e-003	0.9041	0.2400	5.5100e-003	0.2455	0.0000	764.2708	764.2708	0.0472	0.0354	775.9924
Waste						0.0000	0.0000		0.0000	0.0000	11.7613	0.0000	11.7613	0.6951	0.0000	29.1381
Water						0.0000	0.0000		0.0000	0.0000	0.4844	0.7896	1.2740	0.0499	1.1900e-003	2.8756
Total	0.4190	0.5022	3.8128	8.3900e-003	0.8982	9.8000e-003	0.9080	0.2400	9.3900e-003	0.2494	12.2457	836.2363	848.4819	0.7957	0.0379	879.6664

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/3/2024	6/28/2024	5	20	
2	Site Preparation	Site Preparation	6/29/2024	7/2/2024	5	2	
3	Grading	Grading	7/3/2024	7/8/2024	5	4	

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4	Paving	Paving	7/9/2024	7/22/2024	5	10
5	Building Construction	Building Construction	7/23/2024	4/28/2025	5	200
6	Architectural Coating	Architectural Coating	8/6/2024	5/12/2025	5	200

Acres of Grading (Site Preparation Phase): 1.88**Acres of Grading (Grading Phase): 4****Acres of Paving: 0.41****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,542; Non-Residential Outdoor: 2,514; Striped Parking Area: 1,104 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36

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Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	31.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Demolition - 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					
Fugitive Dust					3.4000e-003	0.0000	3.4000e-003	5.1000e-004	0.0000	5.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.1389	0.1349	2.4000e-004		6.3100e-003	6.3100e-003		5.8900e-003	5.8900e-003	0.0000	21.0916	21.0916	5.3400e-003	0.0000	21.2250
Total	0.0144	0.1389	0.1349	2.4000e-004	3.4000e-003	6.3100e-003	9.7100e-003	5.1000e-004	5.8900e-003	6.4000e-003	0.0000	21.0916	21.0916	5.3400e-003	0.0000	21.2250

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3.2 Demolition - 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	3.0000e-005	2.1000e-003	5.0000e-004	1.0000e-005	2.6000e-004	2.0000e-005	2.8000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	0.9106	0.9106	3.0000e-005	1.4000e-004	0.9544
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.0000e-004	2.6900e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	0.0000	2.8000e-004	0.0000	0.7852	0.7852	2.0000e-005	2.0000e-005	0.7919
Total	3.4000e-004	2.3000e-003	3.1900e-003	2.0000e-005	1.2900e-003	3.0000e-005	1.3100e-003	3.4000e-004	2.0000e-005	3.7000e-004	0.0000	1.6959	1.6959	5.0000e-005	1.6000e-004	1.7463

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					3.4000e-003	0.0000	3.4000e-003	5.1000e-004	0.0000	5.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.1389	0.1349	2.4000e-004		6.3100e-003	6.3100e-003		5.8900e-003	5.8900e-003	0.0000	21.0915	21.0915	5.3400e-003	0.0000	21.2250
Total	0.0144	0.1389	0.1349	2.4000e-004	3.4000e-003	6.3100e-003	9.7100e-003	5.1000e-004	5.8900e-003	6.4000e-003	0.0000	21.0915	21.0915	5.3400e-003	0.0000	21.2250

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3.2 Demolition - 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	3.0000e-005	2.1000e-003	5.0000e-004	1.0000e-005	2.6000e-004	2.0000e-005	2.8000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	0.9106	0.9106	3.0000e-005	1.4000e-004	0.9544
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.0000e-004	2.6900e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	0.0000	2.8000e-004	0.0000	0.7852	0.7852	2.0000e-005	2.0000e-005	0.7919
Total	3.4000e-004	2.3000e-003	3.1900e-003	2.0000e-005	1.2900e-003	3.0000e-005	1.3100e-003	3.4000e-004	2.0000e-005	3.7000e-004	0.0000	1.6959	1.6959	5.0000e-005	1.6000e-004	1.7463

3.3 Site Preparation - 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					
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	1.1100e-003	0.0118	6.6300e-003	2.0000e-005		4.8000e-004	4.8000e-004		4.4000e-004	4.4000e-004	0.0000	1.5113	1.5113	4.9000e-004	0.0000	1.5235
Total	1.1100e-003	0.0118	6.6300e-003	2.0000e-005	6.2700e-003	4.8000e-004	6.7500e-003	3.0000e-003	4.4000e-004	3.4400e-003	0.0000	1.5113	1.5113	4.9000e-004	0.0000	1.5235

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3.3 Site Preparation - 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	2.0000e-005	1.0000e-005	1.7000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0483	0.0483	0.0000	0.0000	0.0487
Total	2.0000e-005	1.0000e-005	1.7000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0483	0.0483	0.0000	0.0000	0.0487

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	1.1100e-003	0.0118	6.6300e-003	2.0000e-005		4.8000e-004	4.8000e-004		4.4000e-004	4.4000e-004	0.0000	1.5113	1.5113	4.9000e-004	0.0000	1.5235
Total	1.1100e-003	0.0118	6.6300e-003	2.0000e-005	6.2700e-003	4.8000e-004	6.7500e-003	3.0000e-003	4.4000e-004	3.4400e-003	0.0000	1.5113	1.5113	4.9000e-004	0.0000	1.5235

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3.3 Site Preparation - 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	2.0000e-005	1.0000e-005	1.7000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0483	0.0483	0.0000	0.0000	0.0487
Total	2.0000e-005	1.0000e-005	1.7000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0483	0.0483	0.0000	0.0000	0.0487

3.4 Grading - 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					
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	2.6000e-003	0.0276	0.0174	4.0000e-005		1.1400e-003	1.1400e-003		1.0500e-003	1.0500e-003	0.0000	3.6207	3.6207	1.1700e-003	0.0000	3.6500
Total	2.6000e-003	0.0276	0.0174	4.0000e-005	0.0142	1.1400e-003	0.0153	6.8500e-003	1.0500e-003	7.9000e-003	0.0000	3.6207	3.6207	1.1700e-003	0.0000	3.6500

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3.4 Grading - 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	5.0000e-005	3.0000e-005	4.1000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1208	0.1208	0.0000	0.0000	0.1218
Total	5.0000e-005	3.0000e-005	4.1000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1208	0.1208	0.0000	0.0000	0.1218

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	2.6000e-003	0.0276	0.0174	4.0000e-005		1.1400e-003	1.1400e-003		1.0500e-003	1.0500e-003	0.0000	3.6207	3.6207	1.1700e-003	0.0000	3.6500
Total	2.6000e-003	0.0276	0.0174	4.0000e-005	0.0142	1.1400e-003	0.0153	6.8500e-003	1.0500e-003	7.9000e-003	0.0000	3.6207	3.6207	1.1700e-003	0.0000	3.6500

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3.4 Grading - 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	5.0000e-005	3.0000e-005	4.1000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1208	0.1208	0.0000	0.0000	0.1218
Total	5.0000e-005	3.0000e-005	4.1000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1208	0.1208	0.0000	0.0000	0.1218

3.5 Paving - 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	3.0900e-003	0.0293	0.0441	7.0000e-005		1.4100e-003	1.4100e-003		1.3000e-003	1.3000e-003	0.0000	5.8870	5.8870	1.8700e-003	0.0000	5.9337
Paving	5.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.6300e-003	0.0293	0.0441	7.0000e-005		1.4100e-003	1.4100e-003		1.3000e-003	1.3000e-003	0.0000	5.8870	5.8870	1.8700e-003	0.0000	5.9337

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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

3.5 Paving - 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	1.6000e-004	1.0000e-004	1.3500e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3926	0.3926	1.0000e-005	1.0000e-005	0.3960
Total	1.6000e-004	1.0000e-004	1.3500e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3926	0.3926	1.0000e-005	1.0000e-005	0.3960

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	3.0900e-003	0.0293	0.0441	7.0000e-005		1.4100e-003	1.4100e-003		1.3000e-003	1.3000e-003	0.0000	5.8870	5.8870	1.8700e-003	0.0000	5.9337
Paving	5.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.6300e-003	0.0293	0.0441	7.0000e-005		1.4100e-003	1.4100e-003		1.3000e-003	1.3000e-003	0.0000	5.8870	5.8870	1.8700e-003	0.0000	5.9337

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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 - 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	1.6000e-004	1.0000e-004	1.3500e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3926	0.3926	1.0000e-005	1.0000e-005	0.3960
Total	1.6000e-004	1.0000e-004	1.3500e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3926	0.3926	1.0000e-005	1.0000e-005	0.3960

3.6 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	0.0824	0.6417	0.7260	1.2800e-003		0.0261	0.0261		0.0252	0.0252	0.0000	105.3345	105.3345	0.0175	0.0000	105.7731
Total	0.0824	0.6417	0.7260	1.2800e-003		0.0261	0.0261		0.0252	0.0252	0.0000	105.3345	105.3345	0.0175	0.0000	105.7731

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3.6 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	2.4000e-004	0.0103	3.1600e-003	5.0000e-005	1.5200e-003	6.0000e-005	1.5800e-003	4.4000e-004	6.0000e-005	5.0000e-004	0.0000	4.5082	4.5082	9.0000e-005	6.7000e-004	4.7092
Worker	1.3900e-003	9.1000e-004	0.0120	4.0000e-005	4.5800e-003	2.0000e-005	4.6100e-003	1.2200e-003	2.0000e-005	1.2400e-003	0.0000	3.5033	3.5033	9.0000e-005	9.0000e-005	3.5331
Total	1.6300e-003	0.0112	0.0152	9.0000e-005	6.1000e-003	8.0000e-005	6.1900e-003	1.6600e-003	8.0000e-005	1.7400e-003	0.0000	8.0116	8.0116	1.8000e-004	7.6000e-004	8.2423

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	0.0824	0.6417	0.7260	1.2800e-003		0.0261	0.0261		0.0252	0.0252	0.0000	105.3344	105.3344	0.0175	0.0000	105.7730
Total	0.0824	0.6417	0.7260	1.2800e-003		0.0261	0.0261		0.0252	0.0252	0.0000	105.3344	105.3344	0.0175	0.0000	105.7730

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

3.6 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	2.4000e-004	0.0103	3.1600e-003	5.0000e-005	1.5200e-003	6.0000e-005	1.5800e-003	4.4000e-004	6.0000e-005	5.0000e-004	0.0000	4.5082	4.5082	9.0000e-005	6.7000e-004	4.7092
Worker	1.3900e-003	9.1000e-004	0.0120	4.0000e-005	4.5800e-003	2.0000e-005	4.6100e-003	1.2200e-003	2.0000e-005	1.2400e-003	0.0000	3.5033	3.5033	9.0000e-005	9.0000e-005	3.5331
Total	1.6300e-003	0.0112	0.0152	9.0000e-005	6.1000e-003	8.0000e-005	6.1900e-003	1.6600e-003	8.0000e-005	1.7400e-003	0.0000	8.0116	8.0116	1.8000e-004	7.6000e-004	8.2423

3.6 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0556	0.4373	0.5225	9.3000e-004		0.0165	0.0165		0.0159	0.0159	0.0000	76.2855	76.2855	0.0125	0.0000	76.5969
Total	0.0556	0.4373	0.5225	9.3000e-004		0.0165	0.0165		0.0159	0.0159	0.0000	76.2855	76.2855	0.0125	0.0000	76.5969

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

3.6 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	7.4400e-003	2.2500e-003	3.0000e-005	1.1000e-003	4.0000e-005	1.1500e-003	3.2000e-004	4.0000e-005	3.6000e-004	0.0000	3.2065	3.2065	7.0000e-005	4.7000e-004	3.3495
Worker	9.5000e-004	5.9000e-004	8.1700e-003	3.0000e-005	3.3200e-003	2.0000e-005	3.3300e-003	8.8000e-004	1.0000e-005	9.0000e-004	0.0000	2.4763	2.4763	6.0000e-005	6.0000e-005	2.4964
Total	1.1200e-003	8.0300e-003	0.0104	6.0000e-005	4.4200e-003	6.0000e-005	4.4800e-003	1.2000e-003	5.0000e-005	1.2600e-003	0.0000	5.6828	5.6828	1.3000e-004	5.3000e-004	5.8459

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0556	0.4373	0.5225	9.3000e-004		0.0165	0.0165		0.0159	0.0159	0.0000	76.2854	76.2854	0.0125	0.0000	76.5968
Total	0.0556	0.4373	0.5225	9.3000e-004		0.0165	0.0165		0.0159	0.0159	0.0000	76.2854	76.2854	0.0125	0.0000	76.5968

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

3.6 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	7.4400e-003	2.2500e-003	3.0000e-005	1.1000e-003	4.0000e-005	1.1500e-003	3.2000e-004	4.0000e-005	3.6000e-004	0.0000	3.2065	3.2065	7.0000e-005	4.7000e-004	3.3495
Worker	9.5000e-004	5.9000e-004	8.1700e-003	3.0000e-005	3.3200e-003	2.0000e-005	3.3300e-003	8.8000e-004	1.0000e-005	9.0000e-004	0.0000	2.4763	2.4763	6.0000e-005	6.0000e-005	2.4964
Total	1.1200e-003	8.0300e-003	0.0104	6.0000e-005	4.4200e-003	6.0000e-005	4.4800e-003	1.2000e-003	5.0000e-005	1.2600e-003	0.0000	5.6828	5.6828	1.3000e-004	5.3000e-004	5.8459

3.7 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	0.0159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5800e-003	0.0646	0.0959	1.6000e-004		3.2300e-003	3.2300e-003		3.2300e-003	3.2300e-003	0.0000	13.5322	13.5322	7.6000e-004	0.0000	13.5513
Total	0.0255	0.0646	0.0959	1.6000e-004		3.2300e-003	3.2300e-003		3.2300e-003	3.2300e-003	0.0000	13.5322	13.5322	7.6000e-004	0.0000	13.5513

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3.7 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	2.5000e-004	1.7000e-004	2.2000e-003	1.0000e-005	8.4000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6403	0.6403	2.0000e-005	2.0000e-005	0.6457
Total	2.5000e-004	1.7000e-004	2.2000e-003	1.0000e-005	8.4000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6403	0.6403	2.0000e-005	2.0000e-005	0.6457

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0159					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5800e-003	0.0646	0.0959	1.6000e-004		3.2300e-003	3.2300e-003		3.2300e-003	3.2300e-003	0.0000	13.5322	13.5322	7.6000e-004	0.0000	13.5513
Total	0.0255	0.0646	0.0959	1.6000e-004		3.2300e-003	3.2300e-003		3.2300e-003	3.2300e-003	0.0000	13.5322	13.5322	7.6000e-004	0.0000	13.5513

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

3.7 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	2.5000e-004	1.7000e-004	2.2000e-003	1.0000e-005	8.4000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6403	0.6403	2.0000e-005	2.0000e-005	0.6457
Total	2.5000e-004	1.7000e-004	2.2000e-003	1.0000e-005	8.4000e-004	0.0000	8.4000e-004	2.2000e-004	0.0000	2.3000e-004	0.0000	0.6403	0.6403	2.0000e-005	2.0000e-005	0.6457

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0141					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0300e-003	0.0538	0.0850	1.4000e-004		2.4200e-003	2.4200e-003		2.4200e-003	2.4200e-003	0.0000	12.0003	12.0003	6.5000e-004	0.0000	12.0167
Total	0.0222	0.0538	0.0850	1.4000e-004		2.4200e-003	2.4200e-003		2.4200e-003	2.4200e-003	0.0000	12.0003	12.0003	6.5000e-004	0.0000	12.0167

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

3.7 Architectural Coating - 2025

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	2.1000e-004	1.3000e-004	1.8300e-003	1.0000e-005	7.4000e-004	0.0000	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.5542	0.5542	1.0000e-005	1.0000e-005	0.5587
Total	2.1000e-004	1.3000e-004	1.8300e-003	1.0000e-005	7.4000e-004	0.0000	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.5542	0.5542	1.0000e-005	1.0000e-005	0.5587

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0141					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0300e-003	0.0538	0.0850	1.4000e-004		2.4200e-003	2.4200e-003		2.4200e-003	2.4200e-003	0.0000	12.0003	12.0003	6.5000e-004	0.0000	12.0166
Total	0.0222	0.0538	0.0850	1.4000e-004		2.4200e-003	2.4200e-003		2.4200e-003	2.4200e-003	0.0000	12.0003	12.0003	6.5000e-004	0.0000	12.0166

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3.7 Architectural Coating - 2025

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	2.1000e-004	1.3000e-004	1.8300e-003	1.0000e-005	7.4000e-004	0.0000	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.5542	0.5542	1.0000e-005	1.0000e-005	0.5587
Total	2.1000e-004	1.3000e-004	1.8300e-003	1.0000e-005	7.4000e-004	0.0000	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.5542	0.5542	1.0000e-005	1.0000e-005	0.5587

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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	0.3895	0.4511	3.7695	8.0800e-003	0.8982	5.9200e-003	0.9041	0.2400	5.5100e-003	0.2455	0.0000	764.2708	764.2708	0.0472	0.0354	775.9924
Unmitigated	0.3895	0.4511	3.7695	8.0800e-003	0.8982	5.9200e-003	0.9041	0.2400	5.5100e-003	0.2455	0.0000	764.2708	764.2708	0.0472	0.0354	775.9924

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	910.98	910.98	910.98	2,436,714	2,436,714
Parking Lot	0.00	0.00	0.00		
Total	910.98	910.98	910.98	2,436,714	2,436,714

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive Thru	9.50	7.30	7.30	2.20	78.80	19.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.553839	0.058700	0.188468	0.120786	0.022796	0.005663	0.010629	0.007566	0.000983	0.000556	0.026354	0.000841	0.002820
Parking Lot	0.553839	0.058700	0.188468	0.120786	0.022796	0.005663	0.010629	0.007566	0.000983	0.000556	0.026354	0.000841	0.002820

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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	15.5616	15.5616	2.5200e-003	3.1000e-004	15.7155
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	15.5616	15.5616	2.5200e-003	3.1000e-004	15.7155
NaturalGas Mitigated	5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	55.6133	55.6133	1.0700e-003	1.0200e-003	55.9438
NaturalGas Unmitigated	5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	55.6133	55.6133	1.0700e-003	1.0200e-003	55.9438

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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	1.04215e+006	5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	55.6133	55.6133	1.0700e-003	1.0200e-003	55.9438
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	55.6133	55.6133	1.0700e-003	1.0200e-003	55.9438

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	1.04215e+006	5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	55.6133	55.6133	1.0700e-003	1.0200e-003	55.9438
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		5.6200e-003	0.0511	0.0429	3.1000e-004		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	55.6133	55.6133	1.0700e-003	1.0200e-003	55.9438

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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	161751	14.9658	2.4200e-003	2.9000e-004	15.1138
Parking Lot	6440	0.5959	1.0000e-004	1.0000e-005	0.6018
Total		15.5616	2.5200e-003	3.0000e-004	15.7155

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	161751	14.9658	2.4200e-003	2.9000e-004	15.1138
Parking Lot	6440	0.5959	1.0000e-004	1.0000e-005	0.6018
Total		15.5616	2.5200e-003	3.0000e-004	15.7155

6.0 Area Detail

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0239	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Unmitigated	0.0239	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.0100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0208					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Total	0.0239	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004

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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	3.0100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0208					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004
Total	0.0239	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.1000e-004	9.1000e-004	0.0000	0.0000	9.7000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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	1.2740	0.0499	1.1900e-003	2.8756
Unmitigated	1.2803	0.0499	1.1900e-003	2.8820

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	1.52677 / 0.0974537	1.2803	0.0499	1.1900e-003	2.8820
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.2803	0.0499	1.1900e-003	2.8820

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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	1.52677 / 0.077963	1.2740	0.0499	1.1900e-003	2.8756
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.2740	0.0499	1.1900e-003	2.8756

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11.7613	0.6951	0.0000	29.1381
Unmitigated	11.7613	0.6951	0.0000	29.1381

Chick-fil-A @ Sutter Boulevard - Bay Area 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	57.94	11.7613	0.6951	0.0000	29.1381
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		11.7613	0.6951	0.0000	29.1381

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	57.94	11.7613	0.6951	0.0000	29.1381
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		11.7613	0.6951	0.0000	29.1381

9.0 Operational Offroad

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Annual

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

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Chick-fil-A @ Sutter Boulevard**

Bay Area AQMD Air District, Summer

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	46.00	Space	0.41	18,400.00	0
Fast Food Restaurant with Drive Thru	5.03	1000sqft	1.41	5,028.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	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 updated to represent total acreage of project site.

Construction Phase - Architectural coating assumed to start two weeks after building construction initiation and lasts for the same duration.

Demolition - Building square footage is equal to the existing building on-site.

Vehicle Trips - Updated to be consistent with the project-specific traffic report.

Water Mitigation - Compliant with MWELO.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblLandUse	LandUseSquareFeet	5,030.00	5,028.00
tblLandUse	LotAcreage	0.12	1.41

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PR_TP	29.00	100.00
tblVehicleTrips	ST_TR	616.12	181.11
tblVehicleTrips	SU_TR	472.58	181.11
tblVehicleTrips	WD_TR	470.95	181.11

2.0 Emissions Summary

Chick-fil-A @ Sutter Boulevard - Bay Area 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					
2024	1.9359	14.1074	14.6483	0.0267	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,517.685 1	2,517.685 1	0.6471	0.0180	2,537.896 8
2025	1.8287	11.7443	14.5517	0.0266	0.1257	0.4455	0.5712	0.0340	0.4314	0.4654	0.0000	2,450.947 0	2,450.947 0	0.3458	0.0142	2,463.835 9
Maximum	1.9359	14.1074	14.6483	0.0267	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,517.685 1	2,517.685 1	0.6471	0.0180	2,537.896 8

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					
2024	1.9359	14.1074	14.6483	0.0267	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,517.685 1	2,517.685 1	0.6471	0.0180	2,537.896 8
2025	1.8287	11.7443	14.5517	0.0266	0.1257	0.4455	0.5712	0.0340	0.4314	0.4654	0.0000	2,450.947 0	2,450.947 0	0.3458	0.0142	2,463.835 9
Maximum	1.9359	14.1074	14.6483	0.0267	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,517.685 1	2,517.685 1	0.6471	0.0180	2,537.896 8

Chick-fil-A @ Sutter Boulevard - Bay Area 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	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Chick-fil-A @ Sutter Boulevard - Bay Area 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	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Energy	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Mobile	2.3673	2.2815	20.7417	0.0468	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,879.4818	4,879.4818	0.2687	0.2037	4,946.8904
Total	2.5292	2.5615	20.9820	0.0485	5.1290	0.0538	5.1828	1.3661	0.0516	1.4177		5,215.4007	5,215.4007	0.2752	0.2098	5,284.8061

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	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Energy	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Mobile	2.3673	2.2815	20.7417	0.0468	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,879.4818	4,879.4818	0.2687	0.2037	4,946.8904
Total	2.5292	2.5615	20.9820	0.0485	5.1290	0.0538	5.1828	1.3661	0.0516	1.4177		5,215.4007	5,215.4007	0.2752	0.2098	5,284.8061

Chick-fil-A @ Sutter Boulevard - Bay Area 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	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/3/2024	6/28/2024	5	20	
2	Site Preparation	Site Preparation	6/29/2024	7/2/2024	5	2	
3	Grading	Grading	7/3/2024	7/8/2024	5	4	
4	Paving	Paving	7/9/2024	7/22/2024	5	10	
5	Building Construction	Building Construction	7/23/2024	4/28/2025	5	200	
6	Architectural Coating	Architectural Coating	8/6/2024	5/12/2025	5	200	

Acres of Grading (Site Preparation Phase): 1.88**Acres of Grading (Grading Phase): 4****Acres of Paving: 0.41****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,542; Non-Residential Outdoor: 2,514; Striped Parking Area: 1,104 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	31.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 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					
Fugitive Dust					0.3396	0.0000	0.3396	0.0514	0.0000	0.0514			0.0000			0.0000
Off-Road	1.4397	13.8867	13.4879	0.0241		0.6311	0.6311		0.5895	0.5895		2,324.945 9	2,324.945 9	0.5884		2,339.656 2
Total	1.4397	13.8867	13.4879	0.0241	0.3396	0.6311	0.9707	0.0514	0.5895	0.6409		2,324.945 9	2,324.945 9	0.5884		2,339.656 2

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	3.3100e-003	0.2027	0.0495	9.2000e-004	0.0271	1.7100e-003	0.0288	7.4300e-003	1.6400e-003	9.0700e-003		100.3403	100.3403	3.3600e-003	0.0159	105.1632
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	0.0329	0.0180	0.2896	9.0000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		92.3990	92.3990	2.1600e-003	2.1000e-003	93.0774
Total	0.0362	0.2207	0.3391	1.8200e-003	0.1339	2.2100e-003	0.1361	0.0358	2.1000e-003	0.0379		192.7393	192.7393	5.5200e-003	0.0180	198.2406

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

3.2 Demolition - 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					
Fugitive Dust					0.3396	0.0000	0.3396	0.0514	0.0000	0.0514			0.0000			0.0000
Off-Road	1.4397	13.8867	13.4879	0.0241		0.6311	0.6311		0.5895	0.5895	0.0000	2,324.945 9	2,324.945 9	0.5884		2,339.656 2
Total	1.4397	13.8867	13.4879	0.0241	0.3396	0.6311	0.9707	0.0514	0.5895	0.6409	0.0000	2,324.945 9	2,324.945 9	0.5884		2,339.656 2

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	3.3100e-003	0.2027	0.0495	9.2000e-004	0.0271	1.7100e-003	0.0288	7.4300e-003	1.6400e-003	9.0700e-003		100.3403	100.3403	3.3600e-003	0.0159	105.1632
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	0.0329	0.0180	0.2896	9.0000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		92.3990	92.3990	2.1600e-003	2.1000e-003	93.0774
Total	0.0362	0.2207	0.3391	1.8200e-003	0.1339	2.2100e-003	0.1361	0.0358	2.1000e-003	0.0379		192.7393	192.7393	5.5200e-003	0.0180	198.2406

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 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					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1067	11.8407	6.6317	0.0172		0.4823	0.4823		0.4437	0.4437		1,665.882 6	1,665.882 6	0.5388		1,679.352 1
Total	1.1067	11.8407	6.6317	0.0172	6.2662	0.4823	6.7485	3.0041	0.4437	3.4478		1,665.882 6	1,665.882 6	0.5388		1,679.352 1

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	0.0202	0.0111	0.1782	5.5000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		56.8609	56.8609	1.3300e-003	1.2900e-003	57.2784
Total	0.0202	0.0111	0.1782	5.5000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		56.8609	56.8609	1.3300e-003	1.2900e-003	57.2784

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 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					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1067	11.8407	6.6317	0.0172		0.4823	0.4823		0.4437	0.4437	0.0000	1,665.8826	1,665.8826	0.5388		1,679.3521
Total	1.1067	11.8407	6.6317	0.0172	6.2662	0.4823	6.7485	3.0041	0.4437	3.4478	0.0000	1,665.8826	1,665.8826	0.5388		1,679.3521

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	0.0202	0.0111	0.1782	5.5000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		56.8609	56.8609	1.3300e-003	1.2900e-003	57.2784
Total	0.0202	0.0111	0.1782	5.5000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		56.8609	56.8609	1.3300e-003	1.2900e-003	57.2784

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

3.4 Grading - 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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3015	13.8178	8.6998	0.0206		0.5722	0.5722		0.5265	0.5265		1,995.580 3	1,995.580 3	0.6454		2,011.715 5
Total	1.3015	13.8178	8.6998	0.0206	7.0826	0.5722	7.6548	3.4247	0.5265	3.9512		1,995.580 3	1,995.580 3	0.6454		2,011.715 5

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	0.0253	0.0139	0.2228	6.9000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		71.0761	71.0761	1.6600e-003	1.6100e-003	71.5980
Total	0.0253	0.0139	0.2228	6.9000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		71.0761	71.0761	1.6600e-003	1.6100e-003	71.5980

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3015	13.8178	8.6998	0.0206		0.5722	0.5722		0.5265	0.5265	0.0000	1,995.580 3	1,995.580 3	0.6454		2,011.715 5
Total	1.3015	13.8178	8.6998	0.0206	7.0826	0.5722	7.6548	3.4247	0.5265	3.9512	0.0000	1,995.580 3	1,995.580 3	0.6454		2,011.715 5

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	0.0253	0.0139	0.2228	6.9000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		71.0761	71.0761	1.6600e-003	1.6100e-003	71.5980
Total	0.0253	0.0139	0.2228	6.9000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		71.0761	71.0761	1.6600e-003	1.6100e-003	71.5980

Chick-fil-A @ Sutter Boulevard - Bay Area 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 - 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	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.868 8	1,297.868 8	0.4114		1,308.154 7
Paving	0.1074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7254	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.868 8	1,297.868 8	0.4114		1,308.154 7

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	0.0329	0.0180	0.2896	9.0000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		92.3990	92.3990	2.1600e-003	2.1000e-003	93.0774
Total	0.0329	0.0180	0.2896	9.0000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		92.3990	92.3990	2.1600e-003	2.1000e-003	93.0774

Chick-fil-A @ Sutter Boulevard - Bay Area 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 - 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	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.868 8	1,297.868 8	0.4114		1,308.154 7
Paving	0.1074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7254	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.868 8	1,297.868 8	0.4114		1,308.154 7

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	0.0329	0.0180	0.2896	9.0000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		92.3990	92.3990	2.1600e-003	2.1000e-003	93.0774
Total	0.0329	0.0180	0.2896	9.0000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		92.3990	92.3990	2.1600e-003	2.1000e-003	93.0774

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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		2,001.921 4	2,001.921 4	0.3334		2,010.256 3
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.921 4	2,001.921 4	0.3334		2,010.256 3

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	4.2300e-003	0.1716	0.0536	8.0000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		85.6278	85.6278	1.7700e-003	0.0127	89.4438
Worker	0.0253	0.0139	0.2228	6.9000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		71.0761	71.0761	1.6600e-003	1.6100e-003	71.5980
Total	0.0295	0.1855	0.2764	1.4900e-003	0.1092	1.4400e-003	0.1107	0.0296	1.3600e-003	0.0310		156.7039	156.7039	3.4300e-003	0.0143	161.0418

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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	2,001.921 4	2,001.921 4	0.3334		2,010.256 3
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.921 4	2,001.921 4	0.3334		2,010.256 3

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	4.2300e-003	0.1716	0.0536	8.0000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		85.6278	85.6278	1.7700e-003	0.0127	89.4438
Worker	0.0253	0.0139	0.2228	6.9000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		71.0761	71.0761	1.6600e-003	1.6100e-003	71.5980
Total	0.0295	0.1855	0.2764	1.4900e-003	0.1092	1.4400e-003	0.1107	0.0296	1.3600e-003	0.0310		156.7039	156.7039	3.4300e-003	0.0143	161.0418

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Building Construction - 2025****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	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.1524	2,002.1524	0.3269		2,010.3248
Total	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.1524	2,002.1524	0.3269		2,010.3248

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	4.1300e-003	0.1710	0.0527	7.8000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		84.1039	84.1039	1.7600e-003	0.0124	87.8510
Worker	0.0237	0.0125	0.2088	6.7000e-004	0.0822	3.7000e-004	0.0825	0.0218	3.4000e-004	0.0221		69.3688	69.3688	1.5100e-003	1.5100e-003	69.8569
Total	0.0279	0.1835	0.2615	1.4500e-003	0.1092	1.4200e-003	0.1107	0.0296	1.3400e-003	0.0309		153.4727	153.4727	3.2700e-003	0.0139	157.7079

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Building Construction - 2025****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	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785	0.0000	2,002.1524	2,002.1524	0.3269		2,010.3248
Total	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785	0.0000	2,002.1524	2,002.1524	0.3269		2,010.3248

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	4.1300e-003	0.1710	0.0527	7.8000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0000e-003	8.8000e-003		84.1039	84.1039	1.7600e-003	0.0124	87.8510
Worker	0.0237	0.0125	0.2088	6.7000e-004	0.0822	3.7000e-004	0.0825	0.0218	3.4000e-004	0.0221		69.3688	69.3688	1.5100e-003	1.5100e-003	69.8569
Total	0.0279	0.1835	0.2615	1.4500e-003	0.1092	1.4200e-003	0.1107	0.0296	1.3400e-003	0.0309		153.4727	153.4727	3.2700e-003	0.0139	157.7079

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 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	0.3006					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	0.4813	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	5.0500e-003	2.7700e-003	0.0446	1.4000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		14.2152	14.2152	3.3000e-004	3.2000e-004	14.3196
Total	5.0500e-003	2.7700e-003	0.0446	1.4000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		14.2152	14.2152	3.3000e-004	3.2000e-004	14.3196

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

3.7 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	0.3006					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	0.4813	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	5.0500e-003	2.7700e-003	0.0446	1.4000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		14.2152	14.2152	3.3000e-004	3.2000e-004	14.3196
Total	5.0500e-003	2.7700e-003	0.0446	1.4000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		14.2152	14.2152	3.3000e-004	3.2000e-004	14.3196

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

3.7 Architectural Coating - 2025

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	0.3006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	0.4714	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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	4.7500e-003	2.5000e-003	0.0418	1.3000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.8738	13.8738	3.0000e-004	3.0000e-004	13.9714
Total	4.7500e-003	2.5000e-003	0.0418	1.3000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.8738	13.8738	3.0000e-004	3.0000e-004	13.9714

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

3.7 Architectural Coating - 2025

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	0.3006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	0.4714	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

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	4.7500e-003	2.5000e-003	0.0418	1.3000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.8738	13.8738	3.0000e-004	3.0000e-004	13.9714
Total	4.7500e-003	2.5000e-003	0.0418	1.3000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.8738	13.8738	3.0000e-004	3.0000e-004	13.9714

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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	2.3673	2.2815	20.7417	0.0468	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,879.4818	4,879.4818	0.2687	0.2037	4,946.8904
Unmitigated	2.3673	2.2815	20.7417	0.0468	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,879.4818	4,879.4818	0.2687	0.2037	4,946.8904

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	910.98	910.98	910.98	2,436,714	2,436,714
Parking Lot	0.00	0.00	0.00		
Total	910.98	910.98	910.98	2,436,714	2,436,714

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.553839	0.058700	0.188468	0.120786	0.022796	0.005663	0.010629	0.007566	0.000983	0.000556	0.026354	0.000841	0.002820
Parking Lot	0.553839	0.058700	0.188468	0.120786	0.022796	0.005663	0.010629	0.007566	0.000983	0.000556	0.026354	0.000841	0.002820

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	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
NaturalGas Unmitigated	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

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	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	2855.22	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038

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	2.85522	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038

6.0 Area Detail

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Unmitigated	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Total	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119

Chick-fil-A @ Sutter Boulevard - Bay Area 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	0.0165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Total	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119

7.0 Water Detail**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

Chick-fil-A @ Sutter Boulevard - Bay Area 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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Chick-fil-A @ Sutter Boulevard**

Bay Area AQMD Air District, Winter

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	46.00	Space	0.41	18,400.00	0
Fast Food Restaurant with Drive Thru	5.03	1000sqft	1.41	5,028.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2025
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	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 updated to represent total acreage of project site.

Construction Phase - Architectural coating assumed to start two weeks after building construction initiation and lasts for the same duration.

Demolition - Building square footage is equal to the existing building on-site.

Vehicle Trips - Updated to be consistent with the project-specific traffic report.

Water Mitigation - Compliant with MWELO.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblLandUse	LandUseSquareFeet	5,030.00	5,028.00
tblLandUse	LotAcreage	0.12	1.41

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PR_TP	29.00	100.00
tblVehicleTrips	ST_TR	616.12	181.11
tblVehicleTrips	SU_TR	472.58	181.11
tblVehicleTrips	WD_TR	470.95	181.11

2.0 Emissions Summary

Chick-fil-A @ Sutter Boulevard - Bay Area 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					
2024	1.9366	14.1233	14.6398	0.0266	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,511.245 4	2,511.245 4	0.6473	0.0183	2,531.563 1
2025	1.8294	11.7577	14.5445	0.0266	0.1257	0.4455	0.5712	0.0340	0.4315	0.4654	0.0000	2,445.195 4	2,445.195 4	0.3461	0.0146	2,458.180 7
Maximum	1.9366	14.1233	14.6398	0.0266	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,511.245 4	2,511.245 4	0.6473	0.0183	2,531.563 1

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					
2024	1.9366	14.1233	14.6398	0.0266	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,511.245 4	2,511.245 4	0.6473	0.0183	2,531.563 1
2025	1.8294	11.7577	14.5445	0.0266	0.1257	0.4455	0.5712	0.0340	0.4315	0.4654	0.0000	2,445.195 4	2,445.195 4	0.3461	0.0146	2,458.180 7
Maximum	1.9366	14.1233	14.6398	0.0266	7.1647	0.6333	7.7374	3.4465	0.5916	3.9734	0.0000	2,511.245 4	2,511.245 4	0.6473	0.0183	2,531.563 1

Chick-fil-A @ Sutter Boulevard - Bay Area 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	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Chick-fil-A @ Sutter Boulevard - Bay Area 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	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Energy	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Mobile	2.1458	2.6201	22.0407	0.0442	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,606.9209	4,606.9209	0.3015	0.2226	4,680.7982
Total	2.3077	2.9001	22.2811	0.0459	5.1290	0.0539	5.1828	1.3661	0.0516	1.4177		4,942.8397	4,942.8397	0.3080	0.2288	5,018.7139

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	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Energy	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Mobile	2.1458	2.6201	22.0407	0.0442	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,606.9209	4,606.9209	0.3015	0.2226	4,680.7982
Total	2.3077	2.9001	22.2811	0.0459	5.1290	0.0539	5.1828	1.3661	0.0516	1.4177		4,942.8397	4,942.8397	0.3080	0.2288	5,018.7139

Chick-fil-A @ Sutter Boulevard - Bay Area 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	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/3/2024	6/28/2024	5	20	
2	Site Preparation	Site Preparation	6/29/2024	7/2/2024	5	2	
3	Grading	Grading	7/3/2024	7/8/2024	5	4	
4	Paving	Paving	7/9/2024	7/22/2024	5	10	
5	Building Construction	Building Construction	7/23/2024	4/28/2025	5	200	
6	Architectural Coating	Architectural Coating	8/6/2024	5/12/2025	5	200	

Acres of Grading (Site Preparation Phase): 1.88**Acres of Grading (Grading Phase): 4****Acres of Paving: 0.41****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,542; Non-Residential Outdoor: 2,514; Striped Parking Area: 1,104 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	31.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

3.2 Demolition - 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					
Fugitive Dust					0.3396	0.0000	0.3396	0.0514	0.0000	0.0514			0.0000			0.0000
Off-Road	1.4397	13.8867	13.4879	0.0241		0.6311	0.6311		0.5895	0.5895		2,324.945 9	2,324.945 9	0.5884		2,339.656 2
Total	1.4397	13.8867	13.4879	0.0241	0.3396	0.6311	0.9707	0.0514	0.5895	0.6409		2,324.945 9	2,324.945 9	0.5884		2,339.656 2

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	3.1000e-003	0.2144	0.0501	9.2000e-004	0.0271	1.7200e-003	0.0288	7.4300e-003	1.6400e-003	9.0700e-003		100.4362	100.4362	3.3500e-003	0.0159	105.2636
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	0.0338	0.0223	0.2784	8.3000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		85.8634	85.8634	2.4600e-003	2.4100e-003	86.6434
Total	0.0369	0.2366	0.3285	1.7500e-003	0.1339	2.2200e-003	0.1361	0.0358	2.1000e-003	0.0379		186.2995	186.2995	5.8100e-003	0.0183	191.9069

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

3.2 Demolition - 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					
Fugitive Dust					0.3396	0.0000	0.3396	0.0514	0.0000	0.0514			0.0000			0.0000
Off-Road	1.4397	13.8867	13.4879	0.0241		0.6311	0.6311		0.5895	0.5895	0.0000	2,324.945 9	2,324.945 9	0.5884		2,339.656 2
Total	1.4397	13.8867	13.4879	0.0241	0.3396	0.6311	0.9707	0.0514	0.5895	0.6409	0.0000	2,324.945 9	2,324.945 9	0.5884		2,339.656 2

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	3.1000e-003	0.2144	0.0501	9.2000e-004	0.0271	1.7200e-003	0.0288	7.4300e-003	1.6400e-003	9.0700e-003		100.4362	100.4362	3.3500e-003	0.0159	105.2636
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	0.0338	0.0223	0.2784	8.3000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		85.8634	85.8634	2.4600e-003	2.4100e-003	86.6434
Total	0.0369	0.2366	0.3285	1.7500e-003	0.1339	2.2200e-003	0.1361	0.0358	2.1000e-003	0.0379		186.2995	186.2995	5.8100e-003	0.0183	191.9069

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 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					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1067	11.8407	6.6317	0.0172		0.4823	0.4823		0.4437	0.4437		1,665.8826	1,665.8826	0.5388		1,679.3521
Total	1.1067	11.8407	6.6317	0.0172	6.2662	0.4823	6.7485	3.0041	0.4437	3.4478		1,665.8826	1,665.8826	0.5388		1,679.3521

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	0.0208	0.0137	0.1713	5.1000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		52.8390	52.8390	1.5200e-003	1.4800e-003	53.3190
Total	0.0208	0.0137	0.1713	5.1000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		52.8390	52.8390	1.5200e-003	1.4800e-003	53.3190

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 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					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1067	11.8407	6.6317	0.0172		0.4823	0.4823		0.4437	0.4437	0.0000	1,665.8826	1,665.8826	0.5388		1,679.3521
Total	1.1067	11.8407	6.6317	0.0172	6.2662	0.4823	6.7485	3.0041	0.4437	3.4478	0.0000	1,665.8826	1,665.8826	0.5388		1,679.3521

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	0.0208	0.0137	0.1713	5.1000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		52.8390	52.8390	1.5200e-003	1.4800e-003	53.3190
Total	0.0208	0.0137	0.1713	5.1000e-004	0.0657	3.1000e-004	0.0660	0.0174	2.9000e-004	0.0177		52.8390	52.8390	1.5200e-003	1.4800e-003	53.3190

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

3.4 Grading - 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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3015	13.8178	8.6998	0.0206		0.5722	0.5722		0.5265	0.5265		1,995.580 3	1,995.580 3	0.6454		2,011.715 5
Total	1.3015	13.8178	8.6998	0.0206	7.0826	0.5722	7.6548	3.4247	0.5265	3.9512		1,995.580 3	1,995.580 3	0.6454		2,011.715 5

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	0.0260	0.0171	0.2141	6.4000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.0487	66.0487	1.9000e-003	1.8500e-003	66.6488
Total	0.0260	0.0171	0.2141	6.4000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.0487	66.0487	1.9000e-003	1.8500e-003	66.6488

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

3.4 Grading - 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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3015	13.8178	8.6998	0.0206		0.5722	0.5722		0.5265	0.5265	0.0000	1,995.580 3	1,995.580 3	0.6454		2,011.715 5
Total	1.3015	13.8178	8.6998	0.0206	7.0826	0.5722	7.6548	3.4247	0.5265	3.9512	0.0000	1,995.580 3	1,995.580 3	0.6454		2,011.715 5

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	0.0260	0.0171	0.2141	6.4000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.0487	66.0487	1.9000e-003	1.8500e-003	66.6488
Total	0.0260	0.0171	0.2141	6.4000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.0487	66.0487	1.9000e-003	1.8500e-003	66.6488

Chick-fil-A @ Sutter Boulevard - Bay Area 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 - 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	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.868 8	1,297.868 8	0.4114		1,308.154 7
Paving	0.1074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7254	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.868 8	1,297.868 8	0.4114		1,308.154 7

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	0.0338	0.0223	0.2784	8.3000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		85.8634	85.8634	2.4600e-003	2.4100e-003	86.6434
Total	0.0338	0.0223	0.2784	8.3000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		85.8634	85.8634	2.4600e-003	2.4100e-003	86.6434

Chick-fil-A @ Sutter Boulevard - Bay Area 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 - 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	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.868 8	1,297.868 8	0.4114		1,308.154 7
Paving	0.1074					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7254	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.868 8	1,297.868 8	0.4114		1,308.154 7

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	0.0338	0.0223	0.2784	8.3000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		85.8634	85.8634	2.4600e-003	2.4100e-003	86.6434
Total	0.0338	0.0223	0.2784	8.3000e-004	0.1068	5.0000e-004	0.1073	0.0283	4.6000e-004	0.0288		85.8634	85.8634	2.4600e-003	2.4100e-003	86.6434

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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		2,001.921 4	2,001.921 4	0.3334		2,010.256 3
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.921 4	2,001.921 4	0.3334		2,010.256 3

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	4.0800e-003	0.1816	0.0555	8.0000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0100e-003	8.8100e-003		85.7531	85.7531	1.7600e-003	0.0127	89.5783
Worker	0.0260	0.0171	0.2141	6.4000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.0487	66.0487	1.9000e-003	1.8500e-003	66.6488
Total	0.0301	0.1987	0.2696	1.4400e-003	0.1092	1.4400e-003	0.1107	0.0296	1.3700e-003	0.0310		151.8018	151.8018	3.6600e-003	0.0145	156.2270

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 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	2,001.921 4	2,001.921 4	0.3334		2,010.256 3
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.921 4	2,001.921 4	0.3334		2,010.256 3

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	4.0800e-003	0.1816	0.0555	8.0000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0100e-003	8.8100e-003		85.7531	85.7531	1.7600e-003	0.0127	89.5783
Worker	0.0260	0.0171	0.2141	6.4000e-004	0.0822	3.9000e-004	0.0825	0.0218	3.6000e-004	0.0222		66.0487	66.0487	1.9000e-003	1.8500e-003	66.6488
Total	0.0301	0.1987	0.2696	1.4400e-003	0.1092	1.4400e-003	0.1107	0.0296	1.3700e-003	0.0310		151.8018	151.8018	3.6600e-003	0.0145	156.2270

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

3.6 Building Construction - 2025

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	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.1524	2,002.1524	0.3269		2,010.3248
Total	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785		2,002.1524	2,002.1524	0.3269		2,010.3248

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	3.9700e-003	0.1810	0.0545	7.8000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0100e-003	8.8000e-003		84.2294	84.2294	1.7500e-003	0.0125	87.9854
Worker	0.0245	0.0154	0.2013	6.2000e-004	0.0822	3.7000e-004	0.0825	0.0218	3.4000e-004	0.0221		64.4712	64.4712	1.7200e-003	1.7400e-003	65.0322
Total	0.0285	0.1964	0.2558	1.4000e-003	0.1092	1.4200e-003	0.1107	0.0296	1.3500e-003	0.0309		148.7006	148.7006	3.4700e-003	0.0142	153.0176

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Building Construction - 2025****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	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785	0.0000	2,002.1524	2,002.1524	0.3269		2,010.3248
Total	1.3246	10.4128	12.4393	0.0221		0.3925	0.3925		0.3785	0.3785	0.0000	2,002.1524	2,002.1524	0.3269		2,010.3248

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	3.9700e-003	0.1810	0.0545	7.8000e-004	0.0271	1.0500e-003	0.0281	7.8000e-003	1.0100e-003	8.8000e-003		84.2294	84.2294	1.7500e-003	0.0125	87.9854
Worker	0.0245	0.0154	0.2013	6.2000e-004	0.0822	3.7000e-004	0.0825	0.0218	3.4000e-004	0.0221		64.4712	64.4712	1.7200e-003	1.7400e-003	65.0322
Total	0.0285	0.1964	0.2558	1.4000e-003	0.1092	1.4200e-003	0.1107	0.0296	1.3500e-003	0.0309		148.7006	148.7006	3.4700e-003	0.0142	153.0176

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 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	0.3006					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	0.4813	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	5.2000e-003	3.4200e-003	0.0428	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.2098	13.2098	3.8000e-004	3.7000e-004	13.3298
Total	5.2000e-003	3.4200e-003	0.0428	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.2098	13.2098	3.8000e-004	3.7000e-004	13.3298

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 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	0.3006					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	0.4813	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	5.2000e-003	3.4200e-003	0.0428	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.2098	13.2098	3.8000e-004	3.7000e-004	13.3298
Total	5.2000e-003	3.4200e-003	0.0428	1.3000e-004	0.0164	8.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		13.2098	13.2098	3.8000e-004	3.7000e-004	13.3298

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2025****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	0.3006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	0.4714	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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	4.9000e-003	3.0800e-003	0.0403	1.2000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		12.8942	12.8942	3.4000e-004	3.5000e-004	13.0065
Total	4.9000e-003	3.0800e-003	0.0403	1.2000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		12.8942	12.8942	3.4000e-004	3.5000e-004	13.0065

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2025****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	0.3006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	0.4714	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

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	4.9000e-003	3.0800e-003	0.0403	1.2000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		12.8942	12.8942	3.4000e-004	3.5000e-004	13.0065
Total	4.9000e-003	3.0800e-003	0.0403	1.2000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4300e-003		12.8942	12.8942	3.4000e-004	3.5000e-004	13.0065

Chick-fil-A @ Sutter Boulevard - Bay Area 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	2.1458	2.6201	22.0407	0.0442	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,606.9209	4,606.9209	0.3015	0.2226	4,680.7982
Unmitigated	2.1458	2.6201	22.0407	0.0442	5.1290	0.0326	5.1615	1.3661	0.0303	1.3964		4,606.9209	4,606.9209	0.3015	0.2226	4,680.7982

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	910.98	910.98	910.98	2,436,714	2,436,714
Parking Lot	0.00	0.00	0.00		
Total	910.98	910.98	910.98	2,436,714	2,436,714

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.553839	0.058700	0.188468	0.120786	0.022796	0.005663	0.010629	0.007566	0.000983	0.000556	0.026354	0.000841	0.002820
Parking Lot	0.553839	0.058700	0.188468	0.120786	0.022796	0.005663	0.010629	0.007566	0.000983	0.000556	0.026354	0.000841	0.002820

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	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
NaturalGas Unmitigated	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	2855.22	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038

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	2.85522	0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0308	0.2799	0.2351	1.6800e-003		0.0213	0.0213		0.0213	0.0213		335.9077	335.9077	6.4400e-003	6.1600e-003	337.9038

6.0 Area Detail

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

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	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Unmitigated	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Total	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119

Chick-fil-A @ Sutter Boulevard - Bay Area 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	0.0165					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1141					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119
Total	0.1311	5.0000e-005	5.2000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0112	0.0112	3.0000e-005		0.0119

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Chick-fil-A @ Sutter Boulevard - Bay Area AQMD Air District, Winter

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

Environmental Noise & Vibration Assessment

Chick-fil-A Restaurant

Morgan Hill, California

BAC Job # 2023-011

Prepared For:

Raney Planning & Management, Inc.

Attn: Malena Garcia
1501 Sports Drive, Suite A
Sacramento, CA, 95834

Prepared By:

Bollard Acoustical Consultants, Inc.



Dario Gotchet, Principal Consultant

May 1, 2023



CEQA Checklist

NOISE AND VIBRATION – Would the Project Result in:	NA – Not Applicable	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X	
b) Generation of excessive groundborne vibration or groundborne noise levels?				X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?					X

Introduction

The proposed Chick-fil-A Restaurant (project) is located at 18599 Sutter Boulevard in Morgan Hill, California. The project consists of the demolition of an existing building and construction of a new quick-service restaurant (QSR) building, a small outdoor patio dining area, a two-lane drive-thru lane, and associated parking stalls. Land uses in the immediate project vicinity include existing commercial/office to the north (financial institution), south (medical offices), and east (financial institution), and future commercial/transient lodging to the west (hotel). The project area with aerial imagery is shown in Figure 1. The project site plan is presented in Figure 2.

The purposes of this assessment are to quantify the existing noise and vibration environments, identify potential noise and vibration impacts resulting from the project, identify appropriate mitigation measures, and provide a quantitative and qualitative analysis of impacts associated with the project. Specifically, impacts are identified if project-related activities would cause a substantial increase in ambient noise levels at existing or future uses in the project vicinity, or if traffic or project-generated noise or vibration levels would exceed applicable federal, state, or City of Morgan Hill standards at nearby existing or future uses.

Noise and Vibration Fundamentals

Noise

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

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure) as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in decibel levels correspond closely to human perception of relative loudness. Noise levels associated with common noise sources are provided in Figure 3.

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 filtering the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels.

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}). The L_{eq} is the foundation of the day-night average noise descriptor, DNL (or L_{dn}), and shows very good correlation with community response to noise.

The Day-Night Average sound level (DNL) 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.

Vibration

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, while vibration is usually associated with transmission through the ground or structures. As with noise, vibration consists of an amplitude and frequency. A person's response to vibration will depend on their individual sensitivity as well as the amplitude and frequency of the source.

Vibration can be described in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of velocity in inches per second peak particle velocity (IPS, PPV) or root-mean-square (VdB, RMS). Standards pertaining to perception as well as damage to structures have been developed for vibration in terms of peak particle velocity as well as RMS velocities. As vibrations travel outward from the source, they excite the particles of rock and soil through which they pass and cause them to oscillate. Differences in subsurface geologic conditions and distance from the source of vibration will result in different vibration levels characterized by different frequencies and intensities. In all cases, vibration amplitudes will decrease with increasing distance. The maximum rate, or velocity of particle movement, is the commonly accepted descriptor of the vibration "strength".

Human response to vibration is difficult to quantify. Vibration can be felt or heard well below the levels that produce any damage to structures. The duration of the event has an effect on human response, as does frequency. Generally, as the duration and vibration frequency increase, the potential for adverse human response increases.

According to the Transportation and Construction-Induced Vibration Guidance Manual (Caltrans, June 2004), operation of construction equipment and construction techniques generate ground vibration. Traffic traveling on roadways can also be a source of such vibration. At high enough amplitudes, ground vibration has the potential to damage structures and/or cause cosmetic damage. Ground vibration can also be a source of annoyance to individuals who live or work close to vibration-generating activities. However, traffic, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage.



Legend

- Project Parcel Boundary (Approximate)
- Ambient Noise & Vibration Survey Locations



Scale (Feet)

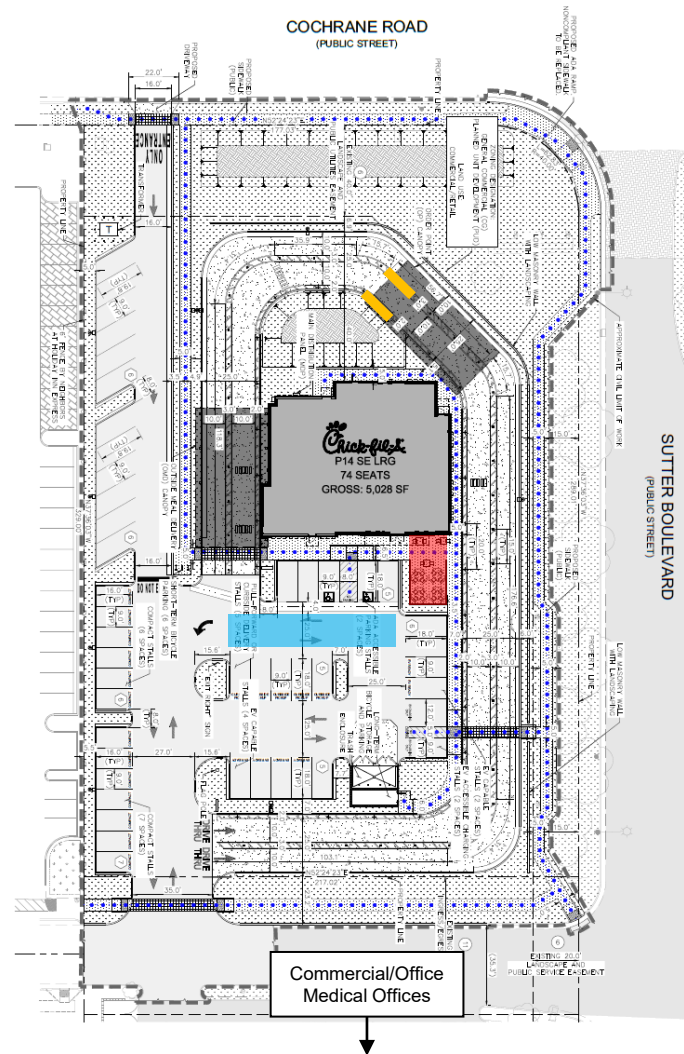


Chick-fil-A Restaurant
Morgan Hill, CA

Project Area

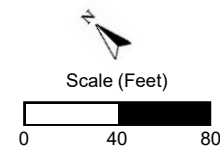
Figure 1

Future Hotel



Legend

- Drive-Thru Menu Speaker Boards (2)
- Outdoor Patio
- Truck Delivery Area (Assumed)

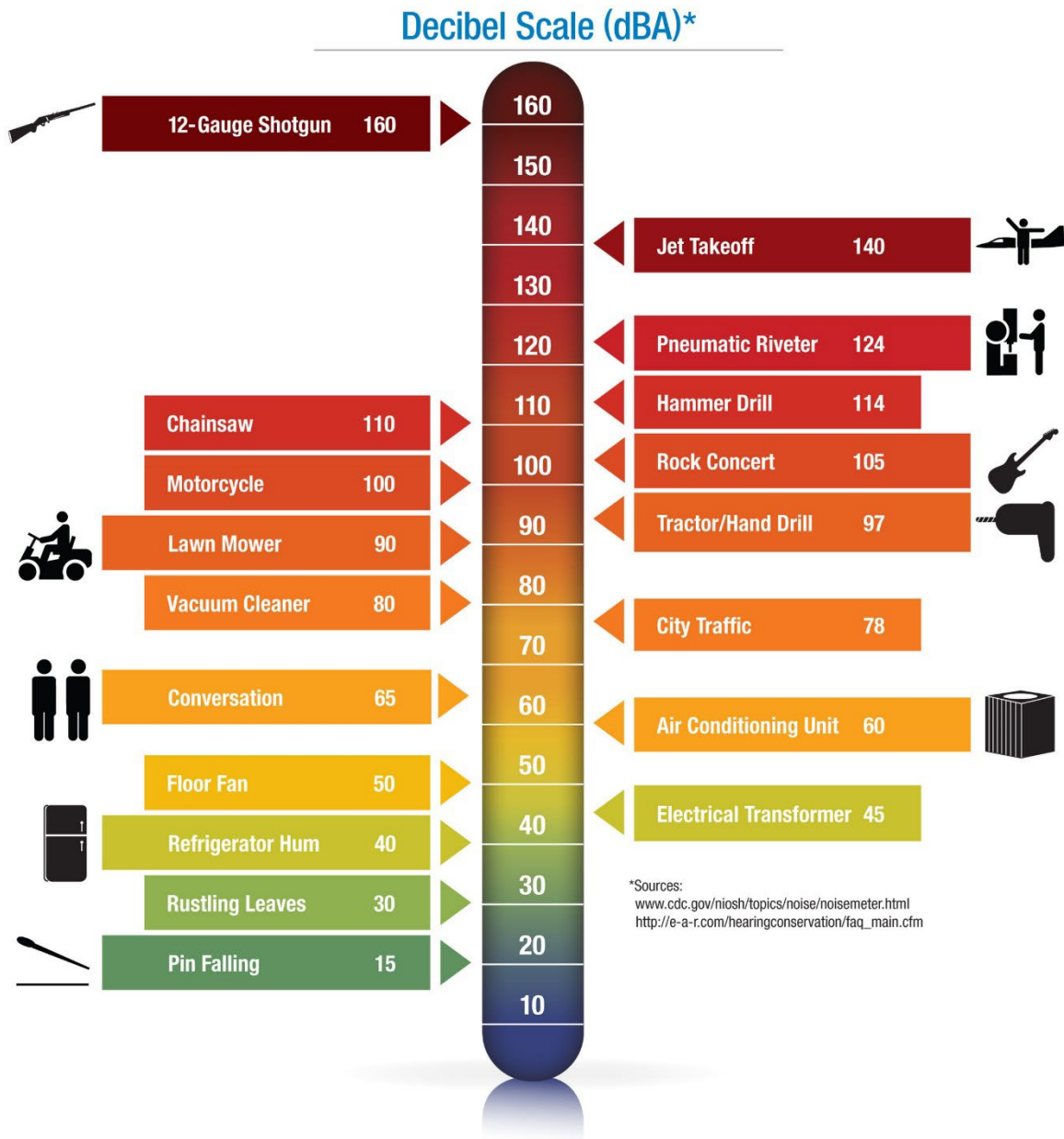


Chick-fil-A Restaurant
Morgan Hill, CA

Project Site Plan

Figure 2

Figure 3
Noise Levels Associated with Common Noise Sources



Regulatory Setting: Criteria for Acceptable Noise and Vibration Exposure

Federal

There are no federal noise or vibration criteria which would be directly applicable to this project. However, the City of Morgan Hill does not currently have adopted numeric standards for groundborne vibration. As a result, the following federal noise criteria was applied to the project.

Federal Transit Administration

Vibration impact criteria developed by the Federal Transit Administration (FTA) were applied to the project. The FTA criteria applicable to damage and annoyance from vibration typically associated with construction activities are presented in Tables 1 and 2.

Table 1
FTA Criteria for Assessing Vibration Damage to Structures

Building Category	Level (VdB) ¹
I. Reinforced-concrete, steel or timber (no plaster)	102
II. Engineered concrete and masonry (no plaster)	98
III. Non-engineered timber and masonry buildings	94
IV. Buildings extremely susceptible to vibration damage	90
¹ RMS velocity in decibels (VdB) re 1 micro-inch/second	

Source: Federal Transit Administration (FTA) Noise and Vibration Manual, Table 12-3

Table 2
Groundborne Vibration Impact Criteria for General Assessment

Land Use Category	Impact Levels (VdB)		
	Frequent Events ^a	Occasional Events ^b	Infrequent Events ^c
Category 1: Buildings where vibration would interfere with interior ops.	65 ^d	65 ^d	65 ^d
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83
a. "Frequent Events" is defined as more than 70 vibration events of the same source per day. b. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. c. "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day. d. This criterion limit is based on levels that are acceptable for most moderately-sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels.			

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

State of California

California Environmental Quality Act (CEQA)

The State of California has established regulatory criteria that are applicable to this assessment. Specifically, Appendix G of the State of California Environmental Quality Act (CEQA) Guidelines are used to assess the potential significance of impacts pursuant to local General Plan policies,

Municipal Code standards, or the applicable standards of other agencies. According to Appendix G of the CEQA guidelines, the project would result in a significant noise or vibration impact if the following occur:

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

It should be noted that audibility is not a test of significance according to CEQA. If this were the case, any project which added any audible amount of noise to the environment would be considered significant according to CEQA. Because every physical process creates noise, the use of audibility alone as significance criteria would be unworkable. CEQA requires a substantial increase in noise levels before noise impacts are identified, not simply an audible change.

Local

Morgan Hill 2035 General Plan

The Safety, Services, and Infrastructure Element of the Morgan Hill 2035 General Plan contains goals and policies to ensure that city residents are not subjected to noise beyond acceptable levels. The General Plan goals and policies which are applicable to the project are reproduced below.

GOAL SSI-8

Prevention of noise from interfering with human activities or causing health problems.

Policies

SSI-8.1 Exterior Noise Level Standards. Require new development projects to be designed and constructed to meet acceptable exterior noise level standards (Table 3 of this report), as follows:

- Apply a maximum exterior noise level of 60 dBA DNL in residential areas where outdoor use is a major consideration (e.g., backyards in single-family housing developments and recreation areas in multi-family housing projects). Where the City determines that providing a DNL of 60 dBA or lower cannot be achieved after the application of reasonable and feasible mitigation, a DNL of 65 dBA may be permitted.
- Indoor noise levels should not exceed a DNL of 45 dBA in new residential housing units.

- Noise levels in new residential development exposed to an exterior DNL of 60 dBA or greater should be limited to a maximum instantaneous noise level (e.g., trucks on busy streets, train warning whistles) in bedrooms of 50 dBA. Maximum instantaneous noise levels in all other habitable rooms should not exceed 55 dBA. The maximum outdoor noise level for new residences near the railroad shall be 70 dBA DNL, recognizing that train noise is characterized by relatively few loud events.

- SSI-8.2 **Impact Evaluation.** The impact of a proposed development project on existing land uses should be evaluated in terms of the potential for adverse community response based on significant increase in existing noise levels, regardless of compatibility guidelines.
- SSI-8.3 **Commercial and Industrial Noise Level Standards.** Evaluate interior noise levels in commercial and industrial structures on a case-by-case basis based on the use of the space.
- SSI-8.4 **Office Noise Level Standards.** Interior noise levels in office buildings should be maintained at 45 dB L_{eq} (hourly average) or less, rather than 45 dB DNL (daily average).
- SSI-8.5 **Traffic Noise Level Standards.** Consider noise level increases resulting from traffic associated with new projects significant if: a) the noise level increase is 5 dBA DNL or greater, with a future noise level of less than 60 dBA DNL, or b) the noise level increase is 3 dBA DNL or greater, with a future noise level of 60 dBA DNL or greater.
- SSI-8.6 **Stationary Noise Level Standards.** Consider noise levels produced by stationary noise sources associated with new projects significant if they substantially exceed existing ambient noise levels.
- SSI-8.7 **Other Noise Sources.** Consider noise levels produced by other noise sources (such as ballfields) significant if an acoustical study demonstrates they would substantially exceed ambient noise levels.
- SSI-8.9 **Site Planning and Design.** Require attention to site planning and design techniques other than sound walls to reduce noise impacts, including a) installing earth berms, b) increasing the distance between the noise source and the receiver, c) using non-sensitive structures such as parking lots, utility areas, and garages to shield noise-sensitive areas, d) orienting buildings to shield outdoor spaces from the noise source, and e) minimizing the noise at its source.

Table 3
State of California Land Use Compatibility Guidelines for Community Noise Environments

Land Uses	CNEL (dBA)					
	55	60	65	70	75	80
Residential – Low Density Single-Family, Duplex, Mobile Homes						
Residential – Multiple-Family						
Transient Lodging, Motels, Hotels						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arena, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Businesses, Commercial and Professional						
Industrial, Manufacturing, Utilities, Agricultural						

	Normally Acceptable: Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.		Normally Unacceptable: New construction or development should generally be discouraged. If new construction does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
	Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and the needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.		Clearly Unacceptable: New construction or development generally should not be undertaken.

Source: Governor's Office of Planning and Research, General Plan Guidelines 2003.

Morgan Hill Municipal Code

The provisions of the Morgan Hill Municipal Code which would be most applicable to this project are reproduced below.

Chapter 8.28 of the Municipal Code provides an enumeration of unlawful noise sources (i.e., animals, birds, auto body repairs, blowers, fans, combustion engines, construction activities, exhausts, loudspeakers). Chapter 8.28 does not, however, provide quantitative performance standards. Section 8.28.040(D) exempts construction noise provided the activities are limited to a specific time frame. Section 8.28.040(D) is reproduced below:

"Construction activities" are defined as including but not limited to excavation, grading, paving, demolition, construction, alteration or repair of any building, site, street or highway, delivery, or removal of construction material to a site, or movement of construction materials on a site. Construction activities are prohibited other than between the hours of seven a.m. and eight p.m., Monday through Friday and between the hours of nine a.m. to six p.m. on Saturday. Construction activities may not occur on Sundays or federal holidays. No third person, including but not limited to landowners, construction company owners, contractors,

subcontractors, or employers, shall permit or allow any person working on construction activities which are under their ownership, control, or direction to violate this provision.

Section 18.76.090 of the Municipal Code establishes acceptable noise level criteria for non-transportation noise sources. The City's quantitative exterior noise standards are provided below in Table 4. According to conversations with City of Morgan Hill planning staff in the preparation of noise assessments in previous years, the Table 4 standards are interpreted as being hourly average (L_{eq}) noise level standards.

Table 4
Noise Level Performance Standards

Receiving Land Use	Maximum Noise Level at Lot Line of Receiving Use^{1,2}
Industrial and Wholesale	70 dBA
Commercial	65 dBA
Residential or Public/Quasi Public	60 dBA
¹ The planning commission may allow an additional 5 dBA noise level at the lot line if the maximum noise level shown above cannot be achieved with reasonable and feasible mitigation. ² Noise standards shown above do not apply to noise generated by vehicle traffic in the public right-of way or from temporary construction, demolition, and vehicles that enter or leave the site of the noise-generating use (e.g., construction equipment, trains, trucks).	

Source: Morgan Hill Municipal Code, Section 18.76.090, Table 18.76-1.

Finally, Municipal Code Section 18.76.130 states that vibration transmitted through the ground that is discernible without instruments at the lot line of the establishment or use is prohibited. However, vibrations from temporary construction, demolition, and vehicles that enter and leave the lot (e.g., construction equipment, trains, trucks, etc.) are exempt from this standard.

Environmental Setting – Existing Ambient Noise and Vibration Environment

Noise-Sensitive Land Uses in the Project Vicinity

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are generally considered to be sensitive to noise because intrusive noise can be disruptive to these activities.

The City of Morgan Hill has established noise level criteria for commercial uses, such as those located adjacent to the project (existing and future). At the direction of City planning staff, an analysis of project-generated noise and vibration level exposure has been requested at the existing commercial use to the south (medical offices) and future commercial/transient lodging use to the west (hotel). The project area and surrounding land uses are shown in Figure 1.

Existing Overall Ambient Noise Environment within the Project Vicinity

The existing ambient noise environment within the project vicinity is defined primarily by noise from traffic on Cochrane Road and Sutter Boulevard, and by activities at nearby commercial uses. To generally quantify existing ambient noise environment within the project vicinity, BAC conducted short-term (3-hour) ambient noise level measurements at two (2) locations on February 14th, 2023. The noise survey locations are shown in Figure 1, identified as Sites A and B. 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 noise level measurements. The meters were calibrated immediately before 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 ambient noise level survey results are summarized below in Table 5.

Table 5
Summary of Short-Term Ambient Noise Survey Results – February 14th, 2023

Survey Location ¹	Time Period	Average Measured Noise Levels (dBA)	
		L _{eq}	L _{max}
Site A: Along western project property line	10:00 a.m. to 11:00 a.m.	58.0	93.6
	11:00 a.m. to 12:00 p.m.	58.3	93.9
	12:00 p.m. to 1:00 p.m.	58.2	93.8
Site B: Along southern project property line	10:00 a.m. to 11:00 a.m.	60.3	77.5
	11:00 a.m. to 12:00 p.m.	58.3	86.8
	12:00 p.m. to 1:00 p.m.	58.4	78.2
¹ Noise survey site locations are shown in Figure 1.			

Source: Bollard Acoustical Consultants, Inc. 2023.

Noise level measurements obtained at Site A, located along the western project property boundary, are believed to be representative of the existing ambient noise level environment along the adjacent commercial boundary to the west. Noise level measurements obtained at Site B, located at the southern end of the project parcel, are believed to be representative of the ambient noise level environment at the existing commercial office uses to the south.

Existing Ambient Vibration Environment within the Project Vicinity

During a BAC site visit on February 14th, 2023, vibration levels were below the threshold of perception within the project area. Nonetheless, to quantify existing vibration levels in the project vicinity, BAC conducted a short-term (15-minute) vibration survey on February 14th, 2023, at Sites A and B in Figure 1. Photographs of the vibration survey equipment are provided in Appendix B. A Larson-Davis Laboratories Model LxT precision integrating sound level meter equipped with a vibration transducer was used to complete the measurements. The results are summarized in Table 6.

Table 6
Summary of Short-Term Ambient Vibration Survey Results – February 14th, 2023

Survey Location	Time	Average Measured Vibration Level (VdB)
Site A: Along western project property line	12:52 p.m.	35
Site B: Along southern project property line	12:32 p.m.	39

Source: Bollard Acoustical Consultants, Inc. 2023.

Table 6 data indicate that measured average vibration levels were well below the threshold of human perception (65 dB VdB), which is consistent with BAC field observations.

Existing Traffic Noise Levels along the Project Area Roadway Network

To predict traffic noise levels along existing roadway networks, modelling is commonly used rather than monitoring. The FHWA Traffic Noise Model (FHWA-RD-77-108) was used to quantify existing traffic noise levels at the existing sensitive land uses nearest to the project area roadway network. The FHWA Model was also used to quantify the distances to the 60, 65 and 70 dB DNL traffic noise contours for these roadways. The FHWA Model predicts hourly average (L_{eq}) values for free-flowing traffic conditions. Estimates of the hourly distribution of traffic for a typical 24-hour period were used to develop day-night average (DNL) values from L_{eq} values.

Existing traffic data in the form of AM and PM peak hour intersection turning movements were provided by the project transportation consultant (Hexagon Transportation Consultants). Those data were converted to Average Daily Traffic (ADT) segment volumes by applying a factor of 5 to the sum of AM and PM peak hour conditions. Other inputs were obtained from BAC field observations and aerial imagery. The existing traffic noise levels at the distances representing the nearest sensitive land uses to the project area roadways and distances from the centerlines of selected roadways to the 60 dB, 65 dB and 70 dB DNL contours are summarized in Table 7. Appendix C contains the FHWA Model inputs for existing conditions.

Table 7
Existing Traffic Noise Levels at Nearest Sensitive Receptors and Distances to DNL Contours

#	Roadway	Segment Description	DNL at Nearest Sensitive Receptor	Distance to Contour (ft)		
				70 dB DNL	65 dB DNL	60 dB DNL
1	Monterey Rd	North of Cochrane Rd	63	54	115	249
2	Monterey Rd	South of Cochrane Rd	67	69	148	319
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	64	56	120	259
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	64	61	131	282
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	64	60	129	278
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	66	79	170	367
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	67	66	141	304
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	61	81	176	378
9	Cochrane Rd	East of US 101 NB Ramps	64	51	111	239
10	Butterfield Blvd	South of Cochrane Rd	--	--	--	--
11	Woodview Ave	North of Cochrane Rd	53	8	17	38
12	Evergreen Vlg	South of Cochrane Rd	49	4	8	17
13	Sutter Blvd	North of Cochrane Rd	62	21	46	99
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	60	23	50	108
15	Sutter Blvd	South of Cochrane Plza	62	21	46	100
16	Madrone Pkwy	North of Cochrane Rd	59	14	30	64
17	Cochrane Plza	South of Cochrane Rd	63	18	40	85
18	Cochrane Plza	West of Sutter Blvd	50	9	19	40
19	Cochrane Plza	East of Sutter Blvd	49	2	4	9
20	US 101 SB Ramps	South of Cochrane Rd	69	85	184	397
21	US 101 NB Ramps	North of Cochrane Rd	61	51	110	238

Source: FHWA-RD-77-108 and Hexagon. Appendix C contains FHWA Model inputs for existing conditions.

Impacts and Mitigation Measures

Thresholds of Significance

For the purposes of this report, a noise and vibration impact is considered significant if the project would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or other applicable standards of other agencies; or
- Generation of excessive groundborne vibration or groundborne noise levels; or
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use

airport, the project would expose people residing or working in the project area to excessive noise levels.

The project area is not within the vicinity of a private airstrip, an airport land use plan, or within two miles of a public airport. Therefore, the last threshold listed above is not discussed further.

The following criteria established by the Federal Transit Administration (FTA), Morgan Hill General Plan, and Morgan Hill Municipal Code were used to evaluate the significance of environmental noise and vibration resulting from the project:

- A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise criteria presented in the Morgan Hill General Plan or Morgan Hill Municipal Code.
- A significant impact would be identified if project-generated off-site traffic, on-site commercial operations, or on-site demolition/construction activities would substantially increase noise levels at existing sensitive receptors in the vicinity. A substantial increase from project-generated off-site traffic noise levels would be identified relative to the numeric increase significance criteria contained in Policy SSI-8.5 of the Morgan Hill General Plan.

General Plan Policy SSI-8.6 states that noise levels produced by stationary noise sources associated with new projects shall be considered significant if they substantially exceed existing ambient noise levels. However, Policy SSI-8.6 does not contain numeric increase significance criteria. In terms of determining the temporary noise increase due to project on-site operations and demolition/construction activities (non-transportation noise sources) at existing sensitive receptors in the vicinity, an impact would occur if those activities would noticeably increase ambient noise levels above background levels at those locations. The threshold of perception of the human ear is approximately 3 to 5 dB – a 5 dB change is considered to be clearly noticeable. For the analysis of project on-site commercial operations and demolition/construction activity noise level increases at existing sensitive receptors, a noticeable increase in ambient noise levels is assumed to occur where those activities would result in an increase by 5 dB or more over existing ambient noise levels.

- A significant impact would be identified if on-site project demolition/construction activities or project operations would expose existing or proposed sensitive receptors to excessive groundborne vibration levels. Specifically, an impact would be identified if groundborne vibration levels due to these sources would exceed FTA vibration impact criteria.

Noise Impacts Associated with Project-Generated Increases in Off-Site Traffic

With development of the project, traffic volumes on the local roadway network will increase. Those increases in daily traffic volumes will result in a corresponding increase in traffic noise levels at existing uses located along those roadways. Impacts 1 and 2 evaluate increases in off-site traffic noise levels which would result from the project.

Pursuant to Policy SSI-8.5 of the Morgan Hill General Plan, traffic noise level increases from new projects are considered significant if: a) the noise level increase is 5 dB DNL or greater, with a future noise level of less than 60 dB DNL, or b) the noise level increase is 3 dB DNL or greater, with a future noise level of 60 dB DNL or greater.

Impact 1: Increases in Existing Traffic Noise Levels due to the Project

The FHWA Traffic Noise Model (FHWA-RD-77-108) was used to quantify increases in existing traffic noise levels at the existing sensitive land uses nearest to the project area roadway network. The FHWA Model predicts hourly L_{eq} values for free-flowing traffic conditions. Estimates of the hourly distribution of traffic for a typical 24-hour period were used to develop DNL values from L_{eq} values.

Traffic data in the form of peak hour intersection turning movements were provided by the project transportation consultant (Hexagon Transportation Consultants). Those data were converted to Average Daily Traffic (ADT) segment volumes by applying a factor of 5 to the sum of AM and PM peak hour conditions. Other inputs were obtained from BAC field observations and aerial imagery. Appendices C and D contain the FHWA Model inputs for existing and existing plus project conditions, respectively. The existing and existing plus project traffic noise levels at the distances representing the nearest sensitive land uses to the project area roadways are summarized in Table 8. Table 8 also shows the thresholds for determination of a significant traffic noise increase, whether the roadway segment contains sensitive uses, and whether or not significant noise impacts are identified for each segment.

It should be noted that the FHWA Model predictions presented in Table 8 are based on inputs that include weekday peak hour traffic volumes, day/night, and truck type percentages (e.g., medium and heavy trucks), vehicle speed, and distance from roadway centerlines. The FHWA Model does not account for non-traffic ambient noise sources such as nearby wildlife (e.g., birds chipping) or other anthropogenic noise sources within an area (e.g., distant traffic from other roadways, recreational activities, commercial or industrial operations, etc.).

Table 8
Predicted Traffic Noise Level Increases at Existing Sensitive Receptors – Existing vs. Existing Plus Project Conditions

#	Roadway	Segment Description	Predicted DNL (dB)			Significance Threshold ¹	Threshold Exceeded?	Sensitive Receptors Present? ²	Significant Impact Identified? ³
			E	E+P	Increase				
1	Monterey Rd	North of Cochrane Rd	63.3	63.3	0.0	3.0	No	Yes	No
2	Monterey Rd	South of Cochrane Rd	66.9	66.9	0.0	3.0	No	Yes	No
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	63.6	63.6	0.0	3.0	No	Yes	No
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	64.1	64.2	0.1	3.0	No	No	No
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	64.0	64.1	0.1	3.0	No	No	No
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	65.8	65.9	0.0	3.0	No	No	No
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	67.2	67.3	0.0	3.0	No	No	No
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	61.2	61.2	0.0	3.0	No	No	No
9	Cochrane Rd	East of US 101 NB Ramps	64.2	64.3	0.0	3.0	No	Yes	No
10	Butterfield Blvd	South of Cochrane Rd	--	--	--	--	--	--	--
11	Woodview Ave	North of Cochrane Rd	53.0	53.5	0.5	5.0	No	No	No
12	Evergreen Vlg	South of Cochrane Rd	48.5	48.5	0.0	5.0	No	No	No
13	Sutter Blvd	North of Cochrane Rd	61.8	62.2	0.4	3.0	No	No	No
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	60.5	60.6	0.1	3.0	No	No	No
15	Sutter Blvd	South of Cochrane Plza	61.9	62.2	0.4	3.0	No	No	No
16	Madrone Pkwy	North of Cochrane Rd	59.0	59.0	0.0	5.0	No	No	No
17	Cochrane Plza	South of Cochrane Rd	63.5	63.5	0.0	3.0	No	No	No
18	Cochrane Plza	West of Sutter Blvd	49.6	49.6	0.0	5.0	No	No	No
19	Cochrane Plza	East of Sutter Blvd	48.7	54.1	5.4	5.0	Yes	No	No
20	US 101 SB Ramps	South of Cochrane Rd	69.0	69.0	0.0	3.0	No	No	No
21	US 101 NB Ramps	North of Cochrane Rd	61.1	61.2	0.1	3.0	No	No	No

¹ Significance thresholds contained in General Plan Policy SSI-8.5.

² Sensitive receptors identified in this analysis include residences and churches.

³ A significant impact is identified only along segments where the project-related traffic noise level increase would exceed applicable significance threshold AND where sensitive receptors are present along the roadway segment.

Source: FHWA-RD-77-108 with inputs from Hexagon. Appendices C & D contain FHWA Model inputs.

As indicated in Table 8, project-generated traffic noise level increases would not result in significant noise impacts at existing sensitive receptors located along the project area roadway network relative to increase significance criteria contained in Policy SSI-8.5 of the Morgan Hill General Plan. As a result, this impact is identified as being ***less than significant***.

Impact 2: Increases in Cumulative Traffic Noise Levels due to the Project

The FHWA Traffic Noise Model (FHWA-RD-77-108) was used to quantify increases in future (cumulative) traffic noise levels at the nearest existing sensitive land uses to the project area roadway network. This analysis first assesses whether a cumulative roadway noise impact would occur by comparing the cumulative with project conditions to existing conditions. If a cumulative roadway noise impact is identified, it is further evaluated to assess whether the proposed project would make a cumulatively considerable contribution to the cumulative impact. This process is completed through a comparison of the roadway noise associated with the cumulative with project scenario against the cumulative no-project scenario. Appendices E and F contain the FHWA Model inputs for cumulative and cumulative plus project conditions, respectively.

Table 9 compares the cumulative with project traffic noise levels against existing no project traffic noise levels and includes a determination regarding whether the corresponding increase in traffic noise exposure over time is considerable. Table 10 compares cumulative with project against cumulative no-project conditions to determine if the project's contribution to the cumulative noise environment is considerable.

Table 9
Predicted Traffic Noise Level Increases at Existing Sensitive Receptors – Existing vs. Cumulative Plus Project Conditions

#	Roadway	Segment Description	Predicted DNL (dB)			Significance Threshold ¹	Threshold Exceeded?	Sensitive Receptors Present? ²	Significant Impact Identified? ³
			E	C+P	Increase				
1	Monterey Rd	North of Cochrane Rd	63.3	64.4	1.1	3.0	No	Yes	No
2	Monterey Rd	South of Cochrane Rd	66.9	68.3	1.3	3.0	No	Yes	No
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	63.6	64.5	1.0	3.0	No	Yes	No
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	64.1	65.3	1.2	3.0	No	No	No
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	64.0	65.0	1.0	3.0	No	No	No
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	65.8	66.7	0.9	3.0	No	No	No
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	67.2	68.5	1.2	3.0	No	No	No
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	61.2	62.0	0.9	3.0	No	No	No
9	Cochrane Rd	East of US 101 NB Ramps	64.2	65.9	1.7	3.0	No	Yes	No
10	Butterfield Blvd	South of Cochrane Rd	--	--	--	--	--	--	--
11	Woodview Ave	North of Cochrane Rd	53.0	56.7	3.7	5.0	No	No	No
12	Evergreen Vlg	South of Cochrane Rd	48.5	48.5	0.0	5.0	No	No	No
13	Sutter Blvd	North of Cochrane Rd	61.8	63.0	1.2	3.0	No	No	No
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	60.5	61.4	0.9	3.0	No	No	No
15	Sutter Blvd	South of Cochrane Plza	61.9	63.0	1.2	3.0	No	No	No
16	Madrone Pkwy	North of Cochrane Rd	59.0	59.0	0.0	5.0	No	No	No
17	Cochrane Plza	South of Cochrane Rd	63.5	64.5	1.0	3.0	No	No	No
18	Cochrane Plza	West of Sutter Blvd	49.6	49.6	0.0	5.0	No	No	No
19	Cochrane Plza	East of Sutter Blvd	48.7	54.1	5.4	5.0	Yes	No	No
20	US 101 SB Ramps	South of Cochrane Rd	69.0	70.0	1.0	3.0	No	No	No
21	US 101 NB Ramps	North of Cochrane Rd	61.1	61.7	0.5	3.0	No	No	No

¹ Significance thresholds contained in General Plan Policy SSI-8.5.

² Sensitive receptors identified in this analysis include residences and churches.

³ A significant impact is identified only along segments where the project-related traffic noise level increase would exceed applicable significance threshold AND where sensitive receptors are present along the roadway segment.

Source: FHWA-RD-77-108 with inputs from Hexagon. Appendices C & F contain FHWA Model inputs.

Table 10
Predicted Traffic Noise Level Increases at Existing Sensitive Receptors – Cumulative vs. Cumulative Plus Project Conditions

#	Roadway	Segment Description	Predicted DNL (dB)			Significance Threshold ¹	Threshold Exceeded?	Sensitive Receptors Present? ²	Significant Impact Identified? ³
			C	C+P	Increase				
1	Monterey Rd	North of Cochrane Rd	64.3	64.4	0.0	3.0	No	Yes	No
2	Monterey Rd	South of Cochrane Rd	68.3	68.3	0.0	3.0	No	Yes	No
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	64.5	64.5	0.0	3.0	No	Yes	No
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	65.3	65.3	0.0	3.0	No	No	No
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	65.0	65.0	0.1	3.0	No	No	No
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	66.7	66.7	0.0	3.0	No	No	No
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	68.5	68.5	0.0	3.0	No	No	No
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	62.0	62.0	0.0	3.0	No	No	No
9	Cochrane Rd	East of US 101 NB Ramps	65.9	65.9	0.0	3.0	No	Yes	No
10	Butterfield Blvd	South of Cochrane Rd	--	--	--	--	--	--	--
11	Woodview Ave	North of Cochrane Rd	56.4	56.7	0.3	5.0	No	No	No
12	Evergreen Vlg	South of Cochrane Rd	48.5	48.5	0.0	5.0	No	No	No
13	Sutter Blvd	North of Cochrane Rd	62.7	63.0	0.3	3.0	No	No	No
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	61.3	61.4	0.1	3.0	No	No	No
15	Sutter Blvd	South of Cochrane Plza	62.7	63.0	0.3	3.0	No	No	No
16	Madrone Pkwy	North of Cochrane Rd	59.0	59.0	0.0	5.0	No	No	No
17	Cochrane Plza	South of Cochrane Rd	64.5	64.5	0.0	3.0	No	No	No
18	Cochrane Plza	West of Sutter Blvd	49.6	49.6	0.0	5.0	No	No	No
19	Cochrane Plza	East of Sutter Blvd	48.7	54.1	5.4	5.0	Yes	No	No
20	US 101 SB Ramps	South of Cochrane Rd	70.0	70.0	0.0	3.0	No	No	No
21	US 101 NB Ramps	North of Cochrane Rd	61.6	61.7	0.0	3.0	No	No	No

¹ Significance thresholds contained in General Plan Policy SSI-8.5.

² Sensitive receptors identified in this analysis include residences and churches.

³ A significant impact is identified only along segments where the project-related traffic noise level increase would exceed applicable significance threshold AND where sensitive receptors are present along the roadway segment.

Source: FHWA-RD-77-108 with inputs from Hexagon. Appendices E & F contain FHWA Model inputs.

Based on the analysis presented in Tables 9 and 10, off-site traffic noise impacts related to project-generated increases in traffic are identified as **less than significant** relative to increase significance criteria contained in Policy SSI-8.5 of the Morgan Hill General Plan.

Off-Site Noise Impacts Associated with On-Site Operational Noise Sources

The project consists of the construction and operation of a Chick-fil-A restaurant with drive-through services. It is the understanding of BAC that the project proposes restaurant operations (including drive-through services) during the hours of 6:00 a.m. to 10:00 p.m. The primary noise sources associated with project on-site operations have been identified as parking lot movements, drive-thru operations (vehicle passages and amplified menu speaker board), on-site vehicle circulation, outdoor patio noise (patrons conversing), delivery truck circulation and delivery activities, and mechanical equipment (HVAC). Analyses of each of the identified project noise sources at the future commercial use to the west (hotel) and existing commercial use to the south (medical offices) are provided in the following section.

For noise generated by on-site operations, Section 18.76.090 of the Morgan Hill Municipal Code establishes a property line exterior noise level standard of 65 dB L_{eq} for commercial uses. Additionally, Policy SSI-8.4 of the Morgan Hill General Plan states that interior noise levels in office buildings should be maintained at 45 dB L_{eq} . Satisfaction of the City's noise level criteria at the closest commercial uses would ensure compliance with the City's noise level limits at commercial uses located farther away.

Impact 3: Parking Area Noise at Adjacent Commercial Land Uses

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.

To compute hourly average (L_{eq}) noise levels generated by parking lot activities, the approximate number of hourly operations and distance to parking stalls is required. According to the project site plan, the project proposes parking stalls on the west and south sides of the project property (Figure 2). The hourly average noise level generated by parking lot movements is computed using the following formula:

$$\text{Peak Hour } L_{eq} = 70 + 10 \cdot \log(N) - 35.6$$

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. Using the information provided above, the provided project site plan, and assuming standard spherical spreading loss (-6 dB per doubling of distance), project parking activity noise exposure at the adjacent future and existing commercial uses was calculated and the results of those calculations are presented in Table 11.

The results presented in Table 11 include an analysis of noise exposure associated with a portion of the closest parking stalls to the adjacent commercial uses. It was conservatively assumed for the purposes of this analysis that those nearest parking stalls could either fill or empty during a given peak hour (although it is likely that parking area activity would be more spread out). The number of parking stalls utilized in the analysis are footnoted in Table 11.

Table 11
Predicted Parking Area Noise Levels at Adjacent Commercial Uses

Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L_{eq} (dB) ²
Future Commercial – Hotel	West	Property Line	54
Existing Commercial – Medical Offices	South	Property Line	45
Existing Commercial – Medical Offices	South	Building Facade	33
¹ Locations of commercial land uses are shown in Figure 1.			
² Number of parking stalls included in analysis: Future Commercial-Hotel (15), Existing Commercial-Offices (25).			

Source: Bollard Acoustical Consultants, Inc. 2023.

As shown in Table 11, project parking area movements are predicted to satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses.

Standard building construction (e.g., stucco siding, STC-27 windows, door weather-stripping, exterior wall insulation, composition plywood roof), typically results in an exterior to interior noise reduction of approximately 25 dB with windows closed and approximately 15 dB with windows open. Given the predicted noise level at the building facade of the existing office building to the south shown in Table 11, and after consideration of the above-mentioned exterior to interior noise level reduction typically provided by standard building construction, project parking area noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

Table 5 of this report contains the results from the BAC ambient noise survey at Site B, which is believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, ambient plus project parking area noise level increases were calculated at the existing offices to the south. According to the results from that exercise, the project-generated increase in ambient daytime noise levels is calculated to be less than 0.1 dB L_{eq} at the closest medical office buildings to the south (Note: For the purposes of this analysis, it is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only). The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because noise exposure from project parking area activities is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because noise level exposure from those activities is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being **less than significant**.

Impact 4: Drive-Thru Operations Noise at Adjacent Commercial Land Uses

According to the project site plan, the proposed drive-through will have two (2) amplified menu speaker posts. Specifically, it is the understanding of BAC that the project proposes two (2) HME SPP2 speaker posts.

To quantify the noise emissions of the proposed drive-through speaker usage, BAC utilized noise level measurement data published by the speaker manufacturer (HM Electronics, Inc.). According to the manufacturers noise level data sheet, presented as Appendix G, the proposed HME SPP2 speaker post can incorporate automatic volume control (AVC), which adjusts outbound volume based on the ambient noise level environment. For example, assuming an outdoor ambient noise level of 45 dB, the speaker will adjust the volume of the system to 45 dB for a resulting overall sound level of 48 dB at a distance of 4 feet. Without the AVC option, the speaker reference noise level is 72 dB at 4 feet. To quantify the noise emissions of the proposed drive-through vehicle passages, BAC utilized noise measurement data collected for similar drive-through operations in the greater Sacramento area in recent years. BAC file data indicates that drive-through vehicle passages, including vehicle idling, have median and maximum noise levels of 60 dB L_{eq} at a distance of 5 feet.

Using the BAC drive-through vehicle passby data and speaker manufacturer noise level measurements presented above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), data were projected from the proposed drive-through lane and speaker posts to the adjacent future and existing commercial uses. The results of those projections are provided in Table 12. The results presented in Table 12 include conservative predictions of project drive-through speaker noise levels (i.e., AVC option not enabled).

Table 12
Predicted Drive-Through Noise Levels at Adjacent Commercial Uses

Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L_{eq} (dB) ²	
			Speakers ³	Vehicles
Future Commercial – Hotel	West	Property Line	44	37
Existing Commercial – Medical Offices	South	Property Line	34	50
Existing Commercial – Medical Offices	South	Building Facade	29	26
¹ Locations of commercial land uses are shown in Figure 1. ² Combined noise level from two speakers in operation simultaneously (worst-case). ³ Predicted speaker noise level with AVC option not enabled.				

Source: Bollard Acoustical Consultants, Inc. 2023.

The Table 12 data indicate that project drive-through operations noise levels are predicted to satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses. It should be noted that activation of the drive-through speaker model's AVC option would further reduce speaker noise level exposure at adjacent commercial uses.

Based on the predicted exterior noise levels shown in Table 12, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (i.e.,

at least 25 dB with windows closed and approximately 15 dB with windows open), project drive-through operations noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

As discussed previously, BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, ambient plus project drive-through operations noise level increases were calculated at the existing offices to the south. According to the results from that exercise, project-generated increases in ambient daytime noise levels are calculated to be less than 0.1 dB L_{eq} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because noise exposure from project drive-through operations is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because noise level exposure from those operations is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being ***less than significant***.

Impact 5: On-Site Vehicle Circulation Noise at Adjacent Commercial Land Uses

To quantify project on-site passenger vehicle circulation noise exposure, BAC utilized specific automobile passby 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. The results of those measurements revealed that individual vehicle passbys generated mean noise levels of approximately 70 dB SEL at a reference distance of 50 feet.

To compute hourly average (L_{eq}) noise levels generated by project on-site vehicle circulation, the approximate number of hourly operations is required. According to the project traffic memorandum (prepared by Hexagon Transportation Consultants, Inc.), the project is estimated to generate up to 101 vehicle trips during an AM peak hour and as many as 201 vehicle trips during a PM peak hour. Based on a conservative 201 vehicle trips per hour, and assuming standard spherical spreading loss (-6 dB per doubling of distance), worst-case project on-site passenger vehicle circulation noise exposure at the adjacent future and existing commercial uses was calculated and the results of those calculations are presented in Table 13.

It should be noted that the results presented in Table 13 conservatively assume that worse-case busy hour vehicle trip generation could all occur within an on-site drive lane located closest to an adjacent commercial use. However, it is more likely that on-site vehicle circulation would be more evenly distributed.

Table 13
Predicted On-Site Passenger Vehicle Circulation Noise Levels at Adjacent Commercial Uses

Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB) ²
Future Commercial – Hotel	West	Property Line	61
Existing Commercial – Medical Offices	South	Property Line	61
Existing Commercial – Medical Offices	South	Building Facade	46
¹ Locations of commercial land uses are shown in Figure 1.			
² Predicted noise level based on 201 vehicle trips during a given worst-case busy hour.			

Source: Bollard Acoustical Consultants, Inc. 2023.

As indicated in Table 13, predicted worst-case project on-site vehicle circulation noise levels would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses.

Given the predicted exterior noise levels presented in Table 13, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (i.e., at least 25 dB with windows closed and approximately 15 dB with windows open), project on-site vehicle circulation noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

As noted previously, BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, ambient plus project on-site vehicle circulation noise level increases were calculated at the existing offices to the south. According to the results from that exercise, project-generated increases in ambient daytime noise levels are calculated to be 0.3 dB L_{eq} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because noise exposure from project worst-case on-site vehicle circulation is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because noise level exposure from this noise source is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being **less than significant**.

Impact 6: Outdoor Patio Noise at Adjacent Commercial Land Uses

According to the provided site plans, the project proposes a small outdoor seating area (patio) for patrons. It is estimated the outdoor patio area could accommodate approximately 25 people at full capacity. To quantify outdoor patio area noise levels, 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).

Given the restaurant use type, it is assumed that patrons would generally occupy the outdoor patio areas 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 areas for a minimum of 30 minutes of a given hour.

Based on worse-case outdoor patio occupancy of 25 people (assumed full capacity), the cited BAC file data above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), outdoor seating area patron noise was projected at the adjacent future and existing commercial uses. The results of those projections are presented in Table 14.

Table 14
Predicted Outdoor Patio Patron Noise Levels at Adjacent Commercial Uses

Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB) ²
Future Commercial – Hotel	West	Property Line	40
Existing Commercial – Medical Offices	South	Property Line	40
Existing Commercial – Medical Offices	South	Building Facade	32
¹ Locations of commercial land uses are shown in Figure 1.			
² Predicted noise level based on 25 people conversing simultaneously (20 normal speaking voice; 5 raised voice).			

Source: Bollard Acoustical Consultants, Inc. 2023.

Table 14 data indicate that predicted worst-case patio conversation noise levels would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses.

Based on the predicted exterior noise levels presented in Table 14, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (i.e., at least 25 dB with windows closed and approximately 15 dB with windows open), project patio noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

As discussed previously, BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, ambient plus project patio noise level increases were calculated at the existing offices to the south. According to the results from that exercise, project-generated increases in ambient daytime noise levels are calculated to be less than 0.1 dB L_{eq} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because noise exposure from the proposed outdoor patio is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because noise level exposure from this noise source is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being **less than significant**.

Impact 7: On-Site Truck Circulation Noise at Adjacent Commercial Land Uses

Based on the project site design, deliveries of product to the proposed restaurant will likely occur at the front of the building with medium-duty trucks/vans. However, for the purposes of this analysis, it was conservatively assumed that the project could also receive deliveries from heavy trucks.

On-site truck passbys are expected to be relatively brief and will occur at low speeds. To predict noise levels generated by on-site truck circulation, BAC utilized file data obtained from measurements conducted by BAC of heavy and medium duty truck passbys. According to BAC file data, single-event heavy and medium truck passby noise levels are approximately 83 and 76 dB SEL (respectively) at a reference distance of 50 feet.

To calculate hourly average (L_{eq}) noise level exposure from truck circulation, it was assumed that the project could conservatively have 1 heavy truck and 1 medium duty truck delivery during the same worst-case busy hour. Based on the hourly delivery truck assumptions above, and SEL's of 83 and 76 dB per passby, the combined hourly average noise level generated by project on-site delivery truck circulation computes to 51 dB L_{eq} at a reference distance of 50 feet from the passby route during the worst-case hour of deliveries.

Based on the reference noise level data and operations assumptions presented above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), worst-case project on-site truck circulation noise exposure at the adjacent future and existing commercial uses was calculated and the results of those calculations are presented in Table 15.

Table 15
Predicted On-Site Truck Circulation Noise Levels at Adjacent Commercial Uses

Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L_{eq} (dB) ²
Future Commercial – Hotel	West	Property Line	53
Existing Commercial – Medical Offices	South	Property Line	53
Existing Commercial – Medical Offices	South	Building Facade	33
¹ Locations of commercial land uses are shown in Figure 1.			
² Predicted noise level based on 1 heavy truck and 1 medium truck delivery within the same hour.			

Source: Bollard Acoustical Consultants, Inc. 2023.

As shown in Table 15, predicted on-site truck circulation noise levels would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses.

Given the predicted exterior noise levels presented in Table 15, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (i.e., at least 25 dB with windows closed and approximately 15 dB with windows open), project on-site truck circulation noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

As noted previously, BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, ambient plus project on-site truck circulation noise level increases were calculated at the existing offices to the south. According to the results from that exercise, project-generated increases in ambient daytime noise levels are calculated to be less than 0.1 dB L_{eq} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because noise exposure from project on-site truck circulation is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because noise level exposure from this noise source is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being ***less than significant***.

Impact 8: Truck Delivery Noise at Adjacent Commercial Land Uses

As mentioned previously, deliveries of product to the proposed restaurant will likely occur at the front of the building with medium-duty trucks/vans. However, for the purposes of this analysis, it was conservatively assumed that the project could also receive deliveries from heavy trucks. The location of the assumed truck delivery area is illustrated in Figure 2.

The primary noise sources associated with delivery activities are trucks stopping (air brakes), trucks backing into position (back-up alarms), and trucks pulling away from the unloading area (revving engines). BAC file data indicate that noise levels associated with medium- (including side-step vans) and heavy-duty truck deliveries are approximately 76 dB SEL at a distance of 100 feet.

To calculate hourly average (L_{eq}) noise level exposure from truck deliveries, it was assumed that the project could conservatively have 1 heavy truck and 1 medium duty truck delivery during the same worst-case busy hour. Based on the hourly delivery trucks assumptions above and an SEL of 76 dB, the hourly average noise level computes to 43 dB L_{eq} at a reference distance of 100 feet during the worst-case hour of deliveries.

Using the reference noise level data and operations assumptions presented above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), worst-case project truck delivery noise exposure at the adjacent future and existing commercial uses was calculated and the results of those calculations are presented in Table 16.

Table 16
Predicted Truck Delivery Noise Levels at Adjacent Commercial Uses

Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB) ²
Future Commercial – Hotel	West	Property Line	43
Existing Commercial – Medical Offices	South	Property Line	43
Existing Commercial – Medical Offices	South	Building Facade	33
¹ Locations of commercial land uses are shown in Figure 1.			
² Predicted noise level based on 1 heavy truck and 1 medium truck delivery within the same hour.			

Source: Bollard Acoustical Consultants, Inc. 2023.

Table 16 data indicate that predicted truck delivery noise levels would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses.

Based on the predicted exterior noise levels shown in Table 16, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (i.e., at least 25 dB with windows closed and approximately 15 dB with windows open), project truck delivery noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

As mentioned previously, BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, ambient plus project truck delivery noise level increases were calculated at the existing offices to the south. According to the results from that exercise, project-generated increases in ambient daytime noise levels are calculated to be less than 0.1 dB L_{eq} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because noise exposure from project truck deliveries is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because noise level exposure from those activities is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being **less than significant**.

Impact 9: Mechanical Equipment (HVAC) Noise at Adjacent Commercial Land Uses

Heating, ventilating, and air conditioning (HVAC) requirements for the proposed QSR building will most likely be met using packaged roof-mounted systems. As a means of determining noise exposure due to rooftop mechanical equipment, BAC utilized reference file data collected for previous studies. BAC reference file data for HVAC systems indicate that a 12.5-ton packaged unit can be expected to generate an A-weighted sound power level of 85 dB.

Using the sound power data stated above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), project HVAC equipment noise exposure at the adjacent future and existing commercial uses was calculated and the results of those calculations are presented in Table 17.

Table 17
Predicted HVAC Equipment Noise Levels at Adjacent Commercial Uses

Receiver ¹	Direction	Assessment Location	Predicted Noise Level, L _{eq} (dB)
Future Commercial – Hotel	West	Property Line	45
Existing Commercial – Medical Offices	South	Property Line	41
Existing Commercial – Medical Offices	South	Building Facade	33
¹ Locations of commercial land uses are shown in Figure 1.			

Source: Bollard Acoustical Consultants, Inc. 2023.

As shown in Table 17, project HVAC equipment noise levels are predicted to satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses.

Given the predicted exterior noise levels presented in Table 17, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (i.e., at least 25 dB with windows closed and approximately 15 dB with windows open), project HVAC equipment noise level exposure is expected to be well below the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

As noted previously, BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, ambient plus project HVAC equipment noise level increases were calculated at the existing offices to the south. According to the results from that exercise, project-generated increases in ambient daytime noise levels are calculated to be less than 0.1 dB L_{eq} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because noise exposure from project HVAC equipment is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because noise level exposure from this noise source is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being **less than significant**.

Impact 10: Cumulative On-Site Operations Noise at Adjacent Commercial Land Uses

The calculated cumulative (combined) noise levels from analyzed on-site operations at the adjacent future and existing commercial uses are presented in Table 18. It should be noted that due to the logarithmic nature of the decibel scale, the sum of two noise values which differ by 10 dB equates to an overall increase in noise levels of 0.4 dB. When the noise sources are equivalent, the sum would result in an overall increase in noise levels of 3 dB.

Table 18
Calculated Cumulative On-Site Noise Levels at Adjacent Commercial Uses

Commercial Receiver	Direction	Predicted Exterior Noise Levels, L _{eq} (dB)								Cumulative, L _{eq} (dB) ¹
		Parking	Drive-Through		On-Site Vehicle Circ.	Outdoor Patio	On-Site Truck Circ.	Truck Deliveries	HVAC	
			Speakers	Vehicles						
Future Hotel	West	54	44	37	61	40	53	43	45	62
Existing Medical Offices	South	45	34	50	61	40	53	43	41	62
Existing Medical Offices	South	33	29	26	46	32	33	33	33	47
¹ Calculated cumulative noise levels based on predicted noise levels presented in Impacts 3-9.										

Source: Bollard Acoustical Consultants, Inc. 2023.

Table 18 data indicate that calculated cumulative (combined) noise level exposure from analyzed project on-site operations would satisfy the Municipal Code 65 dB L_{eq} exterior noise level standard at the property lines of the adjacent future and existing commercial uses.

Based on the predicted exterior noise levels presented in Table 18, and after consideration of the exterior to interior noise level reduction typically provided by standard building construction (i.e., at least 25 dB with windows closed and approximately 15 dB with windows open), combined project on-site operations noise level exposure is expected to satisfy the General Plan's interior noise level standard of 45 dB L_{eq} within the closest existing office buildings.

BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured average (L_{eq}) noise levels at Site B during the survey, cumulative increases in ambient noise levels were calculated at the existing offices to the south. According to the results from that exercise, cumulative project-generated increases in ambient daytime noise levels are calculated to be 0.3 dB L_{eq} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Because cumulative (combined) noise exposure from on-site operations is predicted to satisfy applicable Morgan Hill Municipal Code and General Plan noise level criteria at the adjacent commercial uses, and because cumulative noise level exposure from those operations is not calculated to significantly increase ambient noise levels at the closest existing commercial uses (medical offices), this impact is identified as being ***less than significant***.

Noise Impacts Associated with Project Construction Activities

Impact 11: Project Demolition & Construction Noise at Adjacent Commercial Land Uses

During project demolition and construction activities, heavy equipment would be used for grading excavation, paving, and building construction, which would increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how it is operated, and how well it is maintained. Noise exposure at any single point outside the project work area would also vary depending upon the proximity of equipment activities to that point.

Table 19 includes the range of maximum noise levels for equipment commonly used in general construction projects at full-power operation at a distance of 50 feet. Not all of these construction activities would be required of this project. Table 19 data also include predicted maximum (L_{max}) equipment noise levels at the adjacent future and existing commercial uses, which assume a standard spherical spreading loss of 6 dB per doubling of distance.

Table 19
Reference and Projected Noise Levels for Typical Residential Construction Equipment

Equipment	Reference Noise	Projected Noise Level, L _{max} (dB)		
	Level at 50 Feet, L _{max} (dB)	Future Commercial PL (Hotel)	Existing Commercial PL (Medical Offices)	Existing Commercial Bldg (Medical Offices)
Air compressor	80	90	90	66
Backhoe	80	90	90	66
Ballast equalizer	82	92	92	68
Ballast tamper	83	93	93	69
Compactor	82	92	92	68
Concrete mixer	85	95	95	71
Concrete pump	82	92	92	68
Concrete vibrator	76	86	86	62
Crane, mobile	83	93	93	69
Dozer	85	95	95	71
Excavator	85	95	95	71
Generator	82	92	92	68
Grader	85	95	95	71
Impact wrench	85	95	95	71
Loader	80	90	90	66
Paver	85	95	95	71
Pneumatic tool	85	95	95	71
Pump	77	87	87	63
Saw	76	86	86	62
Scarifier	83	93	93	69
Scraper	85	95	95	71
Shovel	82	92	92	68
Spike driver	77	87	87	63
Tie cutter	84	94	94	70
Tie handler	80	90	90	66
Tie inserter	85	95	95	71
Truck	84	94	94	70
Low		86	86	62
High		95	95	71
Average		91	91	67

Source: 2018 FTA Noise and Vibration Impact Assessment Manual, Table 7-1 and BAC calculations.

As noted in the Regulatory Setting Section of this report, Section 8.28.040(D) of the Morgan Hill Municipal Code exempts construction noise provided that such activities do not occur during set hours. Specifically, construction activities are prohibited other than between the hours of 7:00 a.m. and 8:00 p.m., Monday through Friday and between the hours of 9:00 a.m. to 6:00 p.m. on Saturday. Further, construction activities may not occur on Sundays or federal holidays. It is reasonably assumed for the purposes of this analysis that all on-site noise-generating project construction equipment and activities would occur pursuant to Municipal Code Section 8.28.040(D) and would thereby be exempt from Municipal Code noise level criteria.

However, noise from heavy equipment operations during on-site demolition/construction activities would add to the noise environment in the immediate vicinity of the work area. In terms of determining the temporary noise increase due to project-related demolition/construction activities, an impact would occur if those activities were to noticeably increase ambient noise levels above background levels at nearby existing commercial uses. As mentioned previously in this report,

the threshold of perception of the human ear is approximately 3 to 5 dB – a 5 dB change is considered to be clearly noticeable. For this analysis, a noticeable increase in ambient noise levels is assumed to occur where noise levels increase by 5 dB or more over existing ambient noise levels.

As mentioned previously, BAC ambient noise measurements obtained at Site B are believed to be representative of the ambient noise environment at the existing commercial offices to the south of the project. Using the lowest measured maximum (L_{max}) noise levels at Site B during the survey (presented in Table 5 of this report), and the highest predicted construction equipment maximum noise levels shown in Table 19, ambient plus project demolition/construction equipment noise level increases were calculated at the existing offices to the south. According to the results from that exercise, project-generated increases in ambient daytime noise levels are calculated to be 0.9 dB L_{max} at the closest medical office buildings to the south. It is reasonably assumed that the hours of business for the existing medical offices to the south are during daytime hours only. The calculated increase in ambient daytime noise levels indicated above is well below the applied increase significance criterion of 5 dB.

Based on the analysis and results provided above, this impact is identified as being ***less than significant***. Nonetheless, to the reduce the potential for annoyance at nearby existing uses, the following measures should be incorporated into project on-site construction operations:

- All on-site noise-generating construction activities shall occur pursuant to Section 8.28.040(D) of the Morgan Hill Municipal Code.
- The project shall utilize temporary construction noise control measures including the use of temporary noise barriers, or other appropriate measures as mitigation for noise generated during construction of projects.
- All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition.
- All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.
- Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
- Project area and site access road speed limits shall be established and enforced during the construction period.

Vibration Impacts Associated with Project Activities

Impact 12: Vibration Generated by On-Site Project Demolition/Construction/Operations

During project demolition and construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of the construction. The nearest existing structures have been identified as relatively newer engineered commercial buildings (not highly susceptible to damage by vibration).

Table 20 includes the range of vibration levels for equipment commonly used in general residential construction projects at a distance of 25 feet. Table 20 data also include projected equipment vibration levels at the nearest off-site existing structures to the project area.

Table 20
Reference and Projected Vibration Source Amplitudes for Construction Equipment

Equipment	Reference Maximum Vibration Level at 25 feet, VdB (rms)	Projected Maximum Vibration Level, VdB (rms) ¹		
		Existing Commercial Bldg (East)	Existing Medical Office Bldg (South)	Future Hotel Bldg (West) ²
Vibratory Roller	94	63	60	73
Hoe Ram	87	<55	<55	63
Large bulldozer	87	<55	<55	63
Caisson drilling	87	<55	<55	63
Loaded trucks	86	<55	<55	62
Jackhammer	79	<55	<55	58
Small bulldozer	58	<55	<55	<55
¹ RMS velocity in decibels (VdB) re 1 micro-inch/second.				
² An analysis of project-generated vibration levels at the future hotel building to the west in the event construction and operation of the hotel use is complete before project construction begins.				

Source: 2018 FTA Transit Noise and Vibration Impact Assessment Manual and BAC calculations.

Section 18.76.130 of the Morgan Hill Municipal Code states that vibration transmitted through the ground that is discernible without instruments at the lot line of the establishment or use is prohibited. However, vibrations from temporary construction, demolition, and vehicles that enter and leave the lot (e.g., construction equipment, trucks, etc.) are exempt from this standard.

Based on the data presented in Table 20, vibration levels generated from on-site demolition/construction activities are predicted to be below the FTA threshold for damage to engineered structures (98 VdB) at a distance of 25 feet from those activities. At the closest existing commercial building (east) and nearest existing medical building (south), demolition/construction-related vibration levels are predicted to be below the 65 VdB threshold of human perception (Table 20). It is the understanding of BAC that the existing medical buildings to the south of the project may contain equipment sensitive to vibration. Table 20 data indicate that predicted demolition/construction-related vibration levels at the closest medical building (south) would be below the FTA threshold of 65 VdB for buildings where vibration would interfere with interior operations/equipment.

It should be noted that an analysis of project-generated vibration levels was also conducted at the future off-site hotel building (west) in the event the structure is completed and operational before project construction activities commence. As indicated in Table 20, construction-related vibration levels are predicted to be below levels considered to be annoying (75 VdB) at the future hotel building. Based on the analysis provided above, on-site construction within the project area is not expected to result in excessive groundborne vibration levels at nearby off-site structures.

Results from the ambient vibration level monitoring within the project area (Table 6) indicate that average measured vibration levels were below the 65 VdB threshold of perception. Therefore, it is expected that the project would not result in the exposure of persons to excessive groundborne vibration levels at proposed uses of the project.

Finally, the project proposes the construction of commercial uses. It is the experience of BAC that these uses do not typically have equipment that generates appreciable vibration.

Because vibration levels due to and upon the project are expected to be satisfactory relative to the applied FTA vibration impact criteria, this impact is considered to be ***less than significant***.

This concludes BAC's noise and vibration assessment of the Chick-fil-A Restaurant project in Morgan Hill, California. Please contact BAC at (530) 537-2328 or info@bacnoise.com if you have any comments or questions regarding this report.

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.
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Masking	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.
Noise	Unwanted sound.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the "Maximum" level, which is the highest RMS level.
RT₆₀	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
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** Site A: Along western project property line, facing east
- B** Site B: Along southern project property line, facing south towards medical offices

Chick-fil-A Restaurant
Morgan Hill, CA

Noise & Vibration Survey Photographs

Appendix B

Appendix C-1 of 1
 FHWA Highway Traffic Noise Prediction Model Inputs
 Chick-fil-A Restaurant
 File Name: Existing
 Run Date: 4/19/2023



#	Roadway	Description	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance to Receptor	Offset (dB)
1	Monterey Rd	North of Cochrane Rd	15,445	80	20	2	2	45	150	0
2	Monterey Rd	South of Cochrane Rd	22,475	80	20	2	2	45	110	0
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	16,410	80	20	2	2	45	150	0
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	18,630	80	20	2	2	45	150	0
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	18,220	80	20	2	2	45	150	0
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	27,665	80	20	2	2	45	150	0
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	20,900	80	20	2	2	45	100	0
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	28,960	80	20	2	2	45	315	0
9	Cochrane Rd	East of US 101 NB Ramps	14,525	80	20	2	2	45	125	0
10	Butterfield Blvd	South of Cochrane Rd								
11	Woodview Ave	North of Cochrane Rd	1,560	80	20	2	2	35	110	0
12	Evergreen Vlg	South of Cochrane Rd	760	80	20	2	2	25	100	0
13	Sutter Blvd	North of Cochrane Rd	6,650	80	20	2	2	35	75	0
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	7,555	80	20	2	2	35	100	0
15	Sutter Blvd	South of Cochrane Plza	6,750	80	20	2	2	35	75	0
16	Madrone Pkwy	North of Cochrane Rd	3,500	80	20	2	2	35	75	0
17	Cochrane Plza	South of Cochrane Rd	8,480	80	20	2	2	25	50	0
18	Cochrane Plza	West of Sutter Blvd	2,740	80	20	2	2	25	200	0
19	Cochrane Plza	East of Sutter Blvd	395	80	20	2	2	20	50	0
20	US 101 SB Ramps	South of Cochrane Rd	10,735	80	20	2	2	70	100	0
21	US 101 NB Ramps	North of Cochrane Rd	4,980	80	20	2	2	70	200	0

Appendix D-1 of 1
FHWA Highway Traffic Noise Prediction Model Inputs
Chick-fil-A Restaurant
File Name: Existing+Project
Run Date: 4/19/2023



#	Roadway	Description	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance to Receptor	Offset (dB)
1	Monterey Rd	North of Cochrane Rd	15,560	80	20	2	2	45	150	0
2	Monterey Rd	South of Cochrane Rd	22,510	80	20	2	2	45	110	0
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	16,595	80	20	2	2	45	150	0
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	18,865	80	20	2	2	45	150	0
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	18,510	80	20	2	2	45	150	0
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	27,960	80	20	2	2	45	150	0
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	21,060	80	20	2	2	45	100	0
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	29,255	80	20	2	2	45	315	0
9	Cochrane Rd	East of US 101 NB Ramps	14,645	80	20	2	2	45	125	0
10	Butterfield Blvd	South of Cochrane Rd								
11	Woodview Ave	North of Cochrane Rd	1,770	80	20	2	2	35	110	0
12	Evergreen Vlg	South of Cochrane Rd	760	80	20	2	2	25	100	0
13	Sutter Blvd	North of Cochrane Rd	7,250	80	20	2	2	35	75	0
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	7,730	80	20	2	2	35	100	0
15	Sutter Blvd	South of Cochrane Plza	7,350	80	20	2	2	35	75	0
16	Madrone Pkwy	North of Cochrane Rd	3,500	80	20	2	2	35	75	0
17	Cochrane Plza	South of Cochrane Rd	8,480	80	20	2	2	25	50	0
18	Cochrane Plza	West of Sutter Blvd	2,740	80	20	2	2	25	200	0
19	Cochrane Plza	East of Sutter Blvd	1,380	80	20	2	2	20	50	0
20	US 101 SB Ramps	South of Cochrane Rd	10,800	80	20	2	2	70	100	0
21	US 101 NB Ramps	North of Cochrane Rd	5,050	80	20	2	2	70	200	0

Appendix E-1 of 1
FHWA Highway Traffic Noise Prediction Model Inputs
Chick-fil-A Restaurant
File Name: Cumulative
Run Date: 4/19/2023



#	Roadway	Description	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance to Receptor	Offset (dB)
1	Monterey Rd	North of Cochrane Rd	19,585	80	20	2	2	45	150	0
2	Monterey Rd	South of Cochrane Rd	30,385	80	20	2	2	45	110	0
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	20,420	80	20	2	2	45	150	0
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	24,365	80	20	2	2	45	150	0
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	22,820	80	20	2	2	45	150	0
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	33,590	80	20	2	2	45	150	0
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	27,565	80	20	2	2	45	100	0
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	35,065	80	20	2	2	45	315	0
9	Cochrane Rd	East of US 101 NB Ramps	21,355	80	20	2	2	45	125	0
10	Butterfield Blvd	South of Cochrane Rd								
11	Woodview Ave	North of Cochrane Rd	3,420	80	20	2	2	35	110	0
12	Evergreen Vlg	South of Cochrane Rd	760	80	20	2	2	25	100	0
13	Sutter Blvd	North of Cochrane Rd	8,180	80	20	2	2	35	75	0
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	9,080	80	20	2	2	35	100	0
15	Sutter Blvd	South of Cochrane Plza	8,275	80	20	2	2	35	75	0
16	Madrone Pkwy	North of Cochrane Rd	3,520	80	20	2	2	35	75	0
17	Cochrane Plza	South of Cochrane Rd	10,575	80	20	2	2	25	50	0
18	Cochrane Plza	West of Sutter Blvd	2,740	80	20	2	2	25	200	0
19	Cochrane Plza	East of Sutter Blvd	395	80	20	2	2	20	50	0
20	US 101 SB Ramps	South of Cochrane Rd	13,495	80	20	2	2	70	100	0
21	US 101 NB Ramps	North of Cochrane Rd	5,585	80	20	2	2	70	200	0

Appendix F-1 of 1
 FHWA Highway Traffic Noise Prediction Model Inputs
 Chick-fil-A Restaurant
 File Name: Cumulative+Project
 Run Date: 4/19/2023



#	Roadway	Description	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance to Receptor	Offset (dB)
1	Monterey Rd	North of Cochrane Rd	19,765	80	20	2	2	45	150	0
2	Monterey Rd	South of Cochrane Rd	30,440	80	20	2	2	45	110	0
3	Cochrane Rd	Monterey Rd to Butterfield Blvd	20,605	80	20	2	2	45	150	0
4	Cochrane Rd	Butterfield Blvd to Evergreen Vlg	24,600	80	20	2	2	45	150	0
5	Cochrane Rd	Evergreen Vlg to Sutter Blvd	23,110	80	20	2	2	45	150	0
6	Cochrane Rd	Sutter Blvd to Madrone Pkwy	33,885	80	20	2	2	45	150	0
7	Cochrane Rd	Madrone Pkwy to US 101 SB Ramps	27,670	80	20	2	2	45	100	0
8	Cochrane Rd	US 101 SB Ramps to US 101 NB Ramps	35,255	80	20	2	2	45	315	0
9	Cochrane Rd	East of US 101 NB Ramps	21,430	80	20	2	2	45	125	0
10	Butterfield Blvd	South of Cochrane Rd								
11	Woodview Ave	North of Cochrane Rd	3,630	80	20	2	2	35	110	0
12	Evergreen Vlg	South of Cochrane Rd	760	80	20	2	2	25	100	0
13	Sutter Blvd	North of Cochrane Rd	8,780	80	20	2	2	35	75	0
14	Sutter Blvd	Cochrane Rd to Cochrane Plza	9,255	80	20	2	2	35	100	0
15	Sutter Blvd	South of Cochrane Plza	8,875	80	20	2	2	35	75	0
16	Madrone Pkwy	North of Cochrane Rd	3,520	80	20	2	2	35	75	0
17	Cochrane Plza	South of Cochrane Rd	10,575	80	20	2	2	25	50	0
18	Cochrane Plza	West of Sutter Blvd	2,740	80	20	2	2	25	200	0
19	Cochrane Plza	East of Sutter Blvd	1,380	80	20	2	2	20	50	0
20	US 101 SB Ramps	South of Cochrane Rd	13,535	80	20	2	2	70	100	0
21	US 101 NB Ramps	North of Cochrane Rd	5,630	80	20	2	2	70	200	0

Appendix G

Drive-Through Speaker Reference Noise Level Data

HME

Customer Driven

Memo

Re: Drive-Thru Sound Pressure Levels From the Menu Board or Speaker Post

The sound pressure levels from the menu board or speaker post are as follows:

1. Sound pressure level (SPL) contours (A weighted) were measured on a typical HME SPP2 speaker post. The test condition was for pink noise set to 84 dBA at 1 foot in front of the speaker. All measurements were conducted outside with the speaker post placed 8 feet from a non-absorbing building wall and at an oblique angle to the wall. These measurements should not be construed to guarantee performance with any particular speaker post in any particular environment. They are typical results obtained under the conditions described above.
2. The SPL levels are presented for different distances from the speaker post:

Distance from the Speaker (Feet)	SPL (dBA)
1 foot	84 dBA
2 feet	78 dBA
4 feet	72 dBA
8 feet	66 dBA
16 feet	60 dBA
32 feet	54 dBA

3. The above levels are based on factory recommended operating levels, which are preset for HME components and represent the optimum level for drive-thru operations in the majority of the installations.

Also, HME incorporates automatic volume control (AVC) into many of our Systems. AVC will adjust the outbound volume based on the outdoor, ambient noise level. When ambient noise levels naturally decrease at night, AVC will reduce the outbound volume on the system. See below for example:

Distance from Outside Speaker	Decibel Level of standard system with 45 dB of outside noise <u>without</u> AVC	Decibel level of standard system with 45 dB of outside noise <u>with</u> AVC active
1 foot	84 dBA	60 dBA
2 feet	78 dBA	54 dBA
4 feet	72 dBA	48 dBA
8 feet	66 dBA	42 dBA
16 feet	60 dBA	36 dBA

If there are any further questions regarding this issue please contact HME customer service at 1-800-848-4468.

Thank you for your interest in HME's products.



HEXAGON TRANSPORTATION CONSULTANTS, INC.

Memorandum

Date: April 24, 2023
To: Nick Pappani, Raney Planning & Management
From: Robert Del Rio, T.E., Luis Descanzo
Subject: VMT Assessment for the Proposed 18599 Sutter Boulevard Chick-Fil-A in Morgan Hill, California

Hexagon Transportation Consultants, Inc. has completed a vehicle-miles traveled (VMT) assessment for the proposed Chick-Fil-A restaurant located at 18599 Sutter Boulevard (APN 726-32-005) in Morgan Hill, California (see Figure 1). The site is currently occupied by a vacant restaurant. As proposed, the project would consist of a 5,028 s.f. Chick-Fil-A restaurant with two drive-through lanes. The purpose of this memorandum is to provide an assessment of the project's effect on VMT. The VMT assessment methodology and results are discussed below.

VMT Assessment Methodology and Results

Pursuant to Senate Bill (SB) 743, the California Environmental Quality Act (CEQA) 2019 Update Guidelines Section 15064.3, subdivision (b) states that VMT will be the metric in analyzing transportation impacts for land use projects for CEQA purposes. VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT measures the full distance of personal motorized vehicle-trips with one end within the project.

The City of Morgan Hill, at the time of this report, is undertaking a process of updating its transportation policies to incorporate VMT methodologies and significance thresholds to be consistent with SB 743 but has not released draft thresholds. In the absence of an adopted City policy with impact standards and thresholds, this assessment relies on the Governor's Office of Planning and Research (OPR) guidelines in analyzing the project's effects on VMT.

OPR Screening Recommendations

The *Technical Advisory on Evaluating Transportation Impacts in CEQA* published by OPR in December 2018 provides recommendations regarding VMT evaluation methodology, significance thresholds, and screening thresholds for the evaluation of land use projects.

The OPR provides screening threshold recommendations that are intended to identify when a project can be determined to cause a less-than-significant impact without conducting a detailed VMT evaluation. The OPR screening thresholds recommendations are based on project size, maps, transit availability, and provision of affordable housing. The OPR recommendations include the screening threshold criteria listed below:

Figure 1
Site Location

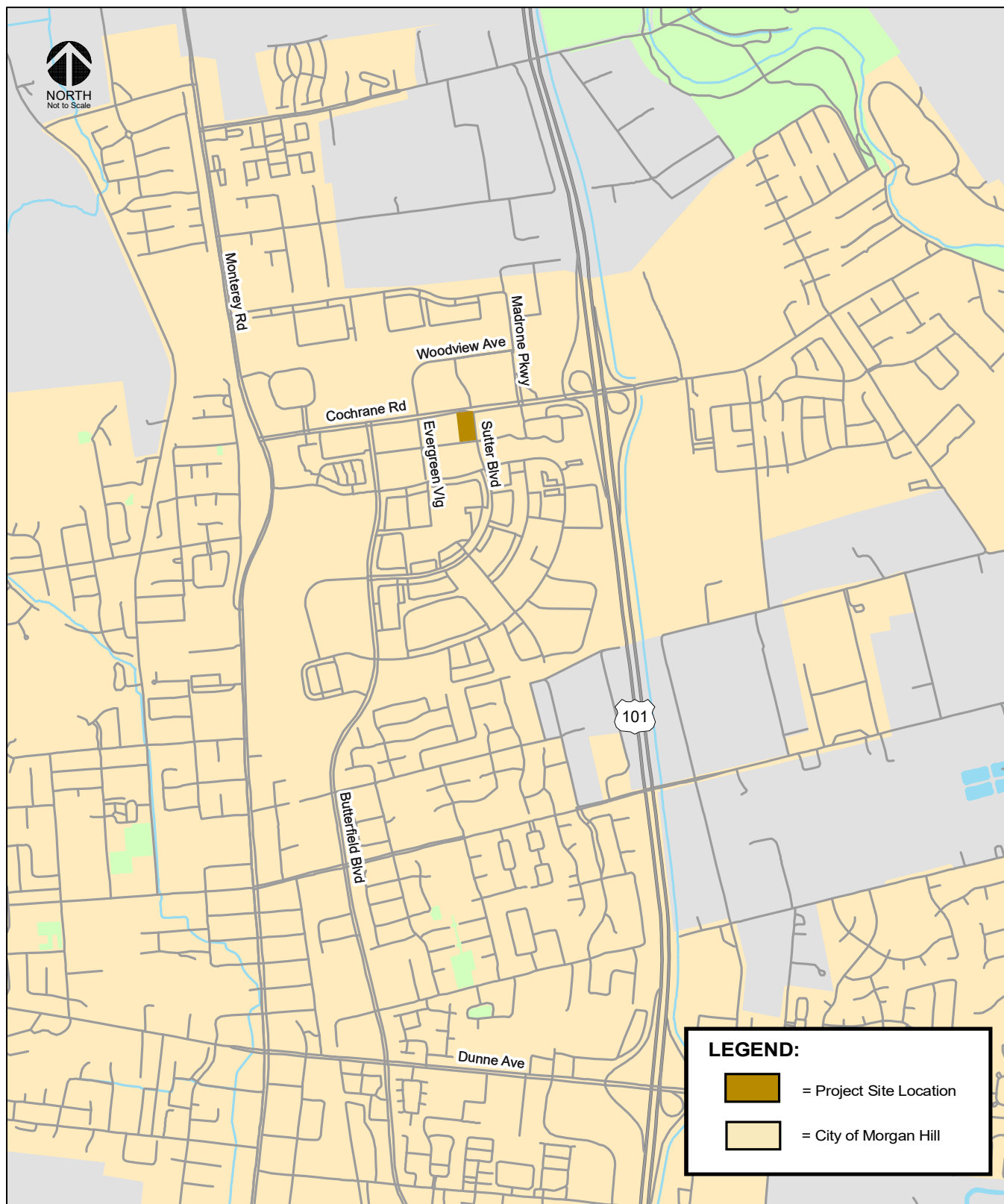
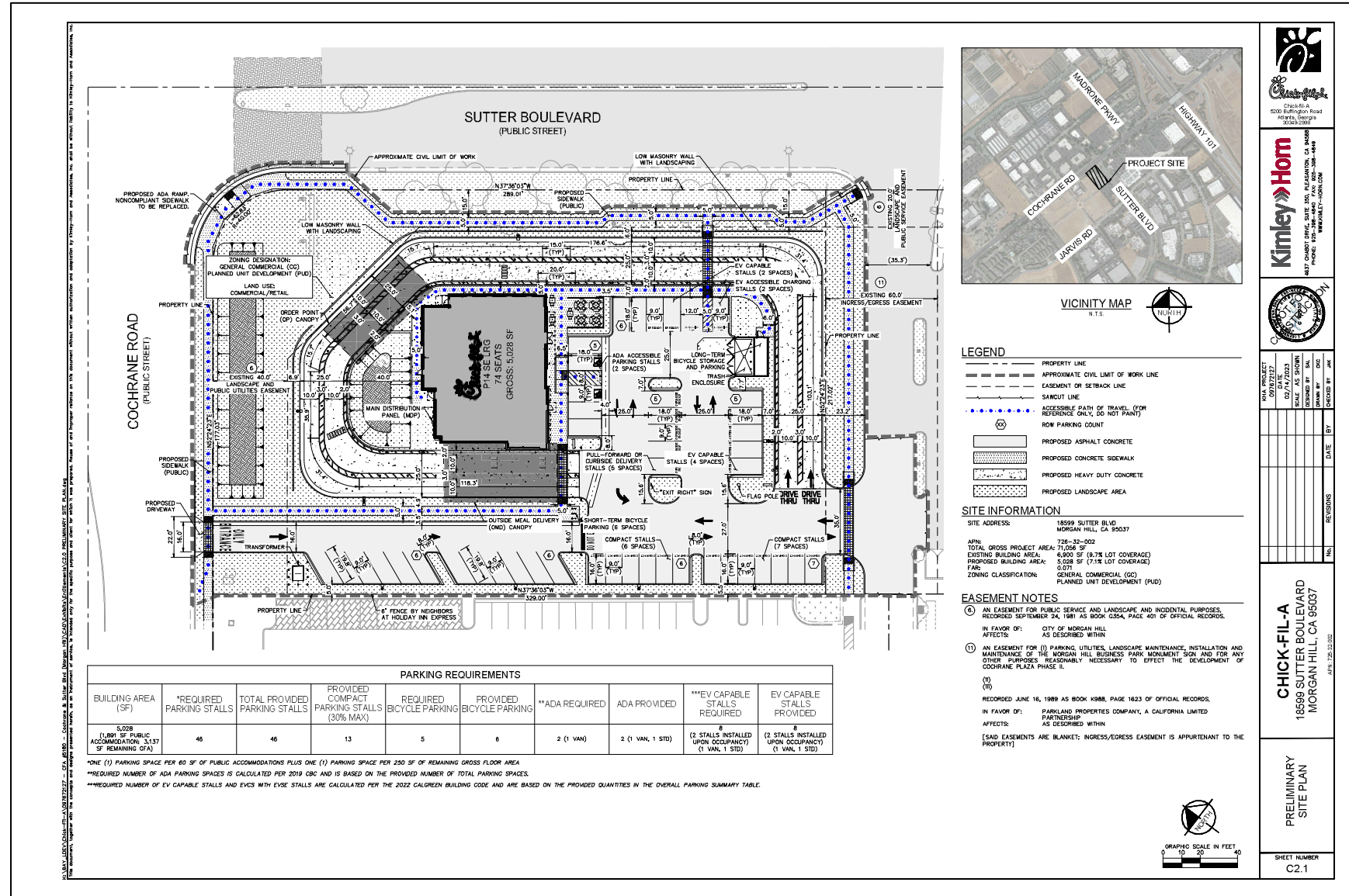


Figure 2
Site Plan



- OPR recommends that office or residential projects not exceeding a level of 15 percent below existing VMT per capita and employee may indicate a less-than-significant impact on VMT.
- OPR recommends that projects (including office, residential, retail, and mixed-use developments) proposed within ½ mile of an existing major transit stop or within ¼ mile of an existing stop along a high-quality transit corridor may be presumed to have a less-than-significant impact on VMT.
- OPR recommends that 100 percent affordable residential development in infill locations be presumed to have a less-than-significant impact on VMT.
- OPR recommends that projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant impact on VMT.
- ***OPR recommends that local-serving retail developments (considered to be less than 50,000 s.f. in size) may be assumed to cause a less-than-significant impact on VMT.***

However, the guidelines for the evaluation of VMT for development projects is limited to general land use categories such as residential, office, industrial, and retail. Therefore, the assessment of VMT for the proposed fast-food restaurant required a conversion to an equivalent amount of one of the general land uses that has similar trip generating and trip origin/destination characteristics. The number and origination/destination of daily trips and resulting VMT generated by the proposed fast-food restaurant available within the City would be similar to that of local-serving retail since there is not another Chick Fil A restaurant located within the City. As such, the proposed project would provide service to City residents that does not exist today. Therefore, the proposed fast-food restaurant was converted to an equivalent amount of local-serving retail space based on a comparison of estimated daily trips using ITE trip rates for the proposed fast-food restaurant and typical retail uses.

Daily Trip Generation Estimates

Site-generated vehicular traffic for the proposed restaurant was estimated utilizing trip generation rates that were determined based on vehicular counts at three existing Chick-fil-A restaurants with two drive-through lanes and of comparable square footage as that of the proposed project. The trip surveys were completed between February 18, 2023 and February 25, 2023 at the following three locations:

- Pittsburg, CA – 4717 Century Boulevard (4.99 k.s.f.)
- Milpitas, CA – 755 E. Calaveras Boulevard (4.96 k.s.f.)
- Daly City, CA – 6 Serramonte Center (4.92 k.s.f.)

Daily trip generation was estimated based on the surveyed peak-hour trips and the ratio of peak-hour trips to daily trips for a fast-food restaurant with drive-through window (Land Use 934) published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. The results of each survey, shown on Table 1, were utilized to calculate average trip rates. Using these average rates, the project is estimated to produce 1,822 daily vehicle trips prior to any trip reductions (see Table 1).

Fast-food restaurants with drive-through windows attract a substantial number of pass-by trips, which are trips made by drivers who already pass by the project site on an adjacent street en- route to another destination, such as a trip from work to home. In contrast, primary (non-pass-by) trips are new trips made for the sole purpose of visiting the project site. Thus, pass-by trips are not considered new trips that are generated by the project site. However, the attraction of pass-by trips does result in a reassignment of existing traffic passing-by the project site on adjacent streets at site driveways and intersections immediately adjacent to the project site. Surveys of fast-food restaurants with a drive-through window at various sites around the country exhibited an average pass-by rate of 55 percent.

Table 1
Trip Survey Summary

Survey Location ¹	Size (ksf)	AM Peak-Hour				PM Peak-Hour			
		Rate	In	Out	Total	Rate	In	Out	Total
Pittsburg - 4717 Century Blvd	4.99	19.86	54	45	99	34.90	89	85	174
Milpitas - 755 E Calaveras Blvd	4.96	13.30	30	36	66	31.24	92	63	155
Daly City - 6 Serramonte Center	4.92	27.03	69	64	133	54.07	126	140	266
Survey Average	4.96	20.06	51	48	99	40.07	102	96	198
<i>ITE 934: Fast-Food Restaurant with Drive-Through</i>	<i>4.96</i>	<i>44.61</i>	<i>113</i>	<i>108</i>	<i>221</i>	<i>33.03</i>	<i>85</i>	<i>79</i>	<i>164</i>
Notes: ¹ Peak-hour trips are based on trip survey counts conducted February 18, 2023 to February 25, 2023.									

during the PM peak hour (*Trip Generation Manual, 11th Edition*). Therefore, a 55 percent reduction was assumed for the estimated daily trips. After subtracting pass-by trips, the project is expected to generate 820 primary vehicle trips per day. Because the existing commercial building on the project site is currently vacant, no trip credits are applied for the existing commercial space. Trip generation estimates for the proposed project are shown in Table 2.

VMT Assessment Results

VMT Evaluation Using OPR Screening Criteria

The proposed project consists of a 5,028 s.f. fast food restaurant. The proposed project was converted to an equivalent amount of retail/commercial use for the purpose of the VMT assessment since the OPR screening criteria outlined above are not directly applicable to fast food restaurant uses. The results of the conversion of the proposed fast-food restaurant to an equivalent amount of retail/commercial space, shown on Table 3, indicate that the proposed fast food restaurant would generate net new daily trips equivalent to that of an approximately 22,500 s.f. retail development. If no pass-by reduction is applied, the proposed fast food restaurant would generate daily trips equivalent to that of an approximately 49,500 s.f. retail development.

Since the project's converted retail size, with or without pass-by reductions, would be less than 50,000 s.f., the proposed project may be presumed to be a local-serving facility and would therefore have a less-than-significant impact on VMT. The OPR guidelines suggest that by adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. Chick-Fil-A, in particular, does not have a significant presence in the Southern Santa Clara Valley region, with restaurants in South San Jose and Salinas being the closest to Morgan Hill. The proposed new Morgan Hill location will provide a proximate location for City residents to a Chick-Fil-A restaurant, thus resulting in shorter trips and subsequent reduction in VMT generated by Morgan Hill residents for the purpose of visiting a Chick-Fil-A location. Moreover, the trip generation estimates assume a significant number of trips will be pass-by trips, which are based on pass-by rates derived from the ITE *Trip Generation Manual, 11th Edition*. As discussed above, pass-by trips are not considered new trips and merely result in a reassignment of existing through traffic (i.e. along Cochrane Road and Sutter Boulevard) at site driveways and intersections immediately adjacent to the project site. These pass-by trips are already accounted for in the baseline VMT and are not new VMT generated by the proposed project.

As a result of the project having trip-making characteristics of a local-serving retail facility, it can be presumed that the proposed project would have a less-than-significant impact on VMT based on OPR's VMT screening criteria.

Quantitative VMT Evaluation

For informational purposes, the VMT assessment was supplemented with a quantitative analysis of the project's effects on VMT. The VTA Countywide transportation model was used to estimate VMT for the proposed retail/fast-food use of the project site since it can estimate the diversion of traffic and change in traffic patterns due to land use changes/additions like those proposed by the project. The VTA model is a mathematical representation of travel within Santa Clara County and is mainly composed of four components: 1) trip generation, 2) trip distribution, 3) mode choice, and 4) trip assignment. The model uses socioeconomic inputs (i.e. households, number of jobs, travel mode-share defaults) to estimate travel within Santa Clara County. Socioeconomic inputs are aggregated into geographic areas or traffic analysis zones (TAZs). The underlying premise of the VMT evaluation is that the proposed retail/fast-food uses would not cause an increase in trips but rather result in a change in trip-making

Table 2
Trip Generation Summary

Land Use	Size (ksf)	Daily		AM Peak-Hour				PM Peak-Hour			
		Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total
Proposed Project											
Chick-Fil-A with Drive-Through ¹	5.03	362.34	1,822	20.06	52	49	101	40.07	104	97	201
Pass-by Reduction (55% Daily/50% AM/55 %PM) ²			-1002		-26	-24	-50		-57	-54	-111
Net Project Trips			820		26	25	51		47	43	90
Notes:											
¹ Peak-hour trips are based on trip survey counts conducted February 18, 2023 to February 25, 2023.											
Daily trips are based on surveyed peak-hour trips and the ratio of peak-hour trips to daily trips published in the ITE <i>Trip Generation Manual</i> , 11 th Edition for Land Use Code 934: Fast-Food Restaurant with Drive-Through.											
² Peak-hour pass-by trip reduction percentage based on data contained in the ITE <i>Trip Generation Manual</i> , 11 th Edition.											
Daily pass-by rate is assumed to be the same as PM pass-by rate.											

Table 3
Conversion to Equivalent Retail Space

Land Use	Size	Daily	
		Rate	Trips
Proposed Chick-fil-A Restaurant (with pass-by reduction) ^{1, 2}			820
Retail (ITE #820) ³	Equivalent Retail Space⁴ = 22,500 Square Feet	37.01	820
Proposed Chick-fil-A Restaurant (without pass-by reduction) ¹			1,822
Retail (ITE #820) ³	Equivalent Retail Space⁴ = 49,500 Square Feet	37.01	1,822
Notes: 1. Daily trips are based on observed peak-hour trips and the ratio of peak-hour trips to daily trips published in the ITE <i>Trip Generation Manual</i> , 11 th Edition for Land Use Code 934: Fast-Food Restaurant with Drive-Through. 2. Peak-hour pass-by trip reduction percentage based on data contained in the ITE <i>Trip Generation Manual</i> , 11 th Edition. Daily pass-by rate is assumed to be the same as PM pass-by rate. 3. ITE <i>Trip Generation Manual</i> , 11 th Edition 2021. 4. The equivalent retail space were rounded up to the next 500 square feet.			

characteristics because some people would visit the proposed project instead of other nearby fast-food establishments.

The VTA model is general in its categorization of commercial, restaurant, retail type of land uses. Therefore, in order to estimate the effects on VMT for the fast-food use of the proposed project with the model, the qualitative evaluation utilizes a converted square footage of 49,500 s.f. of commercial space (based on 1,822 daily trips) as described previously. The equivalent retail space was then converted to 124 retail jobs using a ratio of one retail job per 400 square feet.

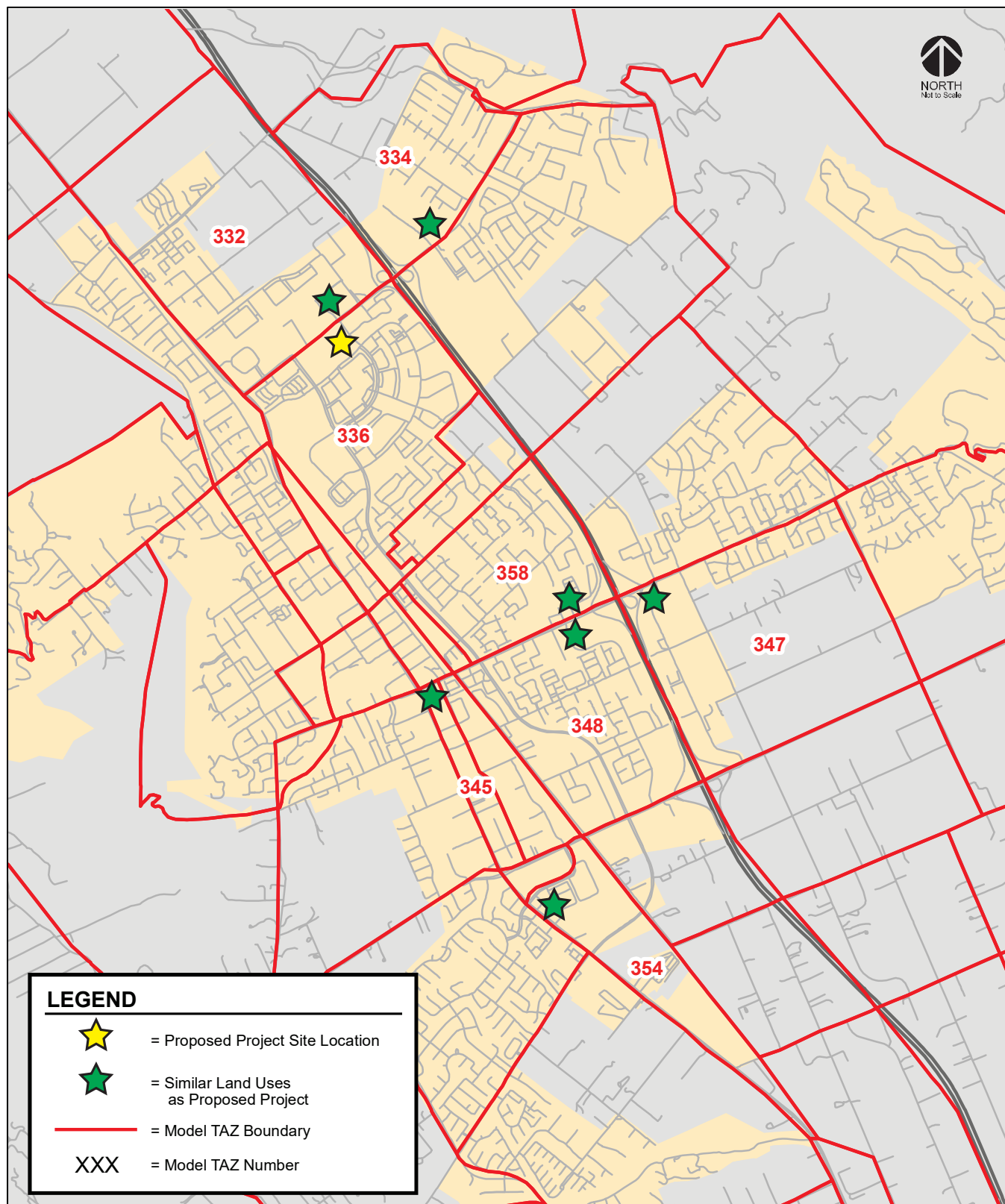
Hexagon selected Traffic Analysis Zones (TAZ) within the model that included similar fast-food uses as the proposed project (see Figure 3). For the purpose of modeling VMT, some employees were assumed to leave their jobs at these nearby shopping centers and instead work at the proposed project site. In order to reflect this, an equivalent number of retail jobs from TAZs (334, 332, 358, 348, 345, 347, 354) were shifted to the project TAZ (336). These job changes were made in the 2015 base year land use file. The VTA model was then used to generate projected daily VMT without and with the project for the selected TAZs to estimate the change in daily VMT. The analysis includes an estimate of home-based work VMT (VMT generated by restaurant employees) and home-based shopping VMT (VMT generated by customers).

VMT Policies and Impact Criteria

To adhere to the state's legislation, the City of Morgan Hill is currently developing the framework for new transportation policies based on the implementation of VMT as the primary measure of transportation impacts for CEQA purposes. The new policies will replace the City's current transportation policies that are based on levels of service. However, since the City has not formally adopted its own City-specific VMT policies, this evaluation utilizes VMT analysis methodology and impact thresholds recommended in the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018.

The thresholds of significance for retail development projects, as recommended in the OPR technical advisory, are based on the existing regional average total VMT. Per the technical advisory, projects that include retail uses are said to create a significant adverse impact on VMT when the project results in any increase in the total VMT.

Figure 3
Similar Land Uses in the Project Vicinity



The model results summarized in Table 4 show that the proposed project would result in an increase of 205 home-based work VMT and a decrease of 607 home-based shopping VMT, resulting in a net decrease of 402 daily VMT. The net reduction in VMT is the result of the project providing a new fast-food option in northern Morgan Hill proximate to nearby residents and employment areas, thus resulting in shorter trips and subsequent reduction in VMT generated by customers. Therefore, the qualitative analysis shows that the proposed project would not result in an impact on the transportation system based on OPR's recommended VMT impact criteria.

Table 4
Retail VMT Analysis

VMT Analysis	No Project	Project	Project - No Project
Home-Based Work VMT	178,223	178,428	205
Home-Based Shop/Other VMT	122,170	121,563	-607
Total VMT	300,393	299,991	-402

Rich Buikema

From: Joanne Conca <[REDACTED]>
Sent: Thursday, February 9, 2023 2:12 PM
To: Rich Buikema
Cc: David Conca
Subject: RE: Issues with Chick-fil-A project

Hi Rich,

Thank you for taking the time to talk with my husband, David Conca, a couple weeks ago about the review process for the proposed Chick-fil-A project at 18599 Sutter Blvd. ("subject property"). We are the owners of the office property at 18525 Sutter Blvd. which is adjacent to the subject property and directly Southeast of it.

We ask that the City of Morgan Hill **not** permit the conditional use permit of the subject property that would allow a drive-through. Please share our concerns about this project with the city planners and those reviewing the proposal.

- 1) Our property shares a driveway with the subject property to enter and exit both of our properties from Sutter Blvd. Currently there is often a long wait to turn left onto Sutter Blvd. while exiting our property in order to yield to street traffic and other vehicles and pedestrians exiting the Cochrane Plaza driveway across the street. If there is a business with a busy drive-through on the subject property, we're concerned that traffic will back up on our driveway from two sources: 1) increased number of cars waiting to turn left onto Sutter Blvd. and 2) the potential overflow of the drive-through queue which would overflow into the driveway.
- 2) We're concerned that a significant amount of Chick-Fil-A traffic will enter our property from Jarvis Dr. and cut across our parking lot in order to access the subject property and avoid a stop sign at Jarvis and Sutter. We do have another entrance onto our property from Jarvis Dr; and we have found that many vehicles driving from Butterfield Blvd. via Jarvis Dr. cut across our property using our Jarvis entrance to avoid the stop sign at Jarvis Dr. and Sutter Blvd. to get to Cochrane Rd. We also see vehicles cut across our lot using the reverse route from Sutter Blvd. to Jarvis Dr. as a short cut. We see this happen daily. It is the path of least resistance where vehicles can avoid a stop sign and avoid speed bumps on the neighboring property.
- 3) Currently ingress and egress access to the subject property is solely through an easement. There is a reciprocal easement agreement with our property, and the property to the West of our two properties. Under the "Grant of Reciprocal Easements" originally recorded on Jun 16, 1989 and subsequently amended on two occasions, *"The Access Easement may be used only for pedestrian and vehicular traffic of the type and quantity reasonably necessary for the development and operation of retail/commercial center as contemplated by the parties' common plan. No increase in the burden created by the Access Easement or change in the use of the Access Easement may be made without the written approval of the owner of the burdened parcel."* Adding another driveway to the subject property on Cochrane Rd. may help ease the burden; but we would expect that there would still be significantly more traffic using the existing driveway than any traffic ever anticipated with the current use of the property as a sit-down restaurant.
- 4) The site plan seems to indicate that if there is an overflow of customers in the queue for the drive-through, then the overflow of vehicles will back into our driveway and onto our property and cause a traffic situation on our property. We believe that such a situation reduces the quiet enjoyment of our own property and the rights to ingress and egress through our own driveway. It directly impacts those

people that work in our building and their medical patients and customers that need a safe parking lot to park and walk.

- 5) Our property's parking lot also experiences pedestrian traffic from the nearby office buildings especially at lunchtime on business days; and again we're concerned about safety issues that will arise if vehicle traffic increases through our parking lot.

Thanks for listening to our concerns. Please keep us posted on any developments.

All the best,

Joanne Conca
[REDACTED]

From: Rich Buikema <Rich.Buikema@morganhill.ca.gov>

Sent: Thursday, January 19, 2023 11:49 AM

To: David C Conca <[REDACTED]>

Subject: RE: Issues with Chick-fil-A project

Thanks David – The project is early in the review process and you will receive notification of any public hearings on the project. As discussed, below is a summary of the Scope of the Traffic Study that will be conducted for the project by Hexagon Transportation Consultants. Let us know if you have any questions or concerns.

Rich Buikema
City of Morgan Hill

The following specific tasks will be undertaken for the traffic operations analysis and incorporated into a full traffic study,

1. Site Reconnaissance and Existing Observations. The physical characteristics of the site and the surrounding roadway network will be reviewed to identify existing roadway cross-sections, intersection lane configurations, traffic control devices and surrounding land uses. Existing traffic conditions will be observed in the field to identify any operational deficiencies and to confirm the accuracy of calculated levels of service.
2. Proposed Project Traffic Projections. Estimates of peak hour trips will be developed based on trip data of other comparable Chick Fil A restaurants to be provided by the applicant. For comparison purposes, peak hour trips for the project also will be estimated using the appropriate vehicular trip generation rates from the Institute of Transportation Engineers (ITE) Trip Generation manual. The directional distribution of site-generated traffic will be forecast based on existing travel patterns, relative locations of complementary land uses in the area and information from previous traffic studies conducted for developments in the area. The site-generated traffic will be

added to the roadway network based on the directions of approach and departure discussed above.

3. Evaluation of Intersection Levels of Service. Intersection level of service calculations for the existing, existing plus

project and cumulative (The year 2030) conditions will be performed for the following eight intersections:

1. Cochrane Road and Monterey Road
2. Cochrane Road and Butterfield Boulevard
3. Cochrane Road and Sutter Boulevard
4. Cochrane Road and Woodview Avenue/Evergreen Village
5. Cochrane Road and Madrone Boulevard
6. Cochrane Road and US 101 Southbound Ramps
7. Cochrane Road and US 101 Northbound Ramps
8. Sutter Boulevard and Project Entrance (unsignalized)

The purpose of the level of service analysis is to identify the current operating conditions of the intersections and

evaluate whether the proposed project may have an adverse impact on intersection operations. Existing weekday

AM and PM peak-hour traffic volumes at the study intersections will be obtained, where available, from recent traffic

studies conducted in the area. New manual peak-hour turning movement counts will not be conducted due to the

effect of the current COVID-19 pandemic on traffic patterns.

5. Site Access Analysis. A site access and circulation review will be conducted to determine the adequacy of the

proposed site plan in accordance with generally accepted traffic engineering standards. This will include a quantitative analysis of the anticipated traffic volumes at the proposed site driveways along Cochrane Road and

Sutter Boulevard, as well as a qualitative analysis of the proposed site circulation and parking layout. The review will

be based on the site's overall anticipated trip generation and consider the following: sight distance, vehicle queuing,

traffic control requirements, driveway location and alignment, and truck access and circulation.

6. On-Site Circulation and Drive-Through Operations Review. Vehicular queuing and service rate data at other comparable Chick Fil A drive-throughs will be provided by the applicant. The drive-through data will be used to determine the maximum projected queue length for the proposed site and compared with the proposed storage

space within the drive-through to determine its adequacy as well as conformance with the City's standard requirements for drive-throughs (Morgan Hill Code of Ordinances, Chapter 18.92.040 Drive-through facilities) in

terms of its setback from adjacent streets, vehicular storage, and overall site circulation.

7. Bicycle, Pedestrian, and Transit Facilities. A qualitative analysis of the project's effect on transit service in the

area and on bicycle and pedestrian circulation in the study area will be included in the report. The evaluation will

include a review to ensure that the proposed project does not prohibit the completion of planned bicycle and pedestrian facilities.

From: David C Conca <[REDACTED]>
Sent: Thursday, January 19, 2023 10:47 AM
To: Rich Buikema <Rich.Buikema@morganhill.ca.gov>
Subject: Issues with Chick-fil-A project

Hi Rich,

It was nice speaking with you this morning about the Chick-fil-A project. I will fill my wife in on what we discussed and then next week we will get an email to you with our initial concern and how it will affect our property right next door.

Thanks.

Regards,

David C Conca
Chief Executive Manager
Strategic Equity Investments, LLC
[REDACTED]
CO RE License #043222
CA DRE License #01276832

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MEMORANDUM

TO: Rich Buikema, City of Morgan Hill
FROM: Basil S. Shiber
DATE: March 20, 2023
RE: FSU Morgan Hill #05180 / Claim of Overburdening Access Easement
CC: Keith Gilbert, Katherine Light, Ronia Lutfi, Nate Loveland, Chad Gallagher, Mitchell Khurin, Jennifer Carman, Leanna Su, Ed Hale

As you may be aware, this firm represents Chick-fil-A, Inc. ("Chick-fil-A" or "CFA") in connection with their ground lease and pending redevelopment of the property commonly known as 18599 Sutter Blvd. in Morgan Hill, California. We understand that there may be a misunderstanding by the adjacent property owner as to what beneficial easement rights Chick-fil-A, vis-à-vis its landlord, BAT Limited Partnership, has pursuant to that certain Grant of Reciprocal Easements recorded June 16, 1989 in Book K988 Page 1623. (the "Grant of Easement"). We have analyzed the Grant of Easement (as amended) in detail and have concluded that the Grant of Easement provides Chick-fil-A with easements for pedestrian access (i.e., a sidewalk) and vehicular traffic (i.e., a roadway) reasonably necessary to accommodate Chick-fil-A's intended use of the subject property.

I. BACKGROUND FACTS.

A. 1989 Grant of Easement for Pedestrian and Vehicular Traffic To Serve A Commercial Development

The Grant of Easement relates to a roughly square piece of property in Morgan Hill approximately 11.3 acres in size, bounded by Cochrane Road on the northwest, Sutter Boulevard on the east and Jarvis Drive on the southeast. The land is described as "Parcel 13" in a parcel map recorded in April 1989 at Book 988, Page 1629. The owner of Lot 13 sold a 1.63 acre portion of the property located in the north-east corner, at the corner of Cochrane Road and Sutter Boulevard, to another party (McPie Time Partners, L.P.) and created a new Lot 13-A (APN 726-58-006) in connection with that transaction. Such 1.63 acre new Lot 13-A is the future Chick-fil-A Demised Premises and may be referred to herein alternatively as "Lot 13-A" or the "CFA Premises".

The Grant of Easement was signed by the then buyer/owner of the CFA Premises (Parkland Properties Company) and the seller/owner of the 9.66 acre “remainder” parcel (Mc Pie Time Partners).

The Grant of Easement provides for access to the CFA Premises over a sixty foot (60') wide easement (“Access Easement”) located on the remainder Parcel and to the immediate southeast of the CFA Premises. The Grant of Easement states that it is the parties’ intention to “develop and operate their respective properties in conjunction with each other as integral parts of a retail/commercial center” (Recital D.) The Grant of Easement further provides that the Access Easement:

May be used only for pedestrian and vehicular traffic of the type and quantity reasonably necessary for the development and operation of a retail/commercial center as contemplated by the parties’ common plan. No increase in the burden created by the Access Easement or change in the use of the Access Easement may be made without the written approval of the owner of the burdened parcel.

(¶ 2.)

Additionally, the Grant of Easement gives the owner of the remainder parcel the right to relocate the Access Easement upon 30 days’ notice, provided that the rights of the CFA Premise to access Sutter Boulevard will not be materially diminished. (¶ 2.)

In addition to the Access Easement, the seller/owner of the Lot 13 remainder parcel reserved what is described as a “Development Easement” over a 10,000 square foot portion of the CFA Premises for possible future use as parking, landscaping and utilities and related matters. (¶ 1(b).)

B. 1998 Amendment to Grant of Easement Affirming Access Easement, Terminating Development Easement, and Providing for Creation of Future Reciprocal Parking Agreement

An “Amendment to Grant of Reciprocal Easements” (“Amended Grant of Easement”) was entered into and recorded on December 16, 1998 by McPie Time Partners L.P., and the successor to Parkland Properties Company, Morgan Hill Development Partners, L.P. The Amended Grant of Easement notes that there is a “Marie Callender’s Restaurant” operating on Lot 13-A. (Recital C.)

The Amended Grant of Easement further provides for a future “Reciprocal Easement Agreement” in the event of development of “Cochrane Plaza” by which the owner of Lot 13-A would be allocated 99 spaces on the remainder parcel (Lot 13) for the benefit of Lot 13-A. In this regard, the Amended Grant of Easement expressly refers to an unrecorded Sale Agreement dated June 15, 1989 by and between Mc Pie Time Partners and Parkland. (¶ 2.) The Amended Grant of Easement further provides that the owner of the remainder parcel may elect to terminate the Reciprocal Parking Easement obligation in the event that it elects to develop the remainder parcel “for a use which does not require a Reciprocal Parking Easement over Lot 13-A” (¶ 3.)

C. 2008 Second Amendment to Grant of Easement Affirming Access Easement

On February 7, 2008, the successor to the parties under the Grant of Easement entered into a “Second Amendment to Grant of Reciprocal Easements” (“Second Amended Grant of Easement”). By this time, it appears that the remainder parcel had been subdivided to create a new 2.26 acre parcel (APN 726-32-022) to the immediate south-east of Lot 13-A at the corner of Sutter Boulevard and Jarvis Drive, and the owner of that new parcel (South Valley Venture, LLC) signed the Second Amended Grant of Easement along with the owner of Lot 13-A and the owner of the balance of Lot 13.¹ The newly created 2.26 acre parcel is the parcel currently improved and operated as an office building immediately adjacent to the CFA Premises (the “Office Parcel”), which is owned by Strategic Equity Investments / Joanne Conca (as discussed further below).

The Second Amended Grant of Easement reconfirmed the Access Easement (§ 3(a)), and further specified in some detail the allocation and reimbursement obligations of the parties with respect to maintenance and repair of improvements installed in connection with the Access Easement. (§ 3.)

In addition, the Second Amended Grant of Easement terminated the Reciprocal Parking Easement referenced in the Amended Grant of Easement (§ 2) and the Development Easement referenced in the original Grant of Easement. (§ 4.)

Accordingly, what currently remains in terms of easement obligations arising out of the Grant of Easement and amendments is the Access Easement adjacent to Lot 13-A.

We understand that historically the Access Easement has been paved and used for vehicular and pedestrian traffic, with some associated landscaping, including by the Marie Callender’s restaurant which previously operated on the CFA Premises and subsequently and most recently by the restaurant which operated as Forbes Grill on Lot 13-A.

D. 2022 Estoppel Certificate Signed By Conca Representing Chick-fil-A Use is Consistent With Grant of Easement

On October 13, 2022, the successor owner of the Office Parcel adjacent to Lot 13-A, on which the Access Easement is located, executed an Estoppel Certificate in favor of Chick-fil-A, Inc. The Estoppel Certificate references the Grant of Easement and subsequent amendments, and notes that the signatory (Strategic Equity Investments, by Joanne Conca) is the current owner of the property burdened by the Access Easement (§ 1). The Estoppel Certificate states:

¹ The successor owner of the balance of Lot 13, Altera Corporation, signed the Second Amended Grant of Easement, and the agreement recites that Altera is the owner of property “consisting of approximately 20.43 acres...referred to as Assessor Parcel Number 726-32-021”. This acreage appears to be greater than the original property described in the Grant of Easement, and presumably reflects additional adjacent acreage owned by Altera.

CFA (as hereinafter defined) will be relying upon the contents of this Estoppel Certificate in connection with the Ground Lease for the Property. Accordingly, the undersigned hereby represents and warrants to Chick-fil-A, Inc., a Georgia Corporation, its affiliates, successors and assigns ("CFA"), that as of the date hereof:

1. The undersigned is the owner of the SVV Property [burdened property] and successor- in-interest to SVV under the REA.
2. The REA has not been modified and is in full force and effect.
3. BAT [successor owner of the Chick-fil-A site] is current in its payment of its proportionate share of repair and maintenance costs under the REA, if any.
4. There does not exist any state of facts with the giving of notice, the passage of time or both, would constitute a default under the REA.

....

As stated, Joanne Conca signed the Estoppel Certificate on behalf of the Office Parcel owner on October 13, 2022. On February 7, 2023, Joanne Conca sent an email to Rich Buikema of the City of Morgan Hill referencing a discussion between Mr. Buikema and her husband, David Conca, "a couple weeks ago about the review process for the proposed Chick-fil-A project at 18599 Sutter Boulevard." Ms. Conca asked that the City of Morgan Hill "not permit the rezoning of the subject property that would allow a drive-through." She shares some concerns relating to use of the easement and refers to and highlights the language of the easement which states: "No increase in the burden created by the Access Easement or change in the use of the Access Easement may be made without the written approval of the owner of the burdened parcel." She states: "We would expect that there would still be significantly more traffic using the existing driveway than any traffic ever anticipated with the current use of the property as a sit down restaurant."

II. LEGAL ANALYSIS.

A. The Easement Contemplates Commercial Use, Which Includes A Fast Food Restaurant And Drive-Through.

As noted, the Grant of Easement provides that: "The Access Easement may be used only for pedestrian and vehicular traffic of the type and quantity reasonably necessary for the development and operation of a retail/commercial center as contemplated by the parties' common plan." The "parties' common plan" at that time clearly involved the development and operation of a "retail/commercial center" which would use the Access Easement. Pursuant to the Morgan Hill Municipal Code, fast food restaurant use is a permitted commercial use on the property, which is zoned General Commercial. A drive-through is a conditionally permitted use on the property. (Morgan Hill Municipal Code § 18.24.020, Table 18.24.1.) In other words, the use of the easement for a Chick-fil-A restaurant with a drive-through is a commercial use consistent with the zoning of the property and expressly anticipated in the Grant of Easement. Indeed, the

Access Easement was created to accommodate such a use. Use of the Access Easement is not limited to a “sit down restaurant” only, nor does it preclude a drive-through component. Rather, it broadly references a “retail/commercial center” which under the City’s Zoning Code encompasses the Chick-fil-A use contemplated.

In this regard, Ms. Conca’s request that the City “not permit the rezoning of the property” appears to incorrectly assume that such a rezoning is required for the Chick-fil-A use.

The express Access Easement includes implied rights necessary for enjoyment of that easement. In this case, the express easement is for pedestrian and vehicular traffic. That express grant would include the implied right to pave the roadway and the sidewalk, install necessary traffic controls, signage, landscaping and otherwise make the area suitable for pedestrian and vehicular traffic (including adherence with City requirements) reasonably necessary to serve a commercial development. (See, e.g., *Dolnikov v. Ekesian* (2013) 222 Cal.App.4th 419, 430-431.) As stated, we believe that the Access Easement has been developed/used in this manner in connection with the prior restaurant use (Marie Callender) and the current restaurant use (Forbes Grill) at the CFA Premises.

Regarding claims of “over-burdening,” the Access Easement may expressly be used “for pedestrian and vehicular traffic of the type and quantity reasonably necessary for the development and operation of” the contemplated commercial use. There is no limit or specification of the “type and quantity” other than what is “reasonably necessary” There is no prohibition on fast-food or drive through use. There is no showing that the level of usage proposed in connection with the Chick-fil-A restaurant is inconsistent with what is “reasonably necessary” for a commercial use allowed under the zoning of the property and compatible with surrounding land uses.

In terms of the limitation referred to by Ms. Conca that there may be “no increase in the burden created by the Access Easement or change in the use of the Access Easement” without the written approval of the owner of the burdened parcel, the baseline to be considered is the use expressly contemplated and agreed to in the Grant of Easement, that is, pedestrian and vehicular traffic “reasonably necessary for the development and operation of a retail/commercial center” The limitation referenced may be applicable if a different and more burdensome type of use is proposed, but the Grant of Easement clearly contemplates a level of use to support a “retail/commercial center,” and under the City’s land use ordinance a fast food restaurant and drive-through are permitted or conditionally permitted commercial uses of the land.

As stated, we do not believe that the Chick-fil-A use is inconsistent with, or exceeds, what was expressly contemplated. Notwithstanding, it should be noted that increased use of an easement is permitted when that increased use is the result of the natural and reasonably contemplated future needs of the dominant tenement. (*Camp Meeker Water System, Inc. v. Public Utilities Com.* (1990) 51 Cal.3d 845, 866; see also *Applegate v. Ota* (1983) 146 Cal.App.3d 702, 711.) This is because easements by their nature are forward looking and must adapt to changing conditions. In this case, the Grant of Easement specifically reflects the parties’ intention that the easement will serve the needs of a “retail/commercial” development. It would be “reasonably contemplated” that the intensity and level of such use may vary depending on the popularity and success of

the development, the tenants/users in the development, the time of year, general economic conditions, and a host of other factors. Simply because some commercial or retail users may generate more pedestrian and/or vehicular traffic than others does not preclude that use under the Grant of Easement. Such fluctuations are “reasonably contemplated” within the scope of the original grant.

Had the parties desired to restrict or prohibit a fast-food or drive-through use, they should (and would) have expressly so stated in the Grant of Easement. They did not.

B. By Signing the Estoppel Certificate On Which Chick-fil-A Expressly Relied, Strategic Equity Investments, LLC / Conca Consented To Chick-fil-A's Use, And Is Estopped From Claiming Otherwise.

By signing the Estoppel Certificate dated September 28, 2022, Strategic Equity Investments, through Ms. Conca, represented to Chick-fil-A that: “There does not exist any state of facts which with the giving of notice, the passage of time or both, would constitute a default under the REA.” The state of facts existing, as expressly stated in the Estoppel Certificate, was that Chick-fil-A was in the process of entering into a ground lease for the property and “will be relying upon the contents of this Estoppel Certificate” in that regard. As a matter of general knowledge, Chick-fil-A operates fast food restaurants with drive-through operations.

It is reasonable to conclude that “with the passage of time” a Chick-fil-A restaurant will be developed on Lot 13-A based on the information set forth in the Estoppel Certificate. Accordingly, Strategic Equity Investments and Ms. Conca expressly represented that the Chick-fil-A use would not “with the passage of time” constitute a default under the Grant of Easement. The facts and representations recited in an estoppel certificate are conclusive, and the signatory may not later deny them. (*Plaza Freeway Ltd. Partnership v. First Mountain Bank* (2000) 81 Cal.App.4th 616, 628–629). Indeed, the purpose of an estoppel certificate is to prevent a party from later taking positions contrary to what is set forth in the estoppel certificate. (*Id.*)

On the strength of the Estoppel Certificate Chick-fil-A elected to waive its due diligence contingency set forth in the Ground Lease and has proceeded with the entitlement and permitting of its restaurant. If Strategic Equity Investments / Ms. Conca had a concern regarding a Chick-fil-A restaurant on the site, it should have so stated in the Estoppel Certificate, rather than representing that it was unaware of any fact that “with the passage of time” could constitute a default.

In addition, Chick-fil-A's pre-application package with a proposed site plan for its project was submitted to the City on May 12, 2022. Therefore, Strategic Equity Investments / Ms. Conca had constructive notice of the application and could have followed up at any time with the City to determine the nature and extent of Chick-fil-A's project. Instead, Strategic Equity Investments / Ms. Conca waited until Chick-fil-A had entered into a ground lease and begun the development process before raising any concerns. As stated, they are estopped from contradicting the representations made in the Estoppel Certificate.

C. The Use Contemplated By Chick-fil-A Is Consistent With, And No More Burdensome Than, The “Cochrane And Butterfield Mixed-Use Development Project” Which Has Been Pending Since At Least 2018.

The Cochrane and Butterfield Mixed-Use Development project (aka “Evergreen Village”) includes “a nine pump gas station, 10,000 square feet of restaurant space, 37,700 square feet of retail space, a 110 room hotel, 40,500 square feet of medical/general office space, and an 85-bed assisted living facility.” (Cochrane and Butterfield Mixed-Use Development Traffic Impact Analysis prepared for City of Morgan Hill by Hexagon Transportation Consultants, Inc. dated June 7, 2018, p. IV.) The owner of the property to be so developed is a successor-in-interest to the Grant of Easement and has the right to use the Access Easement.

That referenced traffic study shows that the Access Easement is one of the access driveways to be used by the project (see Figure 10) and further specifies that one of the uses contemplated is a “fast food restaurant with drive-through window” (Table 6). While that contemplated fast food restaurant with drive-through window is not the Chick-fil-A restaurant at issue, this development plan illustrates that the proposed Chick-fil-A development is consistent with what is contemplated and has been proposed in terms of uses of the Access Easement. To our knowledge, Strategic Equity Investments / Ms. Conca has not objected to or otherwise raised any issues with respect to the uses proposed in connection with the Cochrane and Butterfield Mix Use Development, which will likely generate far more traffic (including on the Access Easement) than Chick-fil-A.

III. SUMMARY AND CONCLUSION

As discussed above, Strategic Equity Investments / Ms. Conca’s complaints regarding use of the Access Easement have no merit:

- First, the language of the Grant of Easement contemplates “pedestrian and vehicular traffic” “reasonably necessary” to accommodate a “retail/commercial” use, and Chick-fil-A’s use is consistent with that scope of use and the property zoning.
- Second, Strategic Equity Investments / Ms. Conca are estopped from asserting that the Chick-fil-A development is inconsistent or would create a default under the Grant of Easement by virtue of signing an Estoppel Certificate representing that the Chick-fil-A use would not “with time” result in a default under the Grant of Easement, on which Chick-fil-A relied.
- Third, the use proposed by Chick-fil-A is consistent with, and far less intensive, than the use proposed on the remainder property in connection with the Cochrane and Butterfield mixed-use development project, which is also contemplated to and has the legal right to use the Access Easement.

Although Chick-fil-A seeks a good relationship with its future neighbor, it should be noted that a person who interferes with the use of an easement deprives the easement owner of a valuable property right, and commits a nuisance that can be enjoined by the owner of the easement. (Civ. Code, § 809.) Moreover, preventing, hindering or

obstructing a person from using land which it has the right to use pursuant to a recorded easement is a criminal infraction. (Pen. Code, § 420.1.)

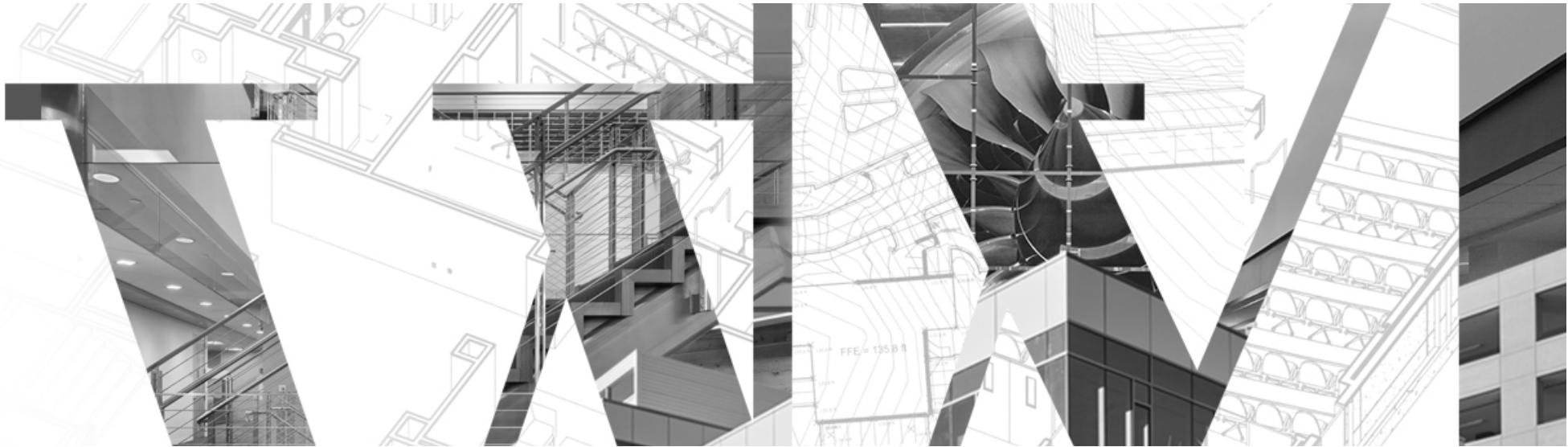
Indeed, a servient owner's (here, Strategic Equity Investments / Ms. Conca) refusal to cooperate in obtaining regulatory and land use approval for improvement of the easement in the manner contemplated, including signing any required permits, constitutes a tortious interference with the easement and entitles the dominant tenement (here, Chick-fil-A and its landlord) to recover damages. (*Dolnikov v. Ekesian* (2013) 222 Cal.App.4th 419, 428-430.) This is especially true where, as here, the current objections of Strategic Equity Investments / Ms. Conca are contrary to representations made in an Estoppel Certificate on which Chick-fil-A relied.



CFA 05180
MORGAN HILL FSU

18599 SUTTER BOULEVARD
MORGAN HILL, CA 95037

CONCEPTUAL DESIGN
PHX22-0187-00
05.15.2023





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CONCEPTUAL RENDERING

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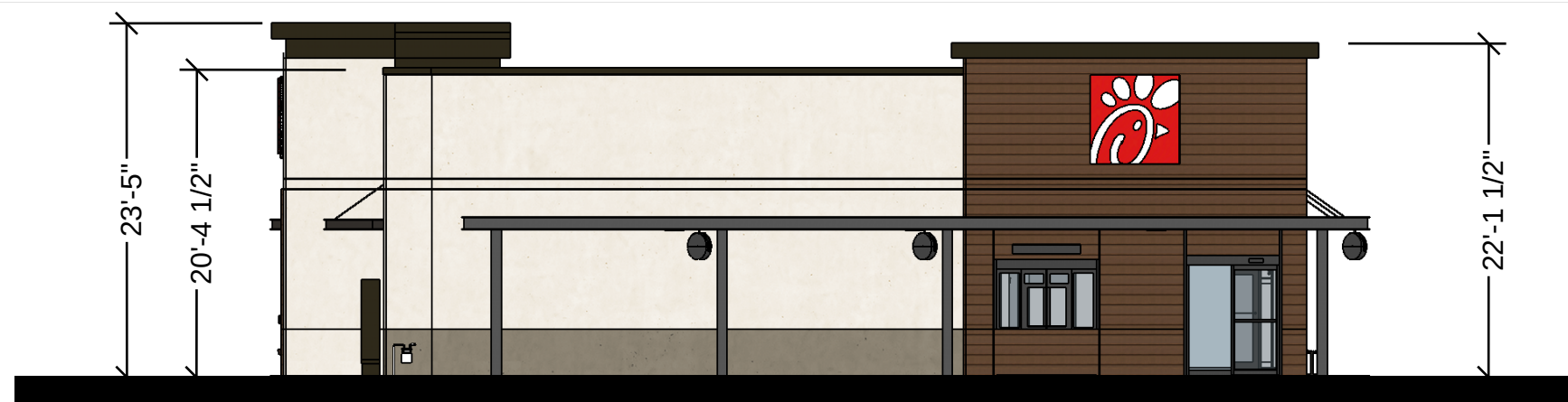
CONCEPTUAL ELEVATIONS

CFA 05180 MORGAN HILL FSU
MORGAN HILL, CA - PHX22-0187-00

WARE MALCOMB

05.15.2023

PAGE
7



This conceptual design is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information, and is intended merely to assist in exploring how the project might be developed. Signage shown is for illustrative purposes only and does not necessarily reflect municipal code compliance. All colors shown are for representative purposes only. Refer to material samples for actual color verification.

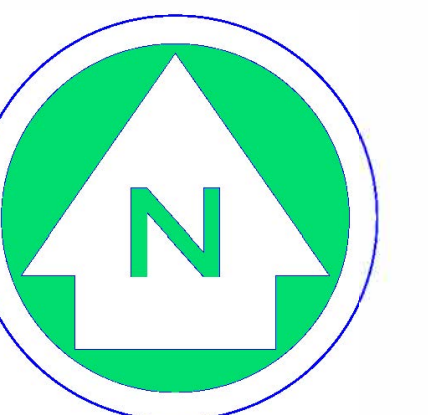
CONCEPTUAL ELEVATIONS

CFA 05180 MORGAN HILL FSU
MORGAN HILL, CA - PHX22-0187-00

WARE MALCOMB

05.15.2023

PAGE
8



2/13/2023 10:53:24 AM Autodesk Docs://CA_05180_Morgan Hill FSU_2022.10_FSR05180_Morgan Hill FSU_ARC.rvt
05-SE-05180-G-000-COVER SHEET

GOVERNMENTAL AGENCIES

BUILDING DEPARTMENT
City of Morgan Hill
Department of Blding & Fire
Prevention Division
17575 Peak Avenue
Morgan Hill, CA 95037
Phone: (408) 778-6480 general
Eric Blomquist, Building Official
eric.blomquist@morganhill.ca.gov

FIRE DEPARTMENT
City of Morgan Hill
Department of Blding & Fire
Prevention Division
17575 Peak Avenue
Morgan Hill, CA 95037
Phone: (408) 778-6480 general
Eric Blomquist, Building Official
eric.blomquist@morganhill.ca.gov

HEALTH DEPARTMENT
Santa Clara County Dept.
Environmental Health | Consumer
Protection Division
1555 Berger Dr. Bldg 2, 3rd Floor
San Jose, CA 95112
Phone: (408) 918-3400 general
Phone: (408) 918-3325 direct
Aziz Hussain, Senior
Environmental Health Specialist
aziz.hussain@cep.sccgov.org

BUILDING DATA

BUILDING CODE:
2019 California Building Code

PLUMBING CODE:
2019 California Plumbing Code

MECHANICAL CODE:
2019 California Mechanical Code

ELECTRICAL CODE:
2019 California Electrical Code

ACCESSIBILITY CODE:
2019 California Building Code

ENERGY CODE:
2019 California Energy Code

FIRE CODE:
2019 California Fire Code

GAS CODE:
2019 California Mechanical Code



05180
P14 SE LRG
MORGAN HILL FSU

18599 SUTTER BOULEVARD
MORGAN HILL, CALIFORNIA 95037



VICINITY MAP

REGION: WEST



DESIGNNOTES APPLIED IN CURRENT PROJECT

DESIGNNOTE #	REV #	DESCRIPTION
2022-014	0	SRI A - BUILDING LIGHTING
2022-015	0	EXPANDED DIGITAL COCKPIT
2022-016	0	DRIVE - THRU COCKPIT CLEARANCE
2022-017	0	SRI EXTERIOR PAINT
2022-018	0	PROJECT DESIGN WORKFLOW
2022-019	0	ACT CEILING RISER ROOM
2022-020	0	ADD CHEROKEE BRICK AS PREFERRED SUPPLIER & BRICK REGIONAL STRATEGY MAP
2022-021	0	UPDATES TO SOIL-FRETREATMENT PROGRAM AND CONTACT INFO
2022-022	0	DRIVE-THRU DUMP SINK AND HAND SINK

ITEMS OF IMPORTANCE

INCLUDED IN PROJECT	ITEM NUMBER	ITEM DESCRIPTION
Yes	1	ITEMS OF IMPORTANCE

*NOTE: REVISION SCHEDULE ABOVE MAY NOT LIST REVISIONS TO ALL DISCIPLINES. REFER TO REVISED DRAWINGS FOR CHANGES TO SHEETS NOT LISTED HERE.

ARCHITECT
WARE MALCOMB
2777 E. CAMELBACK RD,
SUITE #325
PHOENIX, AZ, 85016
Phone: 480.767.1001
JOSH DICKSON
jdickson@waremalcomb.com

ELECTRICAL
ACIES ENGINEERING
400 N. MCCARTHY BLVD, SUITE
250, MILPITAS CA 95035
Phone: (408) 522-5255 x121
Fax: (408) 522-5260
CHRISTIAN DALIMARTA, PE
christian@acies.net

CIVIL
KIMLEY-HORN
4637 CHABOT DRIVE, SUITE 350
PLEASANTON, CA 94588
Phone: (669) 800 4168
JENNIFER KIRBY, PE
jennifer.kirby@kimley-horn.com

LANDSCAPE
HOURIAN ASSOCIATES, INC.
107 AVENIDA MIRAMAR #D
SAN CLEMENTE, CA 92672
Phone: 949.489.5623 x 101
C: 949.412.8888
NICOLE HOURIAN, ASLA
nhourian@hourianassociates.com

Design Permit
SR2022-0024: Sutter - Chick-Fil-A

SHEET INDEX

SHEET NUMBER	SHEET NAME	ISSUED FOR BID	ISSUED FOR PERMIT	ISSUED FOR CONSTRUCTION
G-000	COVER SHEET			
A-100	SITE PLAN			
A-103	REFUSE ENCLOSURE			
A-201	FLOOR PLAN			
A-301	EXTERIOR ELEVATIONS			
A-302	EXTERIOR ELEVATIONS			
A-401	PERSPECTIVES			
ES-0	SINGLE LINE DIAGRAM			
EP1.0	SITE PHOTOMETRIC PLAN			
EP1.1	EXTERIOR LIGHTING CUTSHEET			
EP1.2	EXTERIOR LIGHTING CUTSHEET			
EP1.3	EXTERIOR LIGHTING CUTSHEET			
ES1.0	EXTERIOR LIGHTING PLAN			

Item 2
Attachment 14



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

WARE MALCOMB
Leading Design for Commercial Real Estate

2777 E. CAMELBACK RD, SUITE #325
PHOENIX, AZ, 85016
P 480.767.1001

CHICK-FIL-A
MORGAN HILL FSU

18599 SUTTER BOULEVARD
MORGAN HILL, CALIFORNIA 95037

FSR#05180

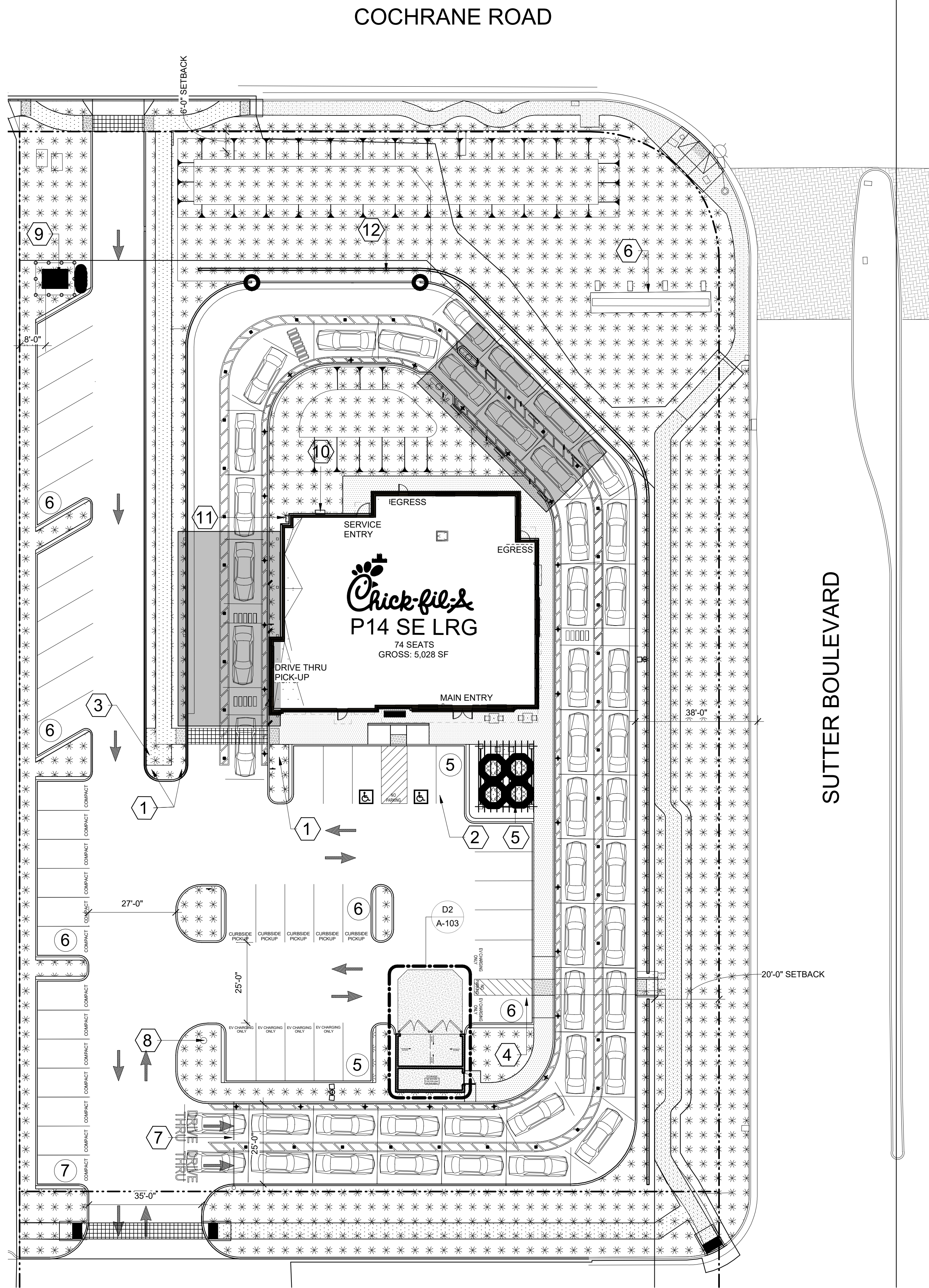
BUILDING TYPE / SIZE: P14 SE LRG
RELEASE: 22-08
PRINTED FOR:
ENTITLEMENT PACKAGE
REVISION SCHEDULE
NO. DATE DESCRIPTION

ENTITLEMENT PACKAGE

CONSULTANT PROJECT # PHX22-0187-00
DATE: 01/31/2023
DRAWN BY: J.M. / V.Z.
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SHEET
COVER SHEET
SHEET NUMBER

G-000

B1 SITE PLAN
1" = 20'-0"



SITE PLAN KEYNOTES	
1	SIGNAGE PER SIGNAGE PACKAGE, TYP.
2	ADA PARKING.
3	SHORT-TERM BIKE PARKING.
4	LOCATION OF LONG-TERM BIKE STORAGE.
5	PATIO PLAN.
6	EXISTING MONUMENT.
7	CLEARANCE BAR PER SIGNAGE.
8	FLAG POLE.
9	TRANSFORMER.
10	ELECTRICAL METER
11	GAS METER.
12	NEW SITE WALL.

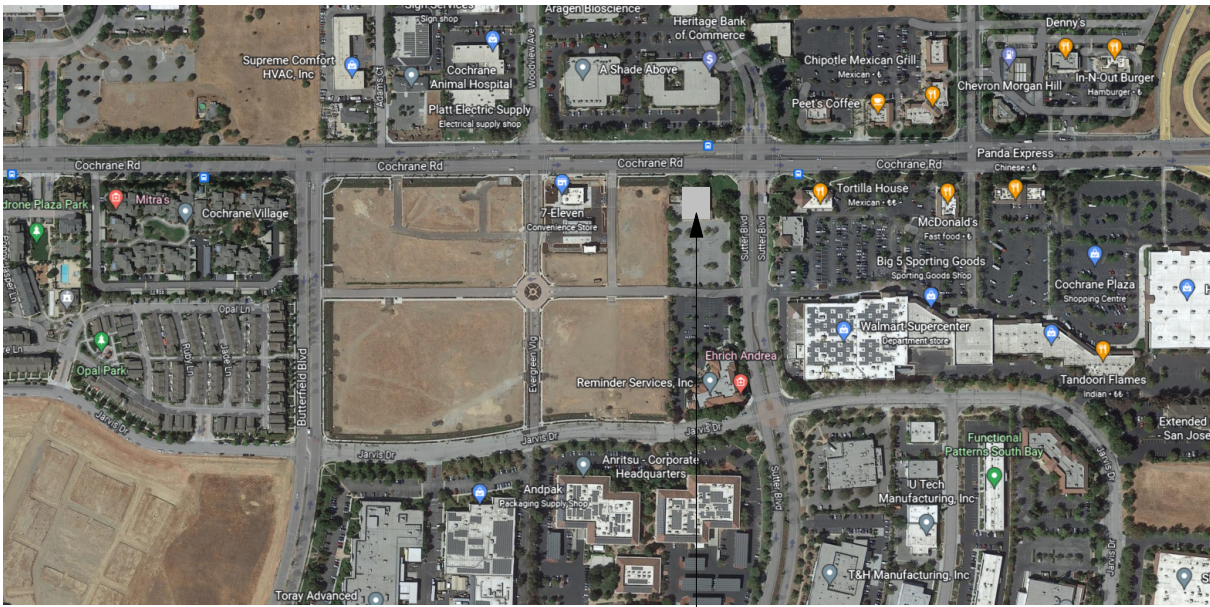
GENERAL NOTES:

FOR ACCESSIBLE ROUTE MAX SLOPE 3% AND CROSS SLOPE 2% ALONG PATH AND 2% SLOPE IN ANY DIRECTION AT EACH TURN AND INTERSECTION OF THE PATH OF TRAVEL.

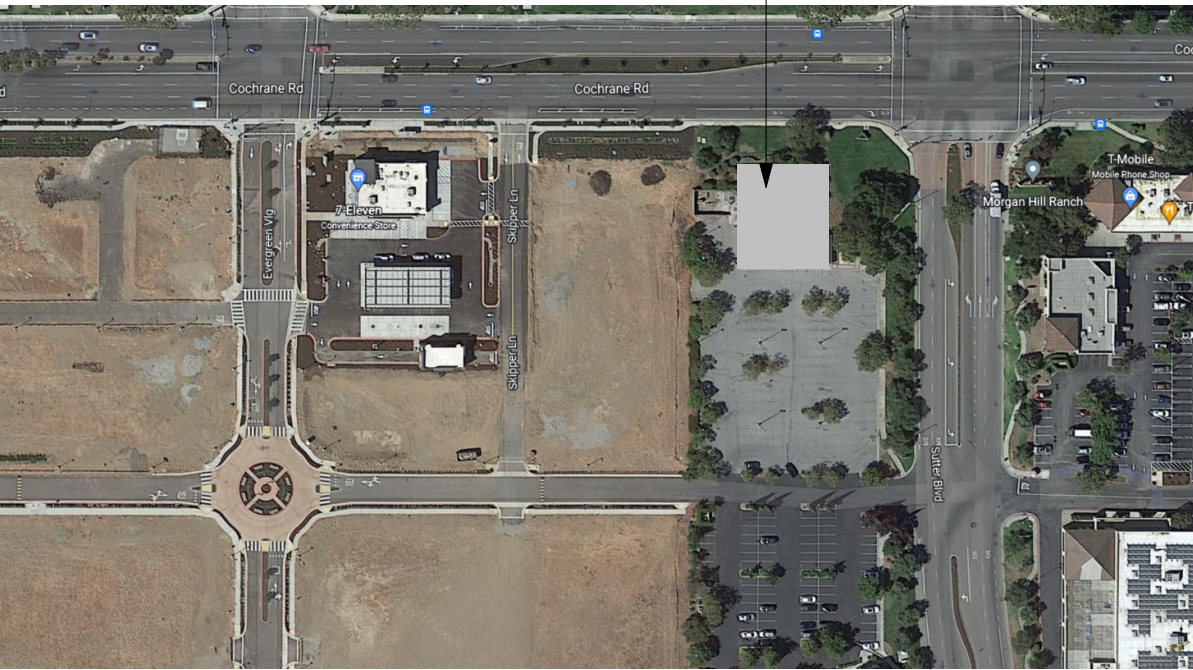
PROJECT DATA:	
SITE AREA GROSS:	1.82 AC 79,473 SF
BUILDING FOOTPRINT: CHICK-FIL-A	5,028 SF
TOTAL FOOTPRINT:	5,028 SF
COVERAGE:	6%
PARKING REQUIRED:	RESTAURANT (3,028 SF) MAX. COMPACT ALLOWED
	1,968 SF / 60 PUBLIC SP= 33.3 3,030 SF / 250 GFA = 12.12 30%
	46 STALLS 15 STALLS
PARKING PROVIDED:	STANDARD: 48 STALLS REG. ACCESSIBLE (810,341,000 SF) 2 STALLS
DT STACK	62 CARS
OP CANOPY	8TH CAR AT INNER LANER
DEVELOPMENT STANDARDS:	
ZONING:	PUD (CG)
MAX. HEIGHT:	35'-0" FT
BUILDING SETBACKS:	FRONT: 25'-0" FT FROM SUTTER BLVD: 30'-0" FT FROM COCHRANE BLVD: 40'-0" FT REAR: 20'-0" FT
LANDSCAPE SETBACKS:	FRONT: 25'-0" FT SIDE: 0'-0" FT REAR: 20'-0" FT
LANDSCAPE REQ:	10%
OFF-STREET PARKING:	STANDARD: 8X16 COMPACT: 8X16 COMPACT %: 30% DRIVE AISLE: 25 FT FIRE LANE: 20 FT OVERHANG: 2 FT TREE WELL: 5 FT
REQ. PARKING RATIO BY USE:	RESTAURANT: 1,100 SF RETAIL: 1,050 SF OFFICE: 1,050 SF
NOTES:	1. TYPE A, FOR PARKING AREAS LESS THAN 50,000 SF-5% OTHERWISE 8%.
PARKING CALCULATION:	
ACCESSIBLE STALL REQUIRED	
PER CBC	3
ACCESSIBLE STALLS PROVIDED	3
10% OF REQUIRED PARKING	3
SHORT TERM BIKE STORAGE REQUIRED	6
SHORT TERM PARKING REQUIRED	6

SITE PLAN LEGEND

LANDSCAPE	
PROPERTY LINE	
BUILDING LINE	
EXISTING 6" CURB	
EXISTING SIDEWALK	
EXISTING CURBS AND SIDEWALKS	
OUTDOOR SEATING	
ACCESSIBLE ROUTE 2% MAX SLOPE	
4" WIDE DIAGONAL STRIPPING	
PARKING LIGHT FIXTURE (SEE ELECTRICAL DRAWING)	
EASEMENT LINE	
VEHICLE (20'-0" LENGTH TYP.)	



PROJECT SITE
PROJECT SITE



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

WARE MALCOMB
Leading Design for Commercial Real Estate

2777 E. CAMELBACK RD, SUITE #325
PHOENIX, AZ, 85016
P 480.767.1001

CHICK-FIL-A
MORGAN HILL FSU
18599 SUTTER BOULEVARD
MORGAN HILL, CALIFORNIA 95037

FSR#05180

BUILDING TYPE / SIZE: P14 SE LRG

RELEASE: 22-08

PRINTED FOR

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REVISION SCHEDULE

NO. DATE DESCRIPTION

ENTITLEMENT PACKAGE

CONSULTANT PROJECT # PHX22-0187-00

DATE: 01/31/2023

DRAWN BY: J.M. / V.Z.

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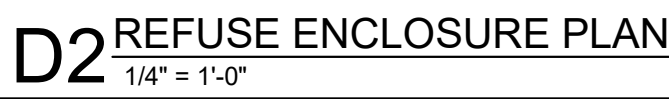
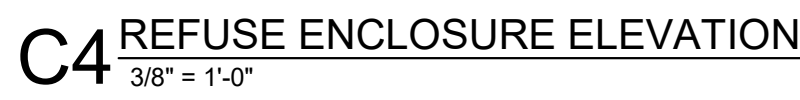
SHEET

SITE PLAN

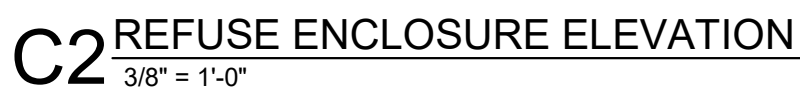
SHEET NUMBER

A-100

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$$\overline{1/4'' = 1'-0''}$$


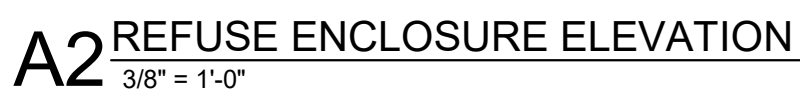
• $3/8'' = 1'-0''$


$$\overline{3/8'' = 1'-0''}$$


D4 $\frac{1}{2}'' = 1'-0''$

REFUSE ENCLOSURE NOTES

- B1** REFUSE ENCLOSURE GATE REAR ELEVATION
3/8" = 1'-0"

$$\frac{3}{8}'' = 1'-0''$$


3/8" = 1'-0"

18599 SUTTER BOULEVARD
MORGAN HILL, CALIFORNIA 95037

BUILDING TYPE / SIZE: P14 SE LRG
RELEASE: 22.08

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ENTITLEMENT PACKAGE

CONSULTANT PROJECT # PHX22-0187-00

RAWN BY J.M. / V.Z.

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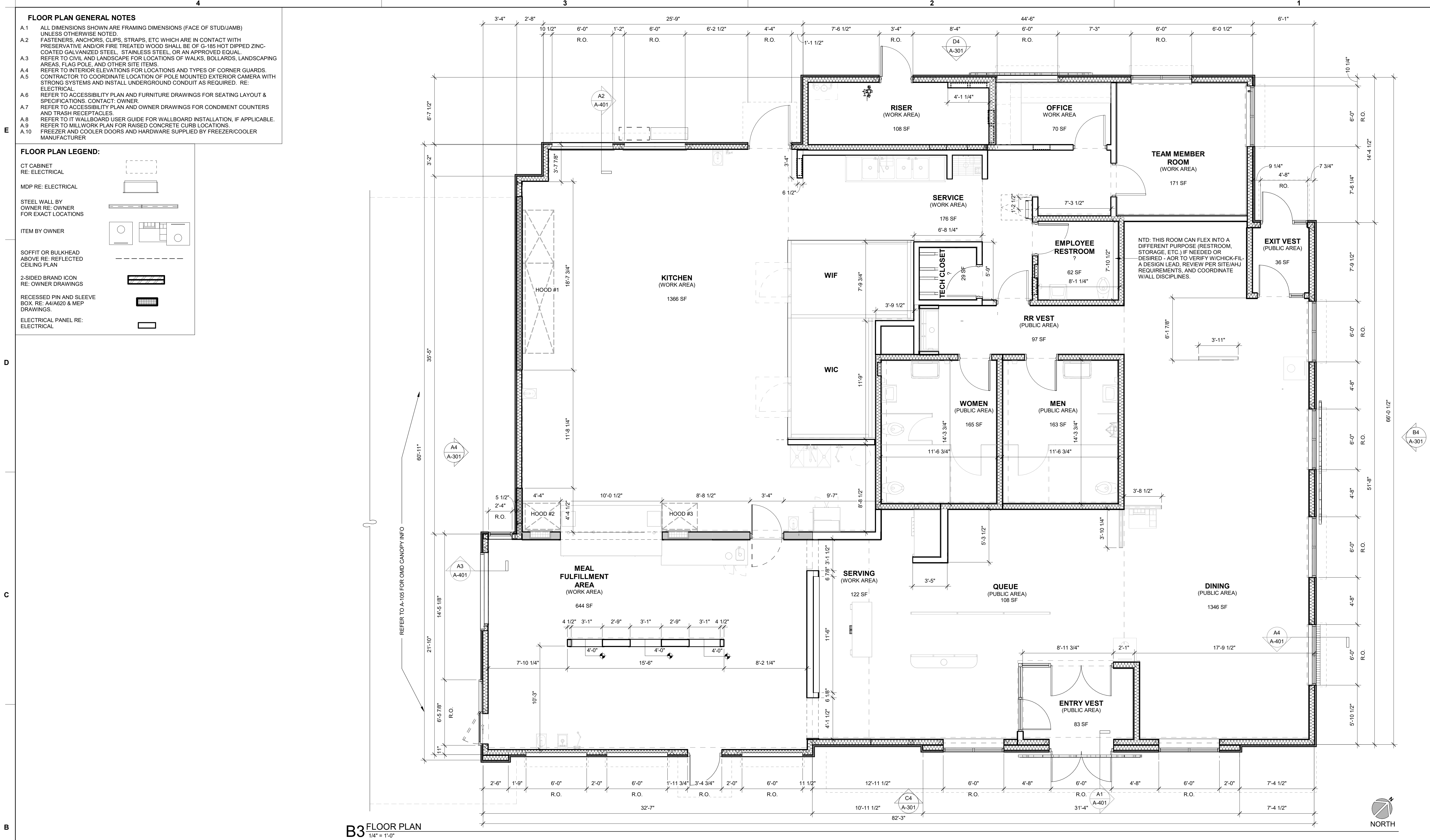
Authorized project representatives.

SHEET
REFUSE ENCLOSURE

REFUSE ENCLOSURE

SHEET NUMBER _____

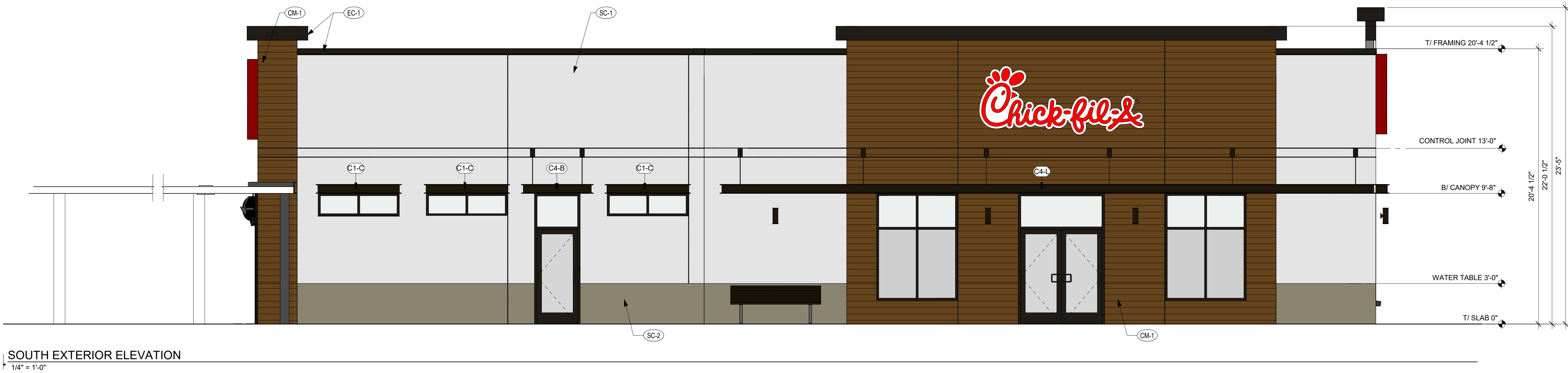
A-103



2/13/2023 10:52:13 AM Autodesk Docs/CA_05180_Morgan Hill FSU_2022.10_FSR05180_Morgan Hill FSU_ARC.rvt
10-SE-05180-A-301-EXTERIOR ELEVATIONS



NORTH EXTERIOR ELEVATION
1/4" = 1'-0"



SOUTH EXTERIOR ELEVATION
1/4" = 1'-0"

FINISH SCHEDULE - EXTERIOR						
MARK	DESCRIPTION	MANUFACTURER	MODEL NAME	MODEL NUMBER	COLOR	NOTE
CM-1	WOOD CLADDING	AZEK EXTERIORS	TIMBER TECH ADVANCED PVC BY AZEK; VINTAGE COLLECTION		MAHOGANY	
EC-1	PARAPET WALL COPING	DUROLAST / EXCEPTIONAL METALS			MIDNIGHT BRONZE	
PT-100	EXTERIOR PAINT	SHERWIN WILLIAMS	SHER-CRYL HIGH PERFORMANCE ACRYLIC #B66-350	SW 2807	ROOKWOOD	REFUSE ENCLOSURE - FINISH: SEMI-GLOSS ON DOOR FRAMES, SATIN ON WALLS
PT-113	EXTERIOR PAINT	SHERWIN WILLIAMS	SHER-CRYL HIGH PERFORMANCE ACRYLIC #B66-350		DARK BRONZE	FINISH: SEMI-GLOSS
SC-1	STUCCO	STO	POWERWALL	SW 7566	WESTHIGHLAND WHITE	FINISH: SAND MEDIUM
SC-2	STUCCO	STO	POWERWALL	SW 6172	HARDWARE	FINISH: SAND MEDIUM
ST-1	STOREFRONT	YKK	YES 45		DARK BRONZE (MATTE)	

ATTACHED CANOPY SCHEDULE						
Mark	Description	Count	Overall Width	Overall Depth (Offset From Top)	Tie Back Mounting	Integral Lighting
C1-C	Exterior Canopy	12	6'-4"	1'-0"	No	
C4-A	Exterior Canopy	1	5'-0"	4'-0"	2'-4"	Yes
C4-B	Exterior Canopy	2	5'-4"	4'-0"	2'-4"	Yes
C4-L	Exterior Canopy	1	48'-6"	4'-0"	2'-4"	Yes
Grand total		16				
CANOPY NOTES:						
BUILDING MOUNTED CANOPIES			- 8" THICK CANOPY - KYNAR FINISH OF STRUCTURE, FASCIA, & DECKING TO MATCH (CP-1)			
COLUMN MOUNTED CANOPIES			- 10" THICK CANOPY - FINISH OF STRUCTURE TO BE (CP-1) - FINISH OF DECKING TO BE (CP-2)			

LEGEND		EXPANSION JOINT, SEALANT COLOR TO MATCH MORTAR COLOR		OIL EXTRACTION PORT ACCESS BOX	
	CM-1		EC-1		CO2 FILL BOX - RE: KITCHEN
	SC-1		MDP - 6T-113 RE: ELECTRICAL		LIGHT FIXTURE - RE: ELECTRICAL
	SC-2		CT CABINET - 6T-113 RE: ELECTRICAL		
	EC-1				



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

WARE MALCOMB
Leading Design for Commercial Real Estate

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PHOENIX, AZ, 85016
P 480.767.1001

CHICK-FIL-A
MORGAN HILL FSU

18599 SUTTER BOULEVARD
MORGAN HILL, CALIFORNIA 95037

FSR#05180

BUILDING TYPE / SIZE: P14 SE LRG

RELEASE: 22.08

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REVISION SCHEDULE

NO. DATE DESCRIPTION

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CONSULTANT PROJECT # PHX22-0187-00

DATE 01/31/2023

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NO. DATE DESCRIPTION

EXTERIOR ELEVATIONS

SHEET NUMBER

A-301

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10-SE-05180-A-302-EXTERIOR ELEVATIONS (COLOR)



FINISH SCHEDULE - EXTERIOR						
MARK	DESCRIPTION	MANUFACTURER	MODEL NAME	MODEL NUMBER	COLOR	NOTE
CM-1	WOOD CLADDING	AZEK EXTERIORS	TIMBER TECH ADVANCED PVC BY AZEK VINTAGE COLLECTION		MAHOGANY	
EC-1	PARAPET WALL COPING	DUROLAST / EXCEPTIONAL METALS			MIDNIGHT BRONZE	
PT-100	EXTERIOR PAINT	SHERWIN WILLIAMS	SHER-CRYL HIGH PERFORMANCE ACRYLIC #B66-350	SW 2807	ROCKWOOD	REFUSE ENCLOSEURE - FINISH: SEMI-GLOSS ON DOOR FRAMES, SATIN ON WALLS
PT-113	EXTERIOR PAINT	SHERWIN WILLIAMS	SHER-CRYL HIGH PERFORMANCE ACRYLIC #B66-350		DARK BRONZE	FINISH: SEMI-GLOSS
SC-1	STUCCO	STO	POWERWALL	SW 7566	WESTHIGHLAND WHITE	FINISH: SAND MEDIUM
SC-2	STUCCO	STO	POWERWALL	SW 6172	HARDWARE	FINISH: SAND MEDIUM
ST-1	STOREFRONT	YKK	YES 45		DARK BRONZE (MATTE)	

ATTACHED CANOPY SCHEDULE						
Mark	Description	Count	Overall Width	Overall Depth	Tie Back Mounting (Offset From Top)	Integral Lighting
C1-C	Exterior Canopy	12	6'-4"	1'-0"	0"	No
C4-A	Exterior Canopy	1	5'-0"	4'-0"	2'-4"	Yes
C4-B	Exterior Canopy	2	5'-4"	4'-0"	2'-4"	Yes
C4-L	Exterior Canopy	1	48'-6"	4'-0"	2'-4"	Yes
Grand total		16				
CANOPY NOTES:						
BUILDING MOUNTED CANOPIES			- 8" THICK CANOPY - KYNAR FINISH OF STRUCTURE, FASCIA, & DECKING TO MATCH (CP-1)			
COLUMN MOUNTED CANOPIES			- 10" THICK CANOPY - FINISH OF STRUCTURE TO BE (CP-1) - FINISH OF DECKING TO BE (CP-2)			

LEGEND		EXPANSION JOINT, SEALANT COLOR TO MATCH MORTAR COLOR		OIL EXTRACTION PORT ACCESS BOX	
	CM-1				
	SC-1				CO2 FILL BOX - RE: KITCHEN
	SC-2				LIGHT FIXTURE - RE: ELECTRICAL
	EC-1				OT CABINET - ET-113 RE: ELECTRICAL



Chick-fil-A

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

WARE MALCOMB
Leading Design for Commercial Real Estate

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PHOENIX, AZ, 85016
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CHICK-FIL-A
MORGAN HILL FSU
18599 SUTTER BOULEVARD
MORGAN HILL, CALIFORNIA 95037

FSR#05180

BUILDING TYPE / SIZE: P14 SE LRG
RELEASE: 22-08

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CONSULTANT PROJECT # PHX22-0187-00
DATE 01/31/2023

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EXTERIOR ELEVATIONS

SHEET

SHEET NUMBER

A-302

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SE-05180-A-401-EXTERIOR PERSPECTIVES



C2 PERSPECTIVES



C1 PERSPECTIVES



A2 PERSPECTIVES



A1 PERSPECTIVES



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

WARE MALCOMB
Leading Design for Commercial Real Estate

2777 E. CAMELBACK RD, SUITE #325
PHOENIX, ARIZONA, 85016
P 480.767.1001

CHICK-FIL-A
MORGAN HILL FSU
18599 SUTTER BLVD
MORGAN HILL, CALIFORNIA 95037

FSR#05180

BUILDING TYPE / SIZE: P14 SE LRG

RELEASE: 22-08

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REVISION SCHEDULE
NO. DATE DESCRIPTION

ENTITLEMENT PACKAGE

CONSULTANT PROJECT # PHX22-0187-00

DATE: 08/11/2023

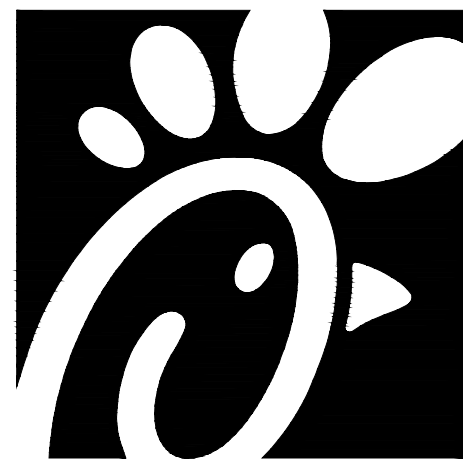
DRAWN BY: V.Z.

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SHEET
EXTERIOR
PERSPECTIVES

SHEET NUMBER

A-401



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5200 Buffington Road
Atlanta, Georgia
30349-2998

WARE MALGOMB
Leading Design for Commercial Real Estate

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Pleasanton, CA 94588
P 925.244.9620
F 925.244.9621

CHICK-FIL-A
18599 SUTTER BOULEVARD
MORGAN HILL, CA 95037

FSR# 0000

BUILDING TYPE / SIZE:
RELEASE:
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SHEET

SITE PHOTOMETRIC PLAN

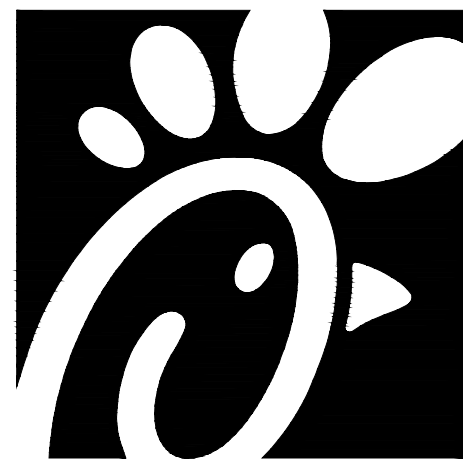
SHEET NUMBER

SITE PHOTOMETRIC PLAN

SCALE
1/16" = 1'-0"

1

EP1.0



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

WARE MALGOMB
Leading Design for Commercial Real Estate

4683 Chabot Drive, Ste 300
Pleasanton, CA 94588
P 925.244.9620
F 925.244.9621

CHICK-FIL-A
18599 SUTTER BOULEVARD
MORGAN HILL, CA 95037

FSR# 0000

BUILDING TYPE / SIZE:
RELEASE:
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SHEET

EXTERIOR LIGHTING PLAN

SHEET NUMBER

ES1.0

SUTTER BOULEVARD

SITE BOUNDARY

(E) LIGHT POLE

(E) LIGHT POLE

Chick-fil-A

TYPICAL
OF 9

TYPICAL
OF 10

TYPICAL
OF 10

A1

A1

DRIVE THRU

DRIVE THRU

SCHEDULE

SYMBOL	TAG	QTY	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	FILE NAME	(QTY)LAMP	LUMENS	LLF	WATTS	DISTRIBUTION	MOUNTING HEIGHT
	A1	2	COOPER LIGHTING	PRV-PA2A-730-U-T4W	PREVAIL AREA AND ROADWAY LUMINAIRE (2) 70 CRI, 3000K, 720mA LIGHT ENGINES WITH 24 LEADS AND TYPE IV WIDE OPTICS	PRV-PA2A-730-U-T4W.ies	1	14,170	0.9	113.0	BUG RATING : B3-U0-G3	25 FT
	A	7	COOPER LIGHTING	PRV-PA2A-730-U-T4W-HSS	PREVAIL AREA AND ROADWAY LUMINAIRE (2) 70 CRI, 3000K, 720mA LIGHT ENGINES WITH 24 LEADS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD	PRV-PA2A-730-U-T4W-HSS.ies	1	10,262	0.9	113.0	BUG RATING : B1-U0-G3	25 FT
	B	20	DECO LIGHTING	D533R-PRO-55-30-U-5-W-M	LED CANOPY LUMINAIRE, 3000K, 80 CRI		1	7910	0.9	55		RECESS
	C	9	PROGRESS LIGHTING	P5675-31	5" UP/DOWN CYLINDER WITH HEAVY DUTY ALUMINUM CONSTRUCTION, WET LISTED, WITH TWO GENERAL ELECTRIC RETROFIT LAMPS #LED12P30RW83025		2		0.9	24	BUG RATING : B1-U0-G1	8 FT

(E) LIGHT POLE

EXTERIOR LIGHTING PLAN

SCALE
1/16" = 1'-0"

1

EXISTING TREE LEGEND

BOTANICAL NAME	COMMON NAME	HGT./CALIPER	ACTION
1 PLATANUS ACERIFOLIA	LONDON PLANE TREE	8'	REMAIN
2 PLATANUS ACERIFOLIA	LONDON PLANE TREE	7'	REMAIN
3 PLATANUS ACERIFOLIA	LONDON PLANE TREE	7'	REMAIN
4 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMAIN
5 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMAIN
6 PLATANUS ACERIFOLIA	LONDON PLANE TREE	8'	REMAIN
7 PLATANUS ACERIFOLIA	LONDON PLANE TREE	4',5',6',5',6'	REMAIN
8 PLATANUS ACERIFOLIA	LONDON PLANE TREE	7'	REMAIN
9 PLATANUS ACERIFOLIA	LONDON PLANE TREE	7'	REMAIN
10 PLATANUS ACERIFOLIA	LONDON PLANE TREE	9'	REMAIN
11 PLATANUS ACERIFOLIA	LONDON PLANE TREE	8'	REMAIN
12 PLATANUS ACERIFOLIA	LONDON PLANE TREE	15'	REMAIN
13 PLATANUS ACERIFOLIA	LONDON PLANE TREE	9'	REMAIN
14 PLATANUS ACERIFOLIA	LONDON PLANE TREE	13'	REMAIN
15 PLATANUS ACERIFOLIA	LONDON PLANE TREE	16'	REMAIN
16 QUERCUS AGRIFOLIA	COAST LIVE OAK	24'	REMAIN
17 PALM	PALM	6'	REMAIN
18 PALM	PALM	5'	REMAIN
19 PALM	PALM	6'	REMAIN
20 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMAIN
21 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMAIN
22 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMAIN
23 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMAIN
24 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMAIN
25 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMAIN
26 PLATANUS ACERIFOLIA	LONDON PLANE TREE	16'	REMAIN
27 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMAIN
28 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMAIN
29 PLATANUS ACERIFOLIA	LONDON PLANE TREE	11'	REMAIN
30 ACER PALMATUM	JAPANESE MAPLE	3',3',3',6',4'	REMAIN
31 PLATANUS ACERIFOLIA	LONDON PLANE TREE	12'	REMAIN
32 PLATANUS ACERIFOLIA	LONDON PLANE TREE	10'	REMAIN
33 QUERCUS AGRIFOLIA	COAST LIVE OAK	19'	REMAIN
34 QUERCUS AGRIFOLIA	COAST LIVE OAK	24'	REMAIN
35 QUERCUS AGRIFOLIA	COAST LIVE OAK	28'	REMAIN
36 PLATANUS ACERIFOLIA	LONDON PLANE TREE	16'	REMAIN
37 PYRUS KAWAKAMII	EVERGREEN PEAR	30'	REMAIN
38 PYRUS KAWAKAMII	EVERGREEN PEAR	11'	REMAIN
39 PYRUS KAWAKAMII	EVERGREEN PEAR	4',4',2'	REMAIN
40 OLEA EUROPAEA 'WILSONI'	FRUITLESS OLIVE	4',4',4',4',4',3'	REMAIN
41 OLEA EUROPAEA 'WILSONI'	FRUITLESS OLIVE	3'	REMAIN
42 PYRUS KAWAKAMII	EVERGREEN PEAR	6'	REMAIN

ORDINANCE TREES TO BE REMOVED:
INDIGENOUS 4
NON-INDIGENOUS 0
ORDINANCE TREES TO REMAIN: 2

PLANTING NOTES

- CONTRACTOR IS TO REVIEW PLANS, VERIFY SITE CONDITIONS AND PLANT QUANTITIES PRIOR TO INSTALLATION. CONFLICTS BETWEEN THE SITE AND THESE PLANS OR WITHIN THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO LANDSCAPE INSTALLATION. ANY DEVIATIONS FROM THE PLANS OR SPECIFICATIONS IS TO HAVE WRITTEN APPROVAL.
- ALL PLANT MATERIAL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF 'AMERICAN NURSERY AND LANDSCAPE ASSOCIATION' STANDARDS. WWW.ANLA.ORG
- LANDSCAPE ARCHITECT SHALL APPROVE PLANT MATERIAL PLACEMENT BY CONTRACTOR PRIOR TO INSTALLATION.
- CONTRACTOR TO INCLUDE IN HIS BID THE REPAIR OF ANY AND ALL DAMAGE RESULTING FROM INSTALLATION OF PLANTING ITEMS. CONNECT TO EXISTING CONDITIONS.
- PERIMETER OF ALL RAISED PLANTERS TO HAVE A ROOT BARRIER TO REDIRECT ROOT GROWTH PER MANUFACTURER'S SPECIFICATIONS.
- FINISH GRADE TO BE 3" BELOW TOP OF CURB OR SIDEWALK FOR PLANTING AREAS.
- FERTILIZER FOR ALL PLANTING AREAS SHALL BE AS SPECIFIED WITHIN THE SOILS REPORT.
- FOR LANDSCAPE INSTALLATIONS, COMPOST AT A RATE OF A MINIMUM OF FOUR (4) CUBIC YARDS PER ONE THOUSAND SQUARE FEET OF PERMEABLE AREA SHALL BE INCORPORATED TO A DEPTH OF SIX INCHES INTO THE SOIL.
- ALL PLANTING AND IRRIGATION ON THIS PROJECT TO MEET OR EXCEED CITY LANDSCAPE GUIDELINES, STANDARDS AND AGENCY REQUIREMENTS.
- ALL PLANTER AREAS SHALL BE TOP DRESSED WITH 3" MINIMUM RECYCLED REDWOOD BARK MULCH COVER.
- ALL PLANTING AREAS SHALL BE IRRIGATED WITH SUB-GRADE BUBBLERS FOR TREES AND DRIP-IRRI FOR SHRUBS/GROUND COVERS. CONNECTED TO AUTOMATIC REMOTE CONTROL VALVES (SEPARATE VALVES FOR TREES AND DRIP IRRIGATION) AND TIED INTO AN AUTOMATIC IRRIGATION 'SMART' CONTROLLER WITH RAIN SENSOR DEVICE.
- THE LANDSCAPE CONTRACTOR SHALL MAINTAIN ALL PLANTED AREAS BY MEANS OF CONTINUOUS WATERING, PRUNING, RAISING TREE BALLS WHICH SETTLE BELOW GRADE, FERTILIZING, APPLICATION OF SPRAYS WHICH ARE NECESSARY TO KEEP THE PLANTINGS FREE OF INSECTS AND DISEASES, WEEDING, AND/OR OTHER OPERATIONS NECESSARY FOR PROPER CARE AND UPKEEP. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN ALL PLANTINGS AS SPECIFIED ABOVE FOR A PERIOD OF NINETY (90) DAYS.
- ALL PLANTER BEDS TO BE AMENDED WITH SOIL PREPARATION PER SPECIFICATIONS. NO DEVIATIONS ARE ALLOWED.
- ALL PLANTING TO BE IRRIGATED WITH POTABLE WATER (NO RECYCLED WATER IS AVAILABLE FOR THIS SITE).
- SUBSEQUENT TO MASS GRADING ON SITE AND PRIOR TO PLANTING, THE CONTRACTOR SHALL SUBMIT A SOIL SAMPLE TO A CERTIFIED SOILS LABORATORY FOR A SOIL ANALYSIS REPORT AND ADHERE TO ALL RECOMMENDATIONS OF THE SOILS LABORATORY.

REQUIRED CITY SOIL AMENDMENT NOTES

PRIOR TO THE PLANTING OF ANY MATERIALS, COMPACTED SOILS SHALL BE TRANSFORMED TO A FRIABLE CONDITION. ON ENGINEERED SLOPES, ONLY AMENDED PLANTING HOLES NEED MEET THIS REQUIREMENT.

SOIL AMENDMENTS SHALL BE INCORPORATED ACCORDING TO RECOMMENDATIONS OF THE SOIL REPORT AND WHAT IS APPROPRIATE FOR THE PLANTS SELECTED.

FOR LANDSCAPE INSTALLATIONS, COMPOST AT A RATE OF A MINIMUM OF FOUR CUBIC YARDS PER ONE THOUSAND SQUARE FEET OF PERMEABLE AREA SHALL BE INCORPORATED TO A DEPTH OF SIX INCHES INTO THE SOIL. SOILS WITH GREATER THAN SIX PERCENT ORGANIC MATTER IN THE TOP SIX INCHES OF SOIL ARE EXEMPT FROM ADDING COMPOST AND TILLING.

A MINIMUM THREE-INCH LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF CURBS, IN TURF AREAS, CREEPING OR ROOTING PLANTS, AND IN ALL OTHER AREAS. GROUNDCOVERS, OR DIRECT SEEDING APPLICATIONS WHERE MULCH IS CONTRAINDICATED, TO PROVIDE HABITAT FOR BENEFICIAL INSECTS AND OTHER WILDLIFE, UP TO FIVE PERCENT OF THE LANDSCAPE AREA MAY BE LEFT WITHOUT MULCH. DESIGNATED INSECT HABITAT MUST BE INCLUDED IN THE LANDSCAPE DESIGN PLAN AS SUCH.

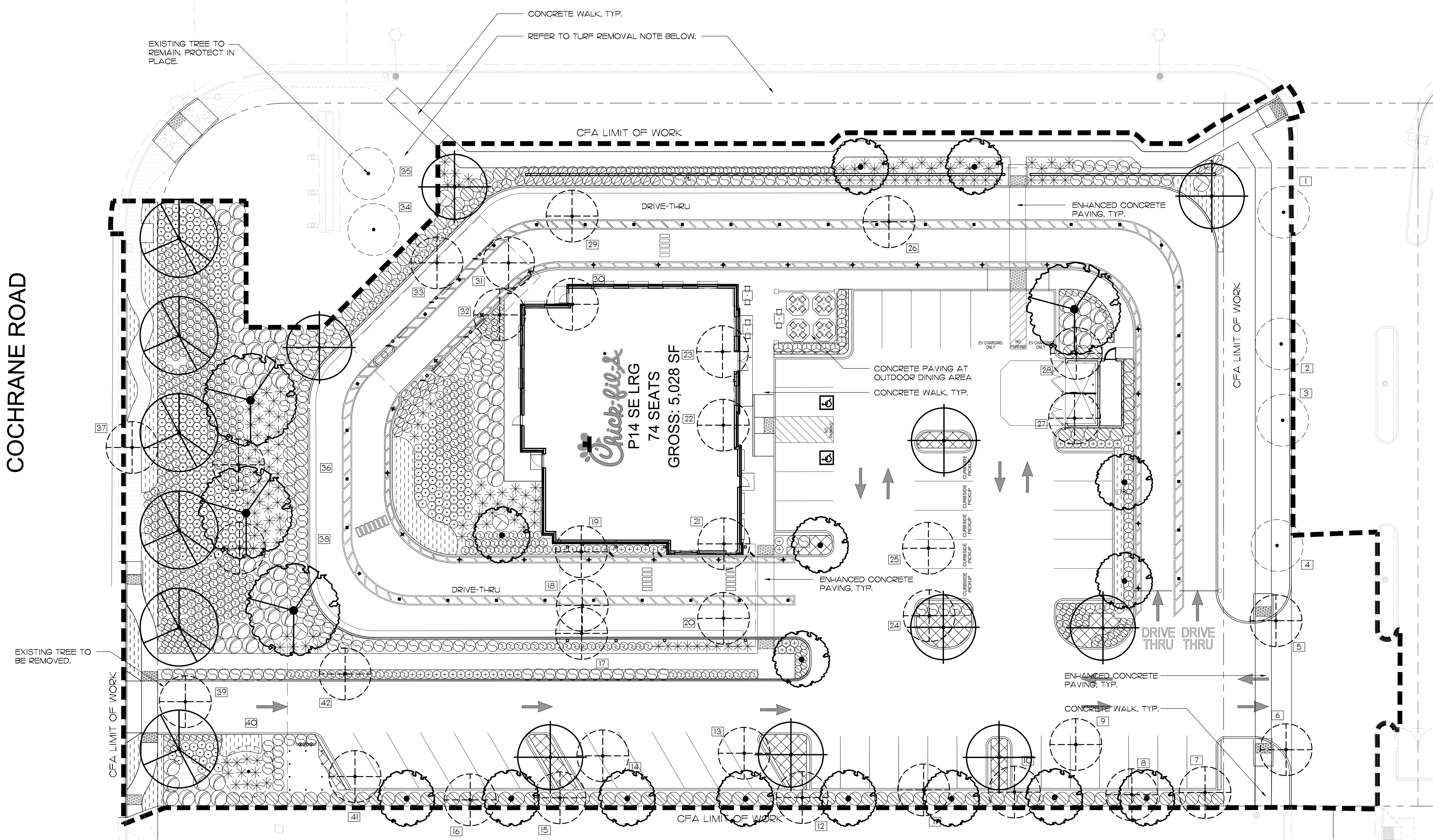
STABILIZING MULCHING PRODUCTS SHALL BE USED ON SLOPES THAT MEET CURRENT ENGINEERING STANDARDS.

THE MULCHING PORTION OF THE SEED/MULCH SLURRY IN HYDRO-SEEDED APPLICATIONS SHALL MEET THE MULCHING REQUIREMENT.

ORGANIC MULCH MATERIALS MADE FROM RECYCLED OR POST-CONSUMER SHALL TAKE PRECEDENCE OVER INORGANIC MATERIALS OR VIRGIN FOREST PRODUCTS UNLESS THE RECYCLED POST-CONSUMER ORGANIC PRODUCTS ARE NOT LOCALLY AVAILABLE. ORGANIC MULCHES ARE PROHIBITED WHERE PROHIBITED BY LOCAL FUEL MODIFICATION PLAN GUIDELINES OR OTHER APPLICABLE LOCAL ORDINANCES. (THE USE OF BARK MULCH, GORILLA MULCH, SHREDDED CEDAR ARE STRONGLY DISCOURAGED AND SHOULD NOT BE USED IN ANY PROJECT.)

COCHRANE ROAD

SUTTER BOULEVARD



1 PLANTING PLAN

SCALE: 1" = 16'-0"

PLANTING LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	REMARKS	WUCOLS IV REGION I
	LAGERSTROEMIA X MUKOSEE	GRAPE MYRTLE	24" BOX	12	STANDARD DECIDUOUS	LOW
	OLEA EUROPAEA 'SWAN HILL'	FRUITLESS OLIVE	36" BOX	9	MULTI-TRUNK DECIDUOUS	LOW
	QUERCUS AGRIFOLIA	COAST LIVE OAK	36" BOX	4	STANDARD EVERGREEN	LOW
	ULMUS PARVIFOLIA	EVERGREEN ELM	24" BOX	6	STANDARD EVERGREEN	LOW
	TYP. EXISTING TREE TO BE REMOVED (35 TOTAL), SEE LISTING THIS SHEET.					
	TYP. EXISTING TREE TO REMAIN (7 TOTAL), SEE LISTING THIS SHEET.					

REQUIRED CITY NOTES:

THIS IS A NEW PROJECT TO BE PRIVATELY MAINTAINED.

WATER SUPPLY TO BE POTABLE WATER. CITY OF MORGAN HILL WATER DIVISION IS THE WATER PURVEYOR.

THE DEVELOPER WILL SUBMIT RECEIPTS AND/OR INVOICES FOR ALL COMPOST AND MULCH PURCHASES TO ENVIRONMENTAL SERVICES DIVISION AFTER FINAL CONSTRUCTION AND HAVE THIS STATEMENT SIGNED BY THE OWNER/DEVELOPER.

OWNER/DEVELOPER

DATE

TURF REMOVAL NOTE:

WILL COMPLY WITH LETTER RECEIVED FROM THE CITY OF MORGAN HILL DATED JUNE 9TH. THE FINAL LANDSCAPING DESIGN PLANS WILL INCLUDE ALL PARTS OF THE PROPERTY AND ENSURE THAT THE WHOLE PROPERTY IS IN COMPLIANCE WITH ALL SECTIONS OF 18.64 AND 18.148 OF THE MUNICIPAL CODE.

LANDSCAPE CALCULATIONS

SHRUB AND GROUND COVER AREA:	20,108 S.F.
BIO-RETENTION BASINS	2,295 S.F.
TURF AREA:	0 S.F.
TOTAL LANDSCAPE AREA:	22,403 S.F.

COMPLIANCE STATEMENT:

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

Robert A. Garcia 8-8-2023
ROBERT A. GARCIA DATE

COMPLIANCE STATEMENT:

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE.

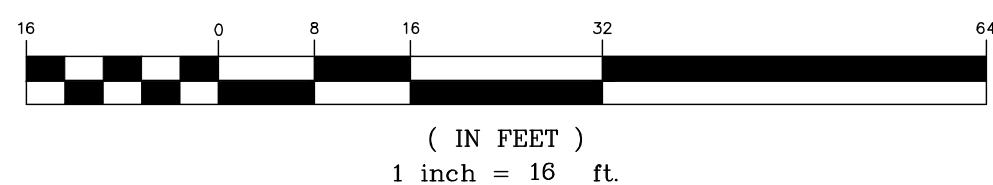
Robert A. Garcia 8-8-2023
ROBERT A. GARCIA DATE

APPLICANT STATEMENT:

AFTER INSTALLATION OF LANDSCAPING ON PROPERTY, I AGREE TO HAVE AN IRRIGATION AUDIT, LANDSCAPE AUDIT, IRRIGATION SCHEDULE, AND MAINTENANCE SCHEDULE CONDUCTED BY A CERTIFIED IRRIGATION AUDITOR AND SUBMIT IT TO THE CITY FOR FINAL PROJECT SIGN OFF.

Robert A. Garcia 8-8-2023
APPLICANT SIGNATURE DATE

GRAPHIC SCALE



UNDERGROUND SERVICE ALERT

CALL: TOLL FREE
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TWO WORKING DAYS BEFORE YOU DIG

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FOR BUILDING - NEEDS TO BE SIGNED BY OWNER

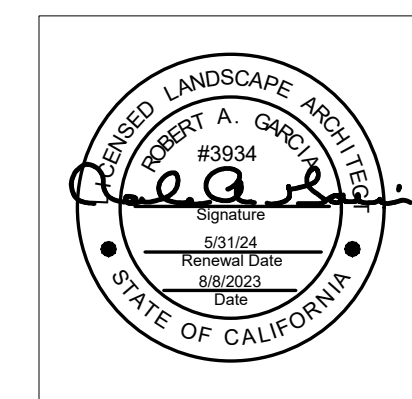


Chick-fil-A

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c 949.489.5623 f 858.810.0335



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COCHRANE ROAD AND SUTTER BLVD.
MORGAN HILL, CALIFORNIA 95037

FSR #05180

BUILDING TYPE / SIZE: P14 SE LRG 21.11

RELEASE: PRINTED FOR REVIEW

PROJECT STATUS

REVISION SCHEDULE

NO. DATE DESCRIPTION

CONSULTANT PROJECT #

DATE 8-8-2023

DRAWN BY NH/mdm

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SHEET

PLANTING PLAN

SHEET NUMBER

L1.0

WATER CONSERVATION STATEMENT

WATER CONSERVATION IS ACHIEVED IN THIS LANDSCAPE CONSTRUCTION DOCUMENT AS DESCRIBED BELOW:

- ALL PLANT MATERIALS SELECTED FOR THIS SITE ARE APPROPRIATE FOR THE GEOGRAPHICAL LOCATION AND LOCAL CLIMATE, AND THEIR ADAPTABILITY TO DROUGHT. DATA FROM WUCOLS III HAS BEEN USED FOR DETERMINING THE SPECIES PLANT FACTOR FOR THE WATER USE CALCULATIONS.
- PLANTS WITH SIMILAR WATER USE REQUIREMENTS ARE GROUPED TOGETHER.
- THE MAJORITY OF LANDSCAPE AREAS ARE PLANTED WITH LOW WATER USE PLANTS, WITH THE BALANCE IN MODERATE WATER USE PLANTS. NO HIGH WATER USE PLANTS ARE USED.
- IRRIGATION SECTIONS: HYDROZONES ARE SEPARATED BY CONSIDERING PLANT SPECIES FACTOR, PLANT DENSITY AND MICROCLIMATE. IF LOW WATER USE PLANTS ARE MIXED WITH MODERATE WATER USE PLANTS IN THE SAME HYDROZONE, THE MODERATE WATER USE FACTOR IS USED FOR WATER USE CALCULATIONS. SEE HYDROZONE EXHIBIT.
- THE IRRIGATION SYSTEM UTILIZES A LOW-VOLUME DISTRIBUTION SYSTEM WITH A MASTER VALVE, FLOW SENSOR, CHECK VALVES, ET BASED AUTOMATIC CONTROLLERS WITH CYCLE PLUS SOAK AND WATER BUDGETING CAPABILITY, WEATHER STATION, AND RAIN SHUT-OFF.
- EXISTING TURF ON THIS PARCEL WILL BE REMOVED AND REPLACED WITH LOW/MODERATE WATER USING PLANTS.
- ALL TREE, SHRUB AND GROUND COVER AREAS WILL BE DRESSED WITH A 3" LAYER OF MULCH FOR MOISTURE RETENTION AND TO DISCOURAGE WEEDS.
- THERE ARE NO SPECIAL LANDSCAPE AREAS IN THIS PROJECT.
- WATERING TIMES MUST BE AFTER 7:00PM AND BEFORE 9:00AM.

MAINTENANCE MANUAL

THIS MANUAL TO BE KEPT AT THE CONTROLLER LOCATION AT ALL TIMES.

IRRIGATION SYSTEMS:

- AUTOMATIC CONTROLLER TO BE CHECKED MONTHLY BY LANDSCAPE MAINTENANCE FOREMAN AND CHECKED WEEKLY BY MAINTENANCE CREW LEADER TO PROVIDE OPTIMUM PLANT GROWTH AND WATER CONSERVATION. (IF SMART CONTROLLER IS IN USE, CHECK ELECTRICAL POWER ONLY)
- LANDSCAPE MAINTENANCE CONTRACTOR TO CHECK ALL SYSTEMS ONCE PER MONTH BY TURNING ON EACH SYSTEM MANUALLY.
- LANDSCAPE MAINTENANCE CONTRACTOR TO VISUALLY CHECK ALL SYSTEMS EVERY WEEK DURING MAINTENANCE OF LANDSCAPE.
- ALL IRRIGATION FILTERS AT THE WYE STRAINER (AT THE BACKFLOW DEVICE) AND ALL FILTERS AT THE DRIP IRRIGATION VALVES TO BE CLEANED MONTHLY OR AS NEEDED.
- CHECK RAIN SHUT OFF DEVICE AT THE BEGINNING OF THE RAINY SEASON AND RE-CALIBRATE AS NEEDED. MAKE SURE DEVICE IS CLEAN, FREE OF ANY DEBRIS, AND IN GOOD WORKING ORDER.
- BACKFLOW DEVICE TO BE VISUALLY CHECKED ON A MONTHLY BASIS. TEST AND RE-CERTIFY ANNUALLY AS PER ALL CODES AND ORDINANCES.
- SCHEDULE ALL IRRIGATION VALVES TO RUN ONLY BETWEEN THE HOURS OF 7:00PM AND 9:00AM.
- ON A MONTHLY BASIS, FLUSH ALL DRIP SYSTEM LINES AND CHECK VALVE BOXES TO SEE THAT THEY DRAIN PROPERLY. CLEAN OUT ANY DEBRIS, MUD OR PLANT GROWTH ANNUALLY.
- TWICE A YEAR CHECK ALL QUICK COUPLERS AND MAKE ALL REPAIRS AS NECESSARY. REPLACE PEA GRAVEL IN VALVE BOXES AS NEEDED.
- COVER OR PROTECT ALL BACKFLOW DEVICES DURING FREEZING WEATHER.
- OWNER TO PROVIDE FOR A WATER AUDIT EVERY FIVE YEARS FROM OPENING OF STORE.

3 ZONES:
low shrubs and ge - 3 drip
low trees - 3 bubblers
mod ex trees - 4 bubblers for the existing sycamores that are remaining

Appendix B - Sample Water Efficient Landscape Worksheet.

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (Eto)		49.5		COMMERCIAL ETAF		0.45	
Hydrozone #	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PFIE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU)*
Regular Landscape Areas							
LOW/MOD	0.30	DRIP	0.81	0.37	21,907	8,113.7	249,009
MOD TREES	0.40	BUBBLER	0.75	0.53	496	264.5	8,119
Totals					(A)	(B)	
Special Landscape Areas					22,403	8,378.2	
					1	0	
					1	0	
Totals					22,403 (C)	8,378.2 (D)	
ETWU Total							257,128
Maximum Allowed Water Allowance (MAWA)							309,397

*Hydrozone #Planting Description
E.g.
1) front lawn
2) low water use plantings
3) medium water use plantings

*Irrigation Method
overhead spray
or drip

*Irrigation Efficiency
0.75 for spray head
0.81 for drip

*ETWU (Annual Gallons Required) =
Eto x 0.62 x ETAF x Area
where 0.62 is a conversion factor that converts acre inches per acre per year to gallons per square foot per year.

*MAWA (Annual Gallons Allowed) = (Eto) (0.62) (ETAF x LA) + ((1-ETAF) x SLA)
where 0.62 is a conversion factor that converts acre inches per acre per year to gallons per square foot per year. LA is the total landscape area in square feet. SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.

MAWA = (49.5) (0.45) (22,403) (0.62) = 309,397

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	(B)	8,378.2
Total Area	(A)	22,403
Average ETAF	B ÷ A	0.374

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

All Landscape Areas

Total ETAF x Area	(B+D)	8,378.2
Total Area	(A+C)	22,403
Site-wide ETAF	(B+D) ÷ (A+C)	0.374

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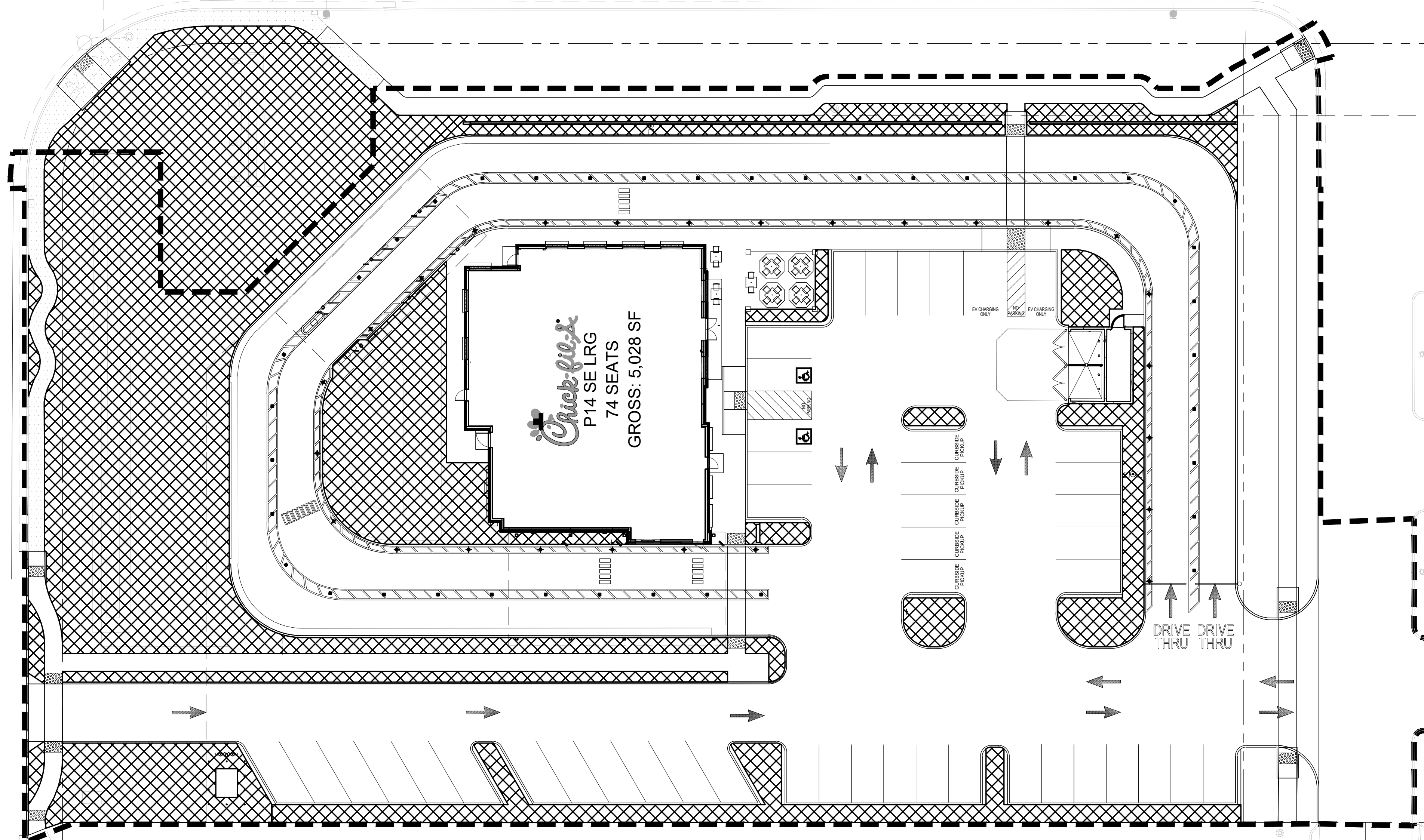
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SUTTER BOULEVARD

COCHRANE ROAD



HYDROZONE MAP		
SYMBOL	DESCRIPTION	AREA
	LOW WATER USE SHRUBS/GROUNDCOVERS	22,403 S.F.
	TOTAL LANDSCAPE	22,403 S.F.

HYDROZONE MAP

IRRIGATION SCHEDULE - INITIAL-ESTABLISHMENT PERIOD

TIMING CHART					MINUTES OF OPERATION PER CYCLE												
STATION	VALVE SIZE	GPM	HYDRO-ZONE	NO. OF DAYS	CYCLES/DAY	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.
A-1	1"	14.0	BUBBLER	6	2	1	1	1	2	2	2	2	2	2	1	1	1
A-2	1"	11.0	BUBBLER	6	2	1	1	1	2	2	2	2	2	2	1	1	1
A-3	1"	19.5	DRIP	6	2	10	13	15	16	18	20	24	24	20	16	14	12
A-4	1"	13.7	DRIP	6	2	10	13	15	16	18	20	24	24	20	16	14	12
A-5	1"	12.4	DRIP	6	2	10	13	15	16	18	20	24	24	20	16	14	12
A-6	1"	18.6	DRIP	6	2	10	13	15	16	18	20	24	24	20	16	14	12
A-7	1"	19.8	DRIP	6	2	10	13	15	16	18	20	24	24	20	16	14	12
A-8	1"	22.1	DRIP	6	2	10	13	15	16	18	20	24	24	20	16	14	12
A-9	1"	11.0	BUBBLER	6	2	1	1	1	2	2	2	2	2	2	1	1	1
A-10	1"	22.1	DRIP	6	2	10	13	15	16	18	20	24	24	20	16	14	12
A-11	1"	10.8	DRIP	6	2	10	13	15	16	18	20	24	24	20	16	14	12

IRRIGATION SCHEDULE - POST-ESTABLISHMENT PERIOD

TIMING CHART					MINUTES OF OPERATION PER CYCLE												
STATION	VALVE SIZE	GPM	HYDRO-ZONE	NO. OF DAYS	CYCLES/DAY	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.
A-1	1"	14.0	BUBBLER	5	1	1	1	1	2	2	2	2	2	2	1	1	1
A-2	1"	11.0	BUBBLER	5	1	1	1	1	2	2	2	2	2	2	1	1	1
A-3	1"	19.5	DRIP	5	1	10	13	15	16	18	20	24	24	20	16	14	12
A-4	1"	13.7	DRIP	5	1	10	13	15	16	18	20	24	24	20	16	14	12
A-5	1"	12.4	DRIP	5	1	10	13	15	16	18	20	24	24	20	16	14	12
A-6	1"	18.6	DRIP	5	1	10	13	15	16	18	20	24	24	20	16	14	12
A-7	1"	19.8	DRIP	5	1	10	13	15	16	18	20	24	24	20	16	14	12
A-8	1"	22.1	DRIP	5	1	10	13	15	16	18	20	24	24	20	16	14	12
A-9	1"	11.0	BUBBLER	5	1	1	1	1	2	2	2	2	2	2	1	1	1
A-10	1"	22.1	DRIP	5	1	10	13	15	16	18	20	24	24	20	16	14	12
A-11	1"	10.8	DRIP	5	1	10	13	15	16	18	20	24	24	20	16	14	12

IRRIGATION SCHEDULES ARE A GUIDELINE ONLY AND DO NOT PROVIDE FOR CHANGING WEATHER CONDITIONS, ETC. CONTRACTOR MAY NEED TO MAKE SLIGHT ADJUSTMENTS IN THE FIELD TO MAINTAIN COVERAGE AND MOISTURE CONTENT IN THE SOIL FOR PROPER AND REQUIRED PLANT GROWTH.

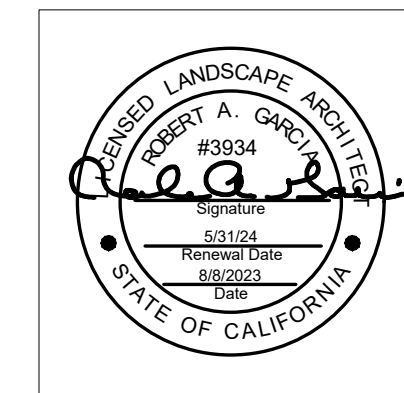


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MORGAN HILL, CALIFORNIA 95037

FSR #05180

BUILDING TYPE / SIZE: P14 SE LRG
21.11

RELEASE: PROJECT STATUS

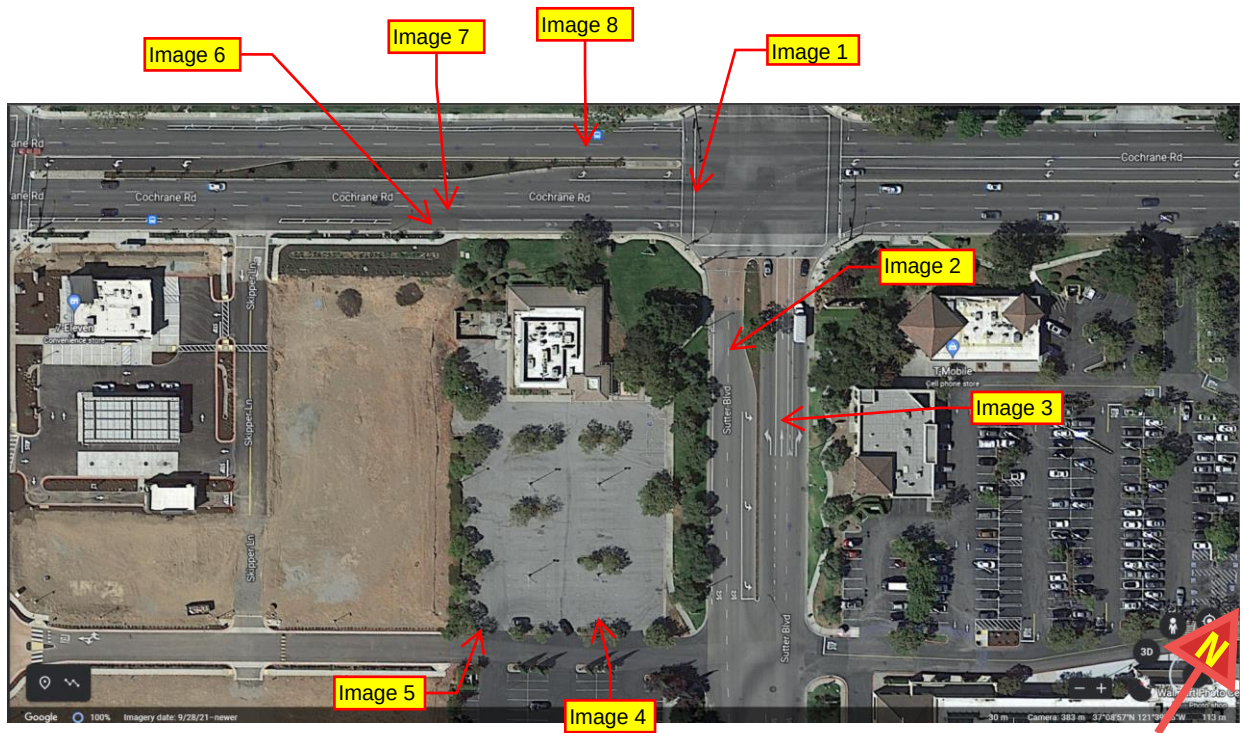
REVISION SCHEDULE
NO. DATE DESCRIPTION

CONSULTANT PROJECT #
DATE 8-8-2023

DRAWN BY: NH/mdm
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PERMIT
WATER CONSERVATION PLAN
SHEET NUMBER

L2.1



Aerial Image with Photo Index

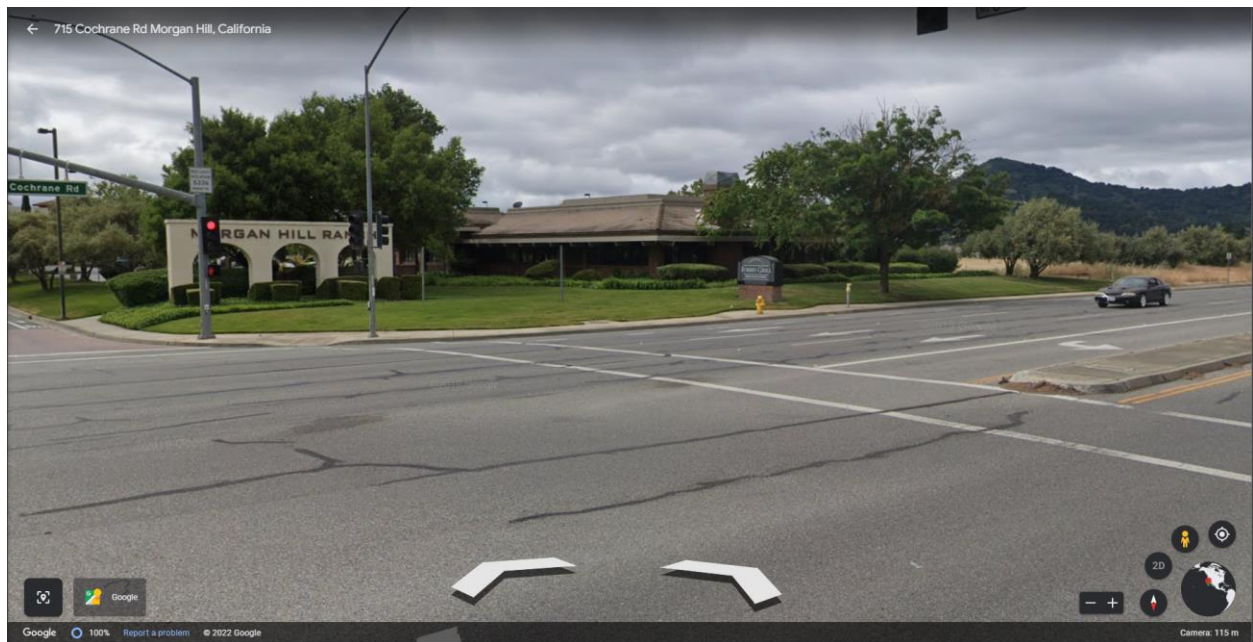


Image 1: Looking due south from the intersection of Cochrane Rd and Sutter Blvd.



Image 2: Looking West (slightly northwest) from standing in Sutter Blvd.



Image 3: Eastern property line from NB Sutter Blvd

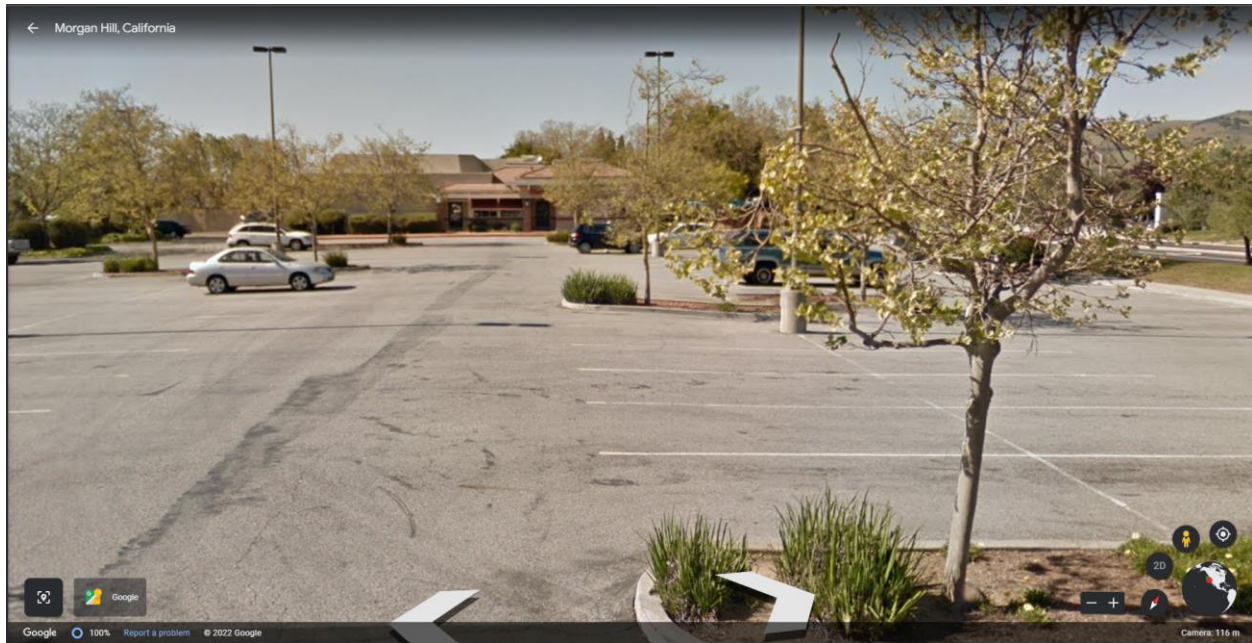


Image 4: Looking Northwest at the entrance to the parking lot from the drive access off Sutter Blvd.



Image 5: Looking down the western property line.



Image 6: Looking south from Cochrane Rd Eastbound.

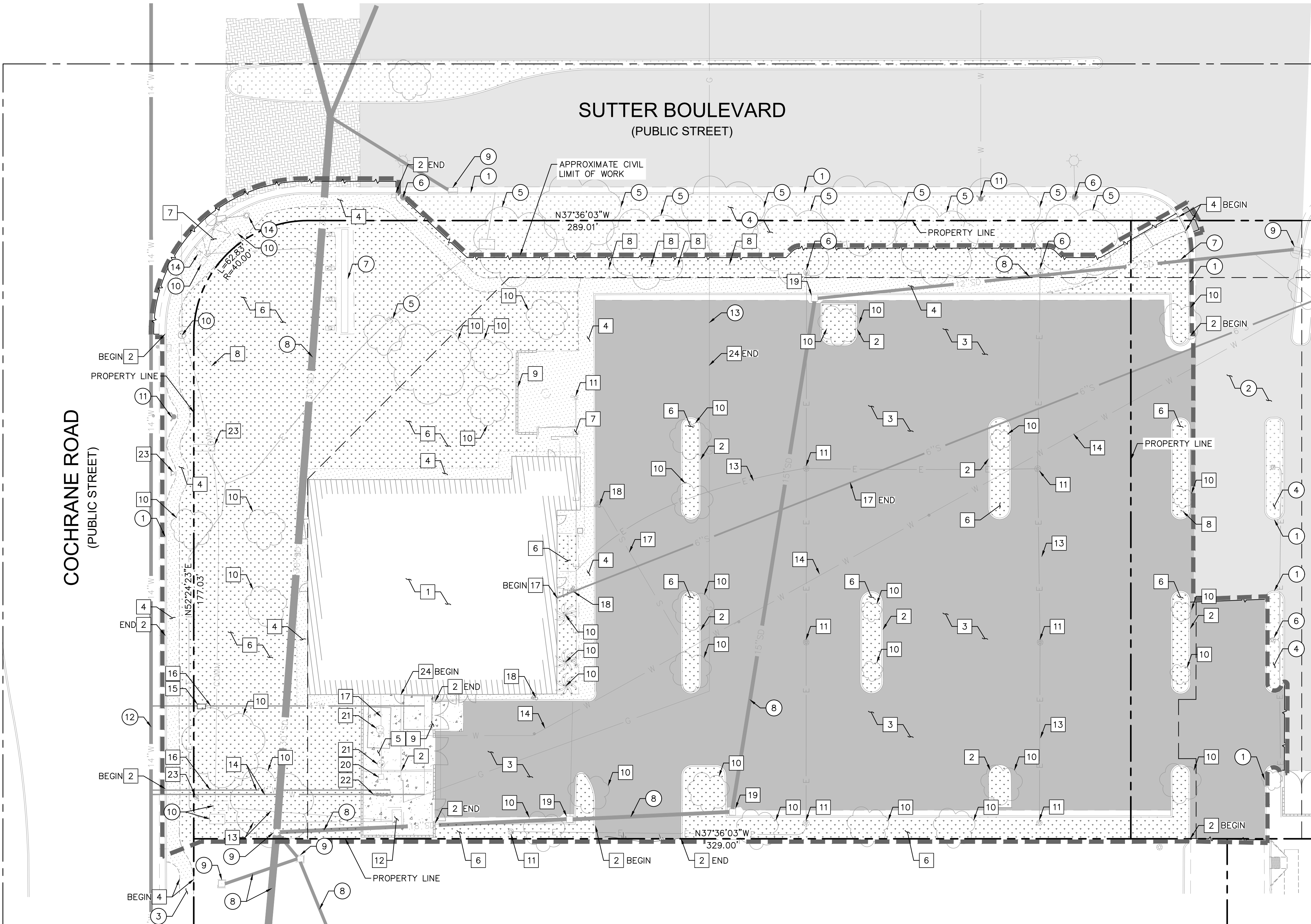


Image 7: Looking at the western property line from Cochrane Rd.



Image 8: View looking south from the bus stop on Cochrane Rd West bound

K:\BAY-LDEVA\Chick-Fil-A\097672127 - CFA #5180 - Cochrane & Sutter Blvd (Morgan Hill)\CAD\Exhibits\Entitlements\C1.1 PRELIMINARY DEMOLITION PLAN.dwg
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LEGEND

PROPERTY LINE

APPROXIMATE CIVIL LIMIT OF WORK LINE

EASEMENT OR SETBACK LINE

SAWCUT LINE

CENTERLINE

EXISTING ASPHALT CONCRETE TO REMAIN

EXISTING LANDSCAPE AREA TO REMAIN

EXISTING ASPHALT CONCRETE TO BE DEMOLISHED AND REMOVED

EXISTING STANDARD DUTY CONCRETE SIDEWALK TO BE DEMOLISHED AND REMOVED

EXISTING HEAVY DUTY CONCRETE TO BE DEMOLISHED AND REMOVED

EXISTING LANDSCAPE AREA TO BE DEMOLISHED AND REMOVED

DEMOLITION NOTES

1

DEMOLISH AND REMOVE EXISTING BUILDING INCLUDING ANY CANOPIES AND CANOPY COLUMNS.

2

DEMOLISH AND REMOVE EXISTING CURB/CURB AND GUTTER.

3

DEMOLISH AND REMOVE EXISTING ASPHALT PAVEMENT.

4

DEMOLISH AND REMOVE EXISTING STANDARD DUTY CONCRETE SIDEWALK.

5

DEMOLISH AND REMOVE EXISTING HEAVY DUTY CONCRETE PAD.

6

GRUB AND REMOVE EXISTING LANDSCAPE AND DEMOLISH AND REMOVE ALL IRRIGATION LINES, DRIPS, VALVES, AND ASSOCIATED EQUIPMENT AS NEEDED.

7

DEMOLISH AND REMOVE EXISTING ADA ACCESSIBLE RAMP.

8

DEMOLISH AND REMOVE SIGN AND SIGN BASE.

9

DEMOLISH AND REMOVE EXISTING ENCLOSURE.

10

DEMOLISH AND REMOVE EXISTING TREE.

11

DEMOLISH AND REMOVE EXISTING LIGHT.

12

DEMOLISH AND REMOVE EXISTING TRANSFORMER AND PAD.

13

DEMOLISH AND REMOVE EXISTING ELECTRICAL LINE.

14

DEMOLISH AND REMOVE EXISTING WATER LINE.

15

DEMOLISH AND REMOVE EXISTING WATER METER.

16

DEMOLISH AND REMOVE EXISTING BACKFLOW PREVENTER.

17

DEMOLISH AND REMOVE EXISTING SANITARY SEWER LINE.

18

DEMOLISH AND REMOVE EXISTING SANITARY SEWER CLEANOUT.

19

DEMOLISH AND REMOVE EXISTING STORM DRAIN INLET.

20

DEMOLISH AND REMOVE EXISTING UTILITY VAULT/BOX.

21

DEMOLISH AND REMOVE EXISTING GREASE INTERCEPTOR.

22

DEMOLISH AND REMOVE EXISTING FIRE APPARATUS (BACKFLOW PREVENTER, FDC, PIV).

23

DEMOLISH AND REMOVE EXISTING MONUMENT SIGN.

24

DEMOLISH AND REMOVE EXISTING GAS LINE.

PROTECTION NOTES

1

PROTECT IN PLACE EXISTING CURB/CURB AND GUTTER.

2

PROTECT IN PLACE EXISTING ASPHALT CONCRETE PAVEMENT.

3

PROTECT IN PLACE EXISTING STANDARD DUTY CONCRETE SIDEWALK.

4

PROTECT IN PLACE EXISTING LANDSCAPE.

5

PROTECT IN PLACE EXISTING TREE.

6

PROTECT IN PLACE EXISTING LIGHT.

7

PROTECT IN PLACE EXISTING SIGN.

8

PROTECT IN PLACE EXISTING STORM DRAIN LINE.

9

PROTECT IN PLACE EXISTING STORM DRAIN STRUCTURE (MANHOLE, INLET).

10

PROTECT IN PLACE EXISTING UTILITY VAULT/BOX.

11

PROTECT IN PLACE EXISTING FIRE HYDRANT.

12

PROTECT IN PLACE EXISTING WATER MAIN.

13

PROTECT IN PLACE EXISTING GAS LINE.

14

PROTECT IN PLACE EXISTING STREET LIGHT.

EXISTING UTILITY NOTE

THE EXISTING UTILITIES SHOWN ON THE PLAN ARE BASED ON AVAILABLE RECORDS. THE CONTRACTOR MUST FIELD DETERMINE THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. REPORT DISCREPANCIES AND POTENTIAL CONFLICTS WITH PROPOSED UTILITIES TO ENGINEER PRIOR TO INSTALLATION OF ANY PIPING.

Chick-fil-A

Chick-fil-A

5200 Buffington Road

Atlanta, Georgia

30349-2998

Kimley-Horn

4637 CHABOT DRIVE, SUITE 350, PLEASANTON, CA 94588

PHONE: 925-398-4840 FAX: 925-398-4849

WWW.KIMLEY-HORN.COM

APPROVED FOR CONSTRUCTION

KHA PROJECT

097672127

DATE

06/09/2023

SCALE

AS SHOWN

DESIGNED BY

SAL

DRAWN BY

CXC

CHECKED BY

JAK

CHICK-FIL-A

18599 SUTTER BOULEVARD

MORGAN HILL, CA 95037

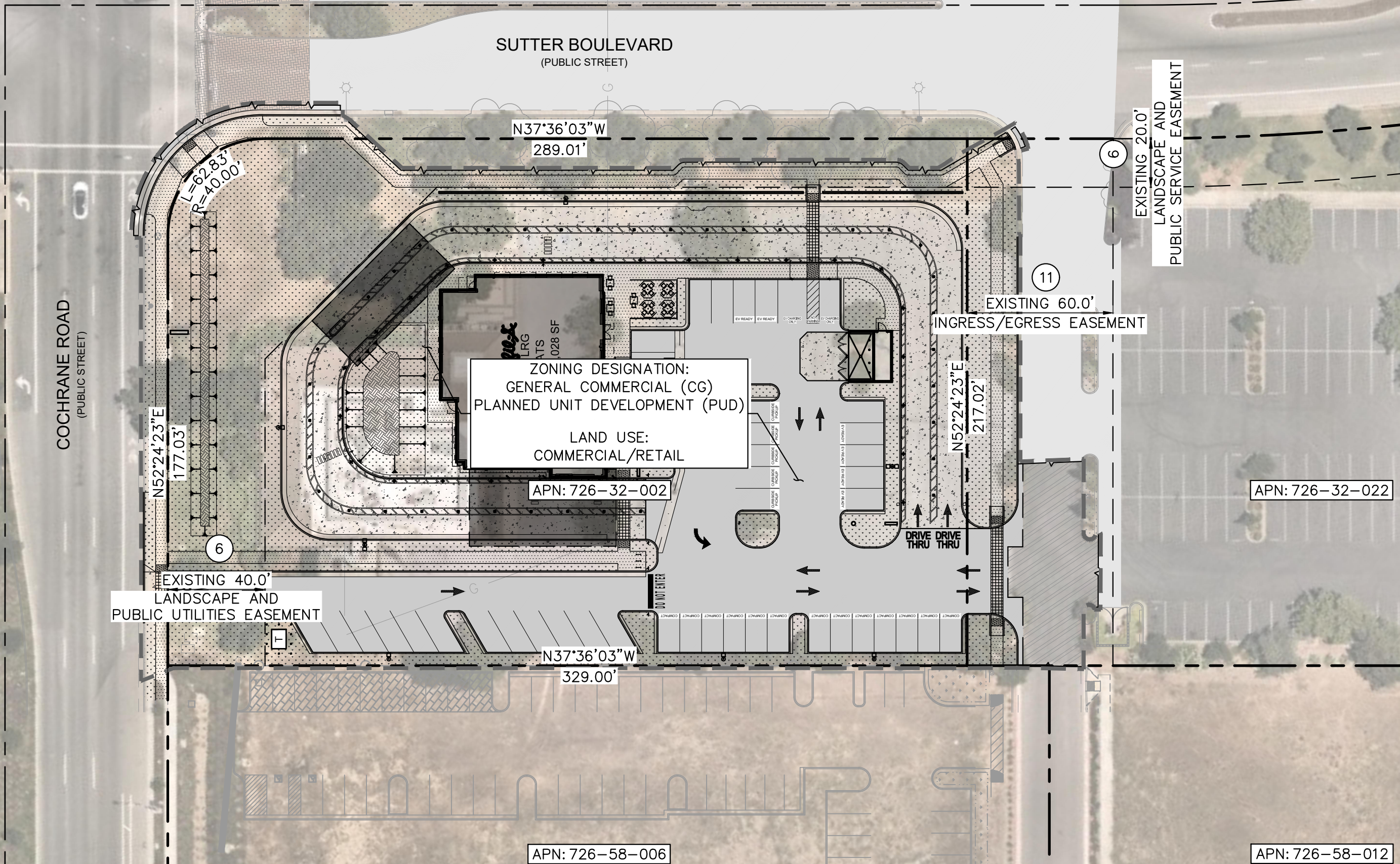
APN: 726-32-002

PRELIMINARY DEMOLITION PLAN

SHEET NUMBER

C1.1

Page 549 of 576



	PROPERTY LINE
	APPROXIMATE CIVIL LIMIT OF WORK LINE
	EASEMENT OR SETBACK LINE
	SAWCUT LINE
	PROPOSED ASPHALT CONCRETE
	PROPOSED CONCRETE SIDEWALK
	PROPOSED HEAVY DUTY CONCRETE
	PROPOSED LANDSCAPE AREA

(6.) AN EASEMENT FOR PUBLIC SERVICE AND LANDSCAPE AND INCIDENTAL PURPOSES.
RECORDED SEPTEMBER 24, 1981 AS BOOK G354, PAGE 401 OF OFFICIAL RECORDS.

IN FAVOR OF: CITY OF MORGAN HILL
AFFECTS: AS DESCRIBED WITHIN

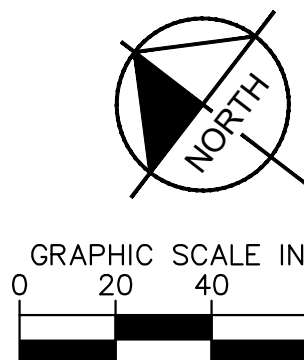
(11.) AN EASEMENT FOR (i) PARKING, UTILITIES, LANDSCAPE MAINTENANCE, INSTALLATION AND MAINTENANCE OF THE MORGAN HILL BUSINESS PARK MONUMENT SIGN AND FOR ANY OTHER PURPOSES REASONABLY NECESSARY TO EFFECT THE DEVELOPMENT OF COCHRANE PLAZA PHASE II.

(ii)
(iii)

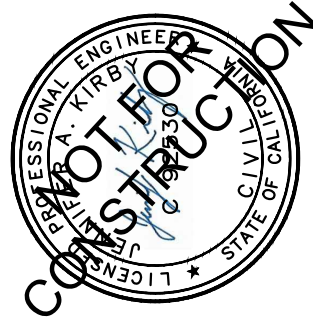
RECORDED JUNE 16, 1989 AS BOOK K988, PAGE 1623 OF OFFICIAL RECORDS.

IN FAVOR OF: PARKLAND PROPERTIES COMPANY, A CALIFORNIA LIMITED
PARTNERSHIP
AFFECTS: AS DESCRIBED WITHIN

[SAID EASEMENTS ARE BLANKET; INGRESS/EGRESS EASEMENT IS APPURTENANT TO THE PROPERTY]



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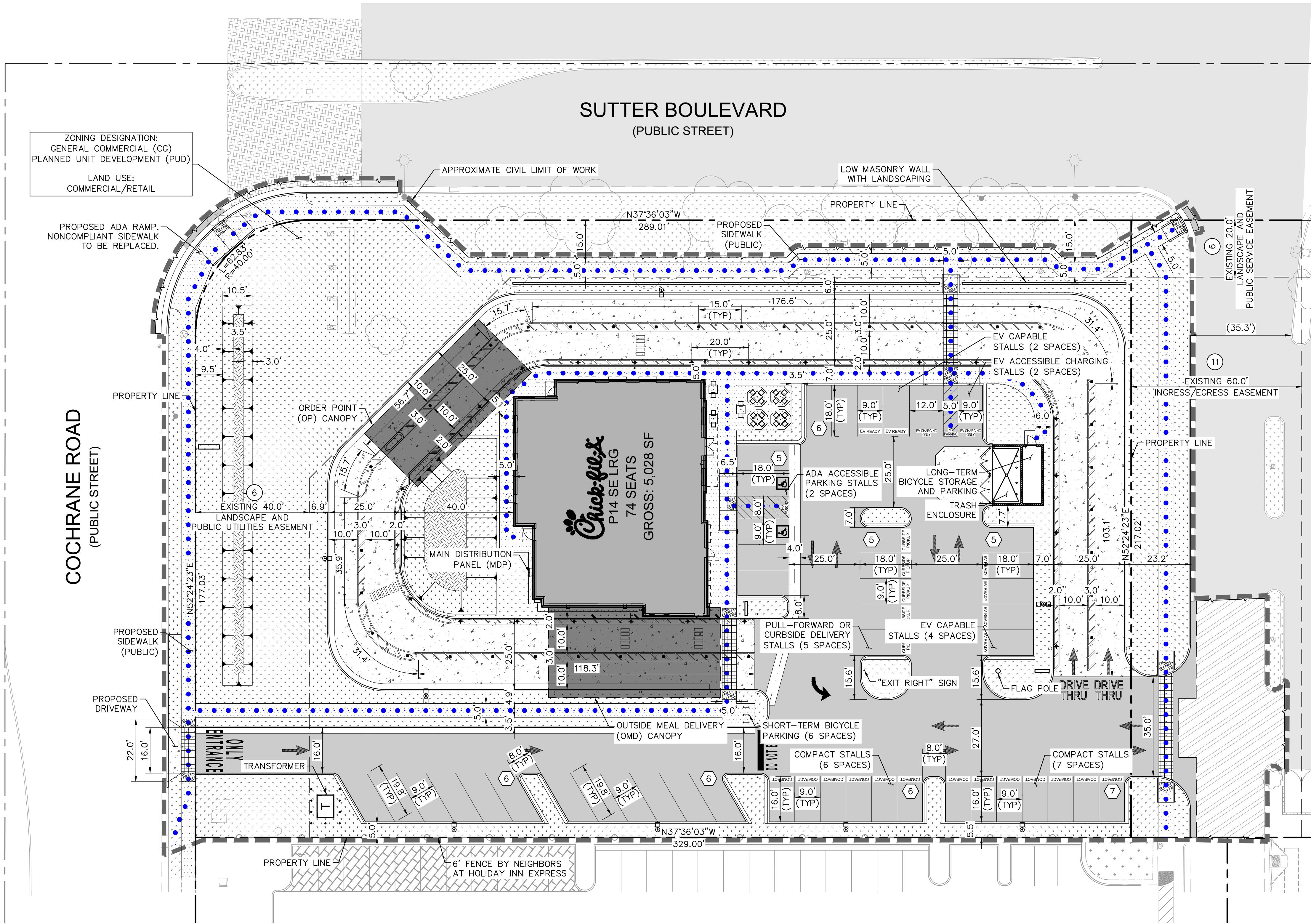
CHICK-FIL-A
18599 SUTTER BOULEVARD
MORGAN HILL, CA 95037

APN: 726-32-002

CONTEXTUAL PLAN

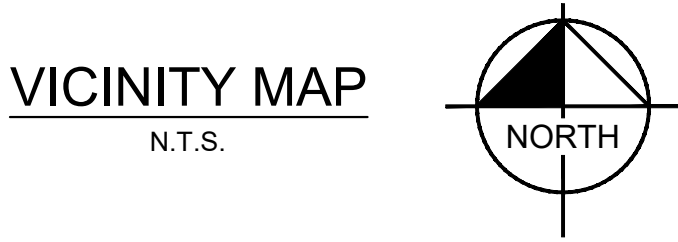
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C2.0

K:\BAY-LDEV\Chick-Fil-A\097672127 - GFA #5180 - Cochrane & Sutter Blvd (Morgan Hill)\CAD\Exhibits\Entitlements\C2.0 PRELIMINARY SITE PLAN.dwg
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PARKING REQUIREMENTS									
BUILDING AREA (SF)	*REQUIRED PARKING STALLS	TOTAL PROVIDED PARKING STALLS	PROVIDED COMPACT PARKING STALLS (30% MAX)	REQUIRED BICYCLE PARKING	PROVIDED BICYCLE PARKING	**ADA REQUIRED	ADA PROVIDED	***EV CAPABLE STALLS REQUIRED	EV CAPABLE STALLS PROVIDED
5,028 (1,998 SF PUBLIC SPACE; 3,030 SF REMAINING GFA)	46	46	13	5	6	2 (1 VAN)	2 (1 VAN, 1 STD)	8 (2 STALLS INSTALLED UPON OCCUPANCY) (1 VAN, 1 STD)	8 (2 STALLS INSTALLED UPON OCCUPANCY) (1 VAN, 1 STD)

*ONE (1) PARKING SPACE PER 60 SF OF PUBLIC SPACE PLUS ONE (1) PARKING SPACE PER 250 SF OF REMAINING GROSS FLOOR AREA (GFA).
**REQUIRED NUMBER OF ADA PARKING SPACES IS CALCULATED PER 2019 CBC AND IS BASED ON THE PROVIDED NUMBER OF TOTAL PARKING SPACES.
***REQUIRED NUMBER OF EV CAPABLE STALLS AND EVCS WITH EVSE STALLS ARE CALCULATED PER THE 2022 CALGREEN BUILDING CODE AND ARE BASED ON THE PROVIDED QUANTITIES IN THE OVERALL PARKING SUMMARY TABLE.



LEGEND

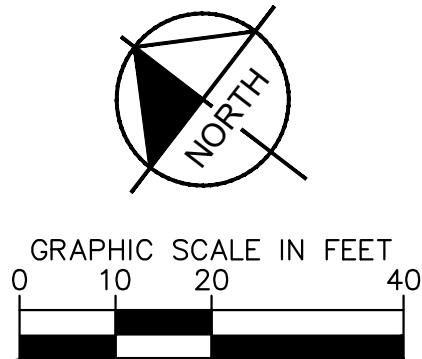
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- APPROXIMATE CIVIL LIMIT OF WORK LINE
- EASEMENT OR SETBACK LINE
- SAWCUT LINE
- ACCESSIBLE PATH OF TRAVEL (FOR REFERENCE ONLY, DO NOT PAINT)
- ROW PARKING COUNT
- PROPOSED ASPHALT CONCRETE
- PROPOSED CONCRETE SIDEWALK
- PROPOSED HEAVY DUTY CONCRETE
- PROPOSED LANDSCAPE AREA
- PROPOSED BIORETENTION
- PROPOSED ASPHALT MILL AND OVERLAY

SITE INFORMATION

SITE ADDRESS: 18599 SUTTER BLVD
MORGAN HILL, CA 95037
APN: 726-32-002
TOTAL GROSS PROJECT AREA: 71,056 SF
EXISTING BUILDING AREA: 6,900 SF (9.7% LOT COVERAGE)
PROPOSED BUILDING AREA: 5,028 SF (7.1% LOT COVERAGE)
FAR: 0.071
ZONING CLASSIFICATION: GENERAL COMMERCIAL (GC)
PLANNED UNIT DEVELOPMENT (PUD)

EASEMENT NOTES

- (6) AN EASEMENT FOR PUBLIC SERVICE AND LANDSCAPE AND INCIDENTAL PURPOSES, RECORDED SEPTEMBER 24, 1981 AS BOOK G354, PAGE 401 OF OFFICIAL RECORDS.
IN FAVOR OF: CITY OF MORGAN HILL
AFFECTS: AS DESCRIBED WITHIN
- (11) AN EASEMENT FOR (i) PARKING, UTILITIES, LANDSCAPE MAINTENANCE, INSTALLATION AND MAINTENANCE OF THE MORGAN HILL BUSINESS PARK MONUMENT SIGN AND FOR ANY OTHER PURPOSES REASONABLY NECESSARY TO EFFECT THE DEVELOPMENT OF COCHRANE PLAZA PHASE II.
(ii)
(iii)
RECORDED JUNE 16, 1989 AS BOOK K988, PAGE 1623 OF OFFICIAL RECORDS.
IN FAVOR OF: PARKLAND PROPERTIES COMPANY, A CALIFORNIA LIMITED PARTNERSHIP
AFFECTS: AS DESCRIBED WITHIN
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CHAD A. HORN
PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
LICENSE NO. 30131

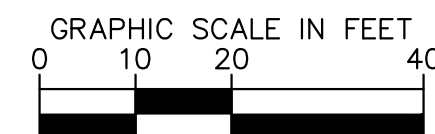
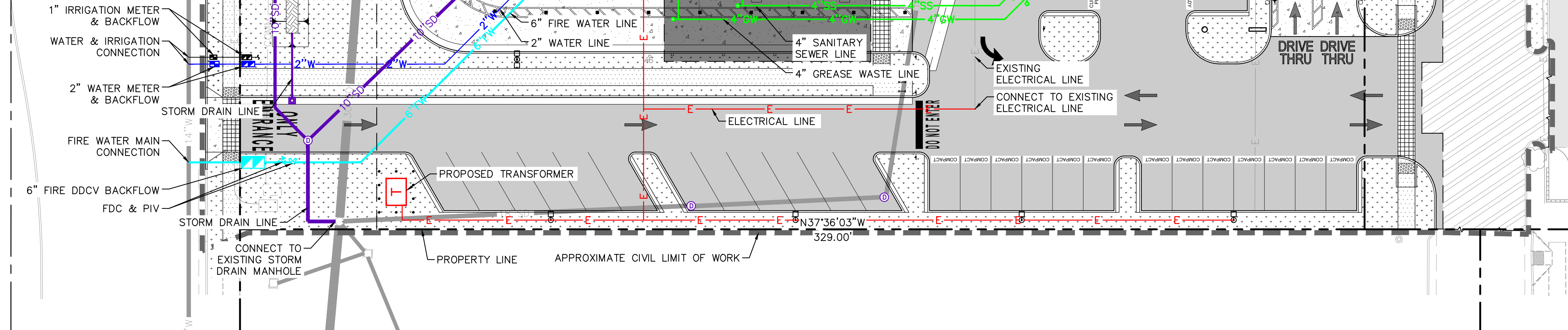
KHA PROJECT	DATE	SCALE	AS SHOWN	DESIGNED BY	SAL	DRAWN BY	CXC	CHECKED BY	JAK	No.	REVISIONS	DATE	BY
097672127	08/14/2023												

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18599 SUTTER BOULEVARD
MORGAN HILL, CA 95037

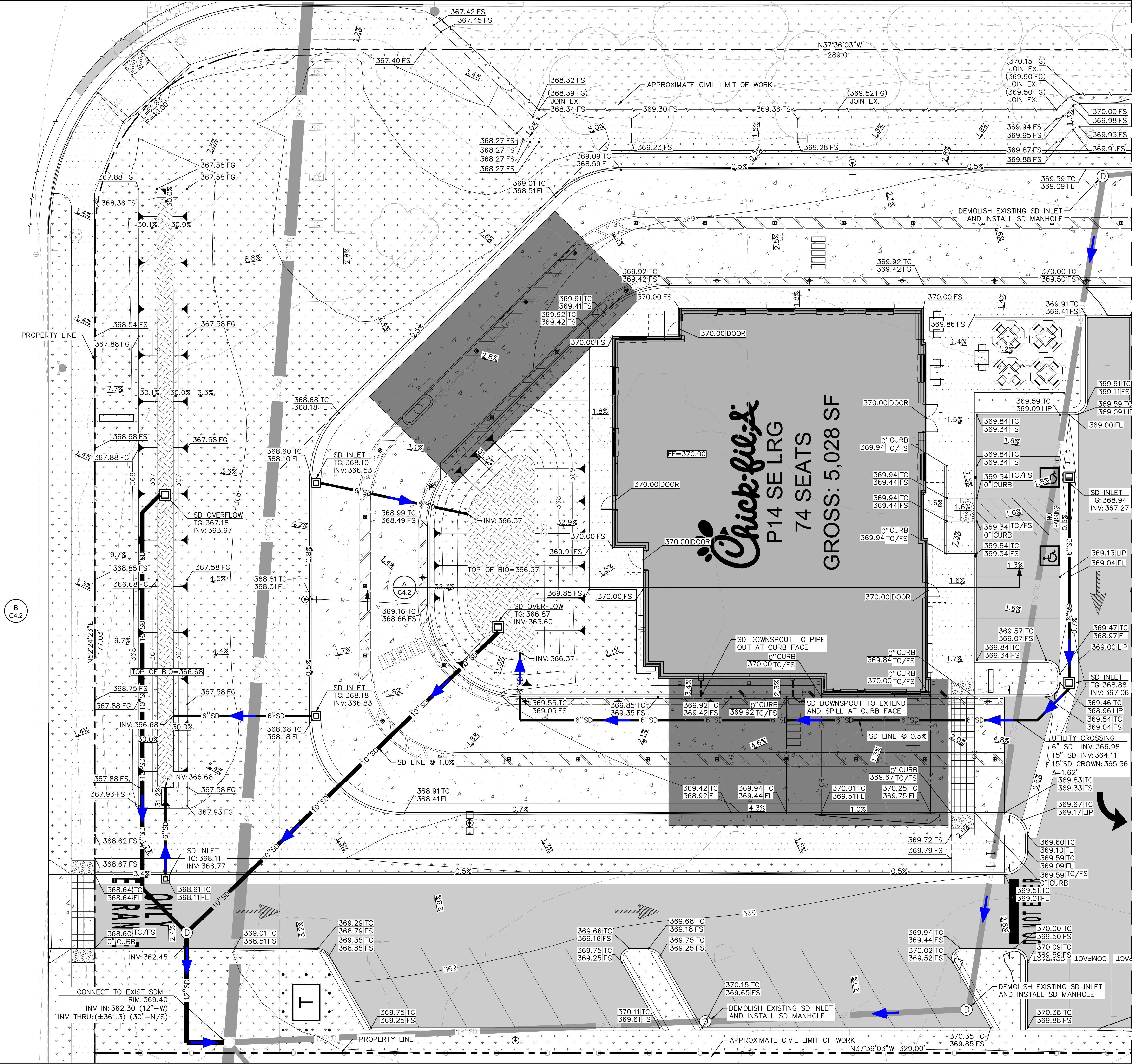
PRELIMINARY
SITE PLAN

SHEET NUMBER
C2.1

APN: 726-32-002



K:\BAY-LDEVA\Chick-Fil-A\097672127 - CFA #5180 - Cochran & Sutter Blvd (Morgan Hill)\CAD\Exhibits\Entitlements\C4.0 PRELIMINARY GRADING AND DRAINAGE PLAN.dwg
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LEGEND

---	PROPERTY LINE
---	APPROXIMATE CIVIL LIMIT OF WORK LINE
---	EASEMENT OR SETBACK LINE
---	SAWCUT LINE
---	EXISTING STORM DRAIN LINE
---	PROPOSED STORM DRAIN LINE
---	RIDGE LINE
---	GRADE BREAK LINE
100.00 TC 99.50 FS	PROPOSED SPOT ELEVATION
(100.00 TC) (99.50 FS)	EXISTING SPOT ELEVATION
[Pattern]	PROPOSED ASPHALT CONCRETE
[Pattern]	PROPOSED CONCRETE SIDEWALK
[Pattern]	PROPOSED HEAVY DUTY CONCRETE
[Pattern]	PROPOSED LANDSCAPE AREA
[Pattern]	PROPOSED BIORETENTION
[Pattern]	PROPOSED ASPHALT MILL AND OVERLAY

SEE SHEET C4.1 FOR CONTINUATION

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PROPOSED CONSTRUCTION

APPROVED FOR CONSTRUCTION

KHA PROJECT	DATE	SCALE	AS SHOWN	DESIGNED BY	DRAWN BY	CHECKED BY
097672127	06/09/2023	AS SHOWN	SAL	CXC	JAK	

No.	REVISIONS	DATE	BY

CHICK-FIL-A

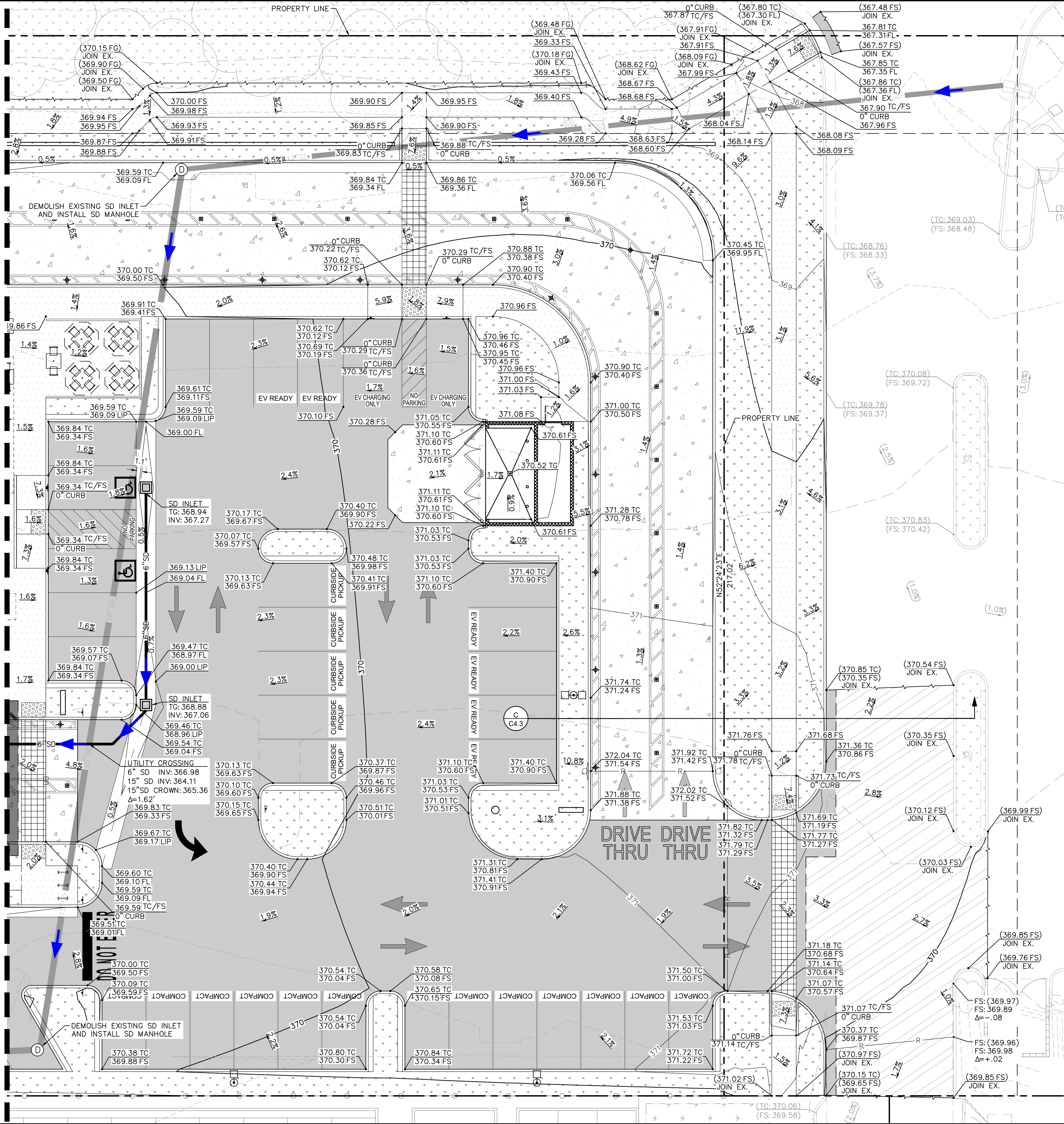
18599 SUTTER BOULEVARD
MORGAN HILL, CA 95037

APN: 726-32-002

PRELIMINARY
GRADING AND
DRAINAGE PLAN

SHEET NUMBER
C4.0

SEE SHEET C4.0 FOR CONTINUATION



LEGEND

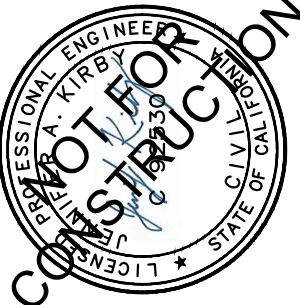
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- APPROXIMATE CIVIL LIMIT OF WORK LINE
- EASEMENT OR SETBACK LINE
- SAWCUT LINE
- EXISTING STORM DRAIN LINE
- PROPOSED STORM DRAIN LINE
- RIDGE LINE
- GRADE BREAK LINE
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- PROPOSED ASPHALT CONCRETE
- PROPOSED CONCRETE SIDEWALK
- PROPOSED HEAVY DUTY CONCRETE
- PROPOSED LANDSCAPE AREA
- PROPOSED BIORETENTION
- PROPOSED ASPHALT MILL AND OVERLAY



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LICENSE NO. 63511

KHA PROJECT	DATE	SCALE	AS SHOWN	DESIGNED BY	DRAWN BY	CHECKED BY
097672127	06/09/2023	AS SHOWN				

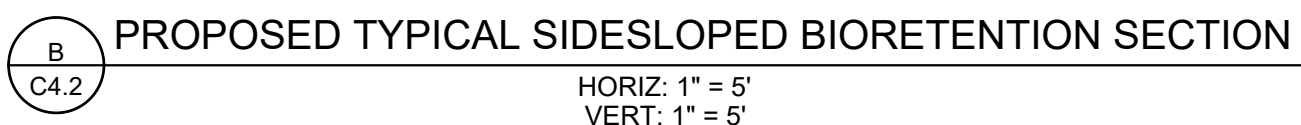
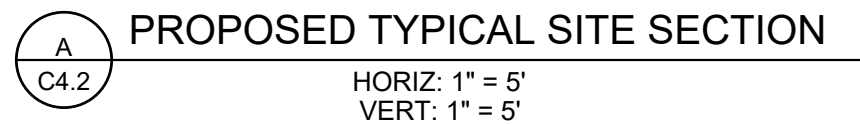
No.	REVISIONS	DATE	BY

CHICK-FIL-A
18599 SUTTER BOULEVARD
MORGAN HILL, CA 95037

PRELIMINARY
GRADING AND
DRAINAGE PLAN

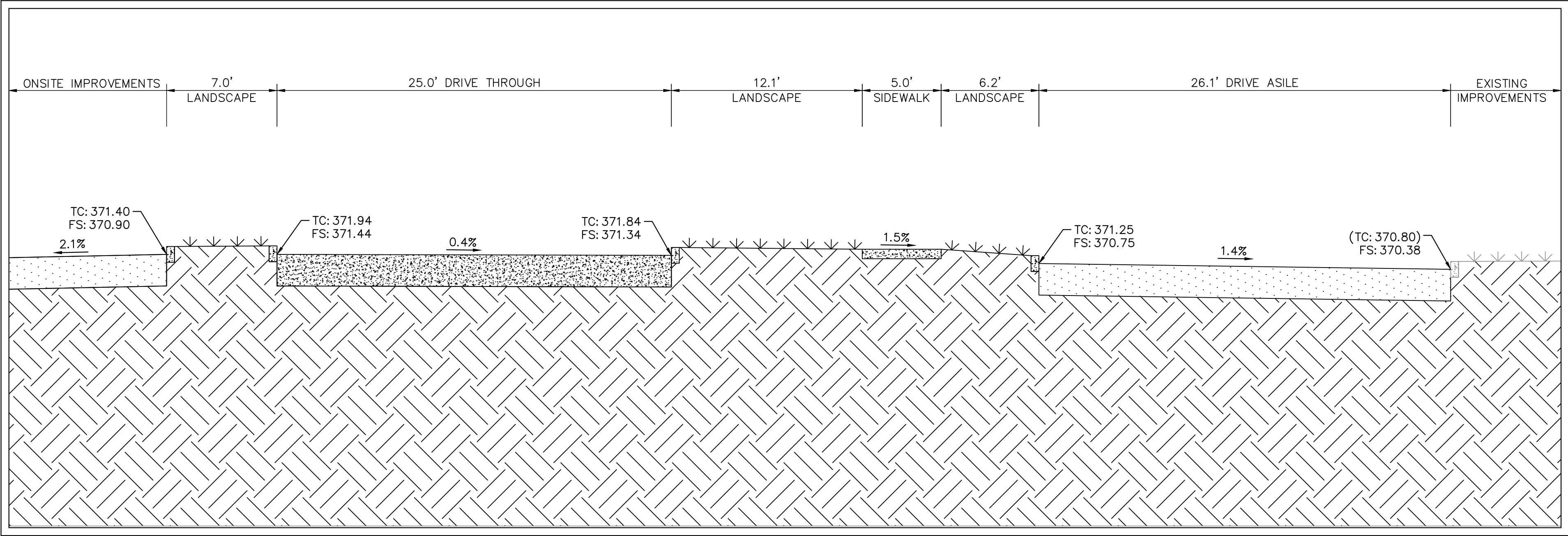
SHEET NUMBER
C4.1

APN: 726-32-002



K:\BAY-LDEV\Chick-Fil-A\097672127 - CFA #5180 - Cochrane & Sutter Blvd Morgan Hill\CAD\Exhibits\Entitlements\C4.2 TYPICAL CROSS SECTIONS.dwg

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C
C4.3

PROPOSED TYPICAL SITE SECTION

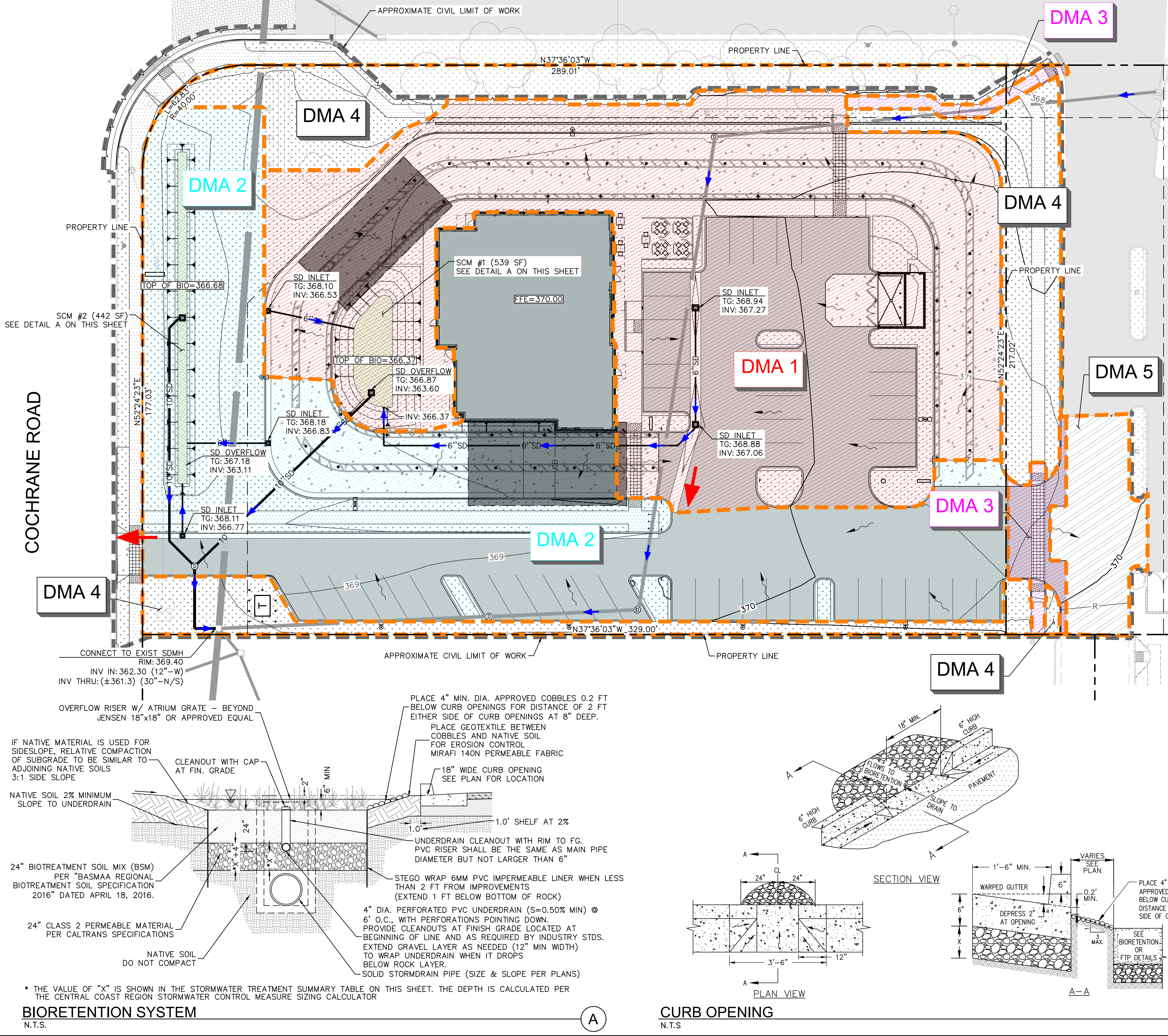
HORIZ: 1" = 5'
VERT: 1" = 5'

TYPICAL CROSS SECTIONS	CHICK-FIL-A 18599 SUTTER BOULEVARD MORGAN HILL, CA 95037 APN: 725-32-002	No.	REVISIONS	DATE	BY	KHA PROJECT 097672127	DATE 06/09/2023	SCALE AS SHOWN	DESIGNED BY SAL	DRAWN BY CKC	CHECKED BY JAK		 Chick-fil-A 5200 Buffington Road Atlanta, Georgia 30349-2998	 Kimley-Horn 4637 CHABOT DRIVE, SUITE 350, PLEASANTON, CA 94588 PHONE: 925-398-4840 FAX: 925-398-4849 WWW.KIMLEY-HORN.COM		
SHEET NUMBER C4.3																

K:\BAY-LDEVA\Chick-Fil-A\097672127 - CFA #5180 - Cochrane & Sutter Blvd Morgan Hill\CAD\Exhibits\Entireties\C5.0 PRELIMINARY STORMWATER CONTROL PLAN.dwg
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COCHRANE ROAD

SUTTER BOULEVARD



LEGEND

- PROPERTY LINE
- APPROXIMATE CIVIL LIMIT OF WORK LINE
- EASEMENT OR SETBACK LINE
- DMA BOUNDARY LINE
- EXISTING STORM DRAIN LINE
- PROPOSED STORM DRAIN LINE
- RIDGE LINE
- GRADE BREAK LINE
- OVERLAND RELEASE PATH
- STORM DRAIN FLOW ARROW
- SURFACE DRAINAGE ARROW
- PROPOSED ASPHALT CONCRETE PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED HEAVY DUTY CONCRETE
- PROPOSED LANDSCAPE AREA
- PROPOSED BIORETENTION
- PROPOSED ASPHALT MILL AND OVERLAY

PROPOSED STORMWATER TREATMENT SUMMARY

	TOTAL AREA (SF)	PERVIOUS AREA (SF)	IMPERVIOUS AREA (SF)	TREATMENT REQUIRED CALC	REQUIRED TREATMENT AREA (SF) - IMP CALC	PROVIDED TREATMENT (SF)	TREATMENT TYPE	DEPTH OF ROCK BELOW UNDERDRAIN (IN)
DMA 1	31,124	6,263	24,861	2X 85TH % EVENT	497	539	BIORETENTION	41"
DMA 2	30,846	8,908	21,938	2X 85TH % EVENT	439	442	BIORETENTION	47"
DMA 3	1,452	0	1,452	2X 85TH % EVENT	29	*	EQUIVALENT BIORETENTION	-
DMA 4	12,196	11,233	963	N/A	0	0	SELF RETAINING	-
DMA 5	2,328	0	2,328	**N/A	0	0	MILL & OVERLAY	-
TOTAL	77,946	26,404	51,542		965	981	N/A	

*THE AREA WITHIN DMA 3 IS INFEASIBLE TO BE TREATED. THEREFORE TREATMENT FOR DMA 1 WILL BE OVERSIZED TO TREAT THE EQUIVALENT REQUIREMENTS OF DMA 3.

** DMA 5 CONSISTS OF ASPHALT TO BE MILL AND OVERLAID. DOES NOT INCLUDE FULL DEPTH IMPERVIOUS AREA REPLACEMENT, SO THEREFORE IS NOT REQUIRED TO BE TREATED.

GENERAL NOTES

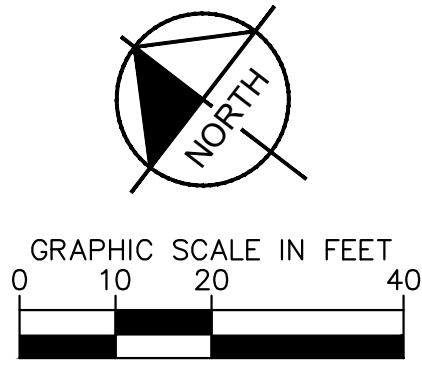
- DEPTH TO SEASONAL HIGH GROUNDWATER TABLE IS 30-40 FT BELOW SURFACE.
- SOIL TYPE ONSITE WAS FOUND TO BE SM - SILTY SAND AND SP - POORLY GRADED SAND WITH SILT. HYDROLOGIC SOIL GROUP OF SOIL ONSITE IS GROUP B.
- ZONING CLASSIFICATION: CG - GENERAL COMMERCIAL.
- SETBACKS ARE AS FOLLOWS:
 - FRONT = 25 FT.
 - REAR = 20 FT.
 - INTERIOR SIDE = 0 FT.
 - STREET SIDE = 15 FT.

IMPERVIOUS VS PERVIOUS AREA

	TOTAL CONSTRUCTION AREA (SF)	IMPERVIOUS AREA (SF)	PERVIOUS AREA (SF)	PERCENT PERVIOUS
EXISTING	77,946	53,021	24,925	32%
PROPOSED	77,946	51,542	26,404	34%

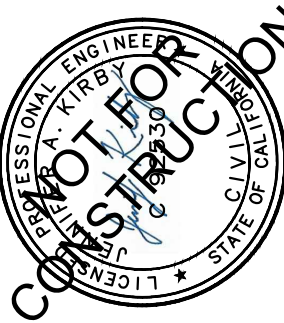
STATEMENT OF PERFORMANCE REQUIREMENTS

- | | |
|--|-----|
| 1. PERFORMANCE REQUIREMENT NO.1 - SITE DESIGN AND RUNOFF REDUCTION | YES |
| 2. PERFORMANCE REQUIREMENT NO.2 - WATER QUALITY TREATMENT | YES |
| 3. PERFORMANCE REQUIREMENT NO.3 - RUNOFF RETENTION | YES |
| 4. PERFORMANCE REQUIREMENT NO.4 - PEAK MANAGEMENT | YES |



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

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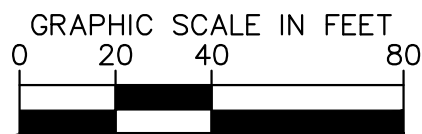
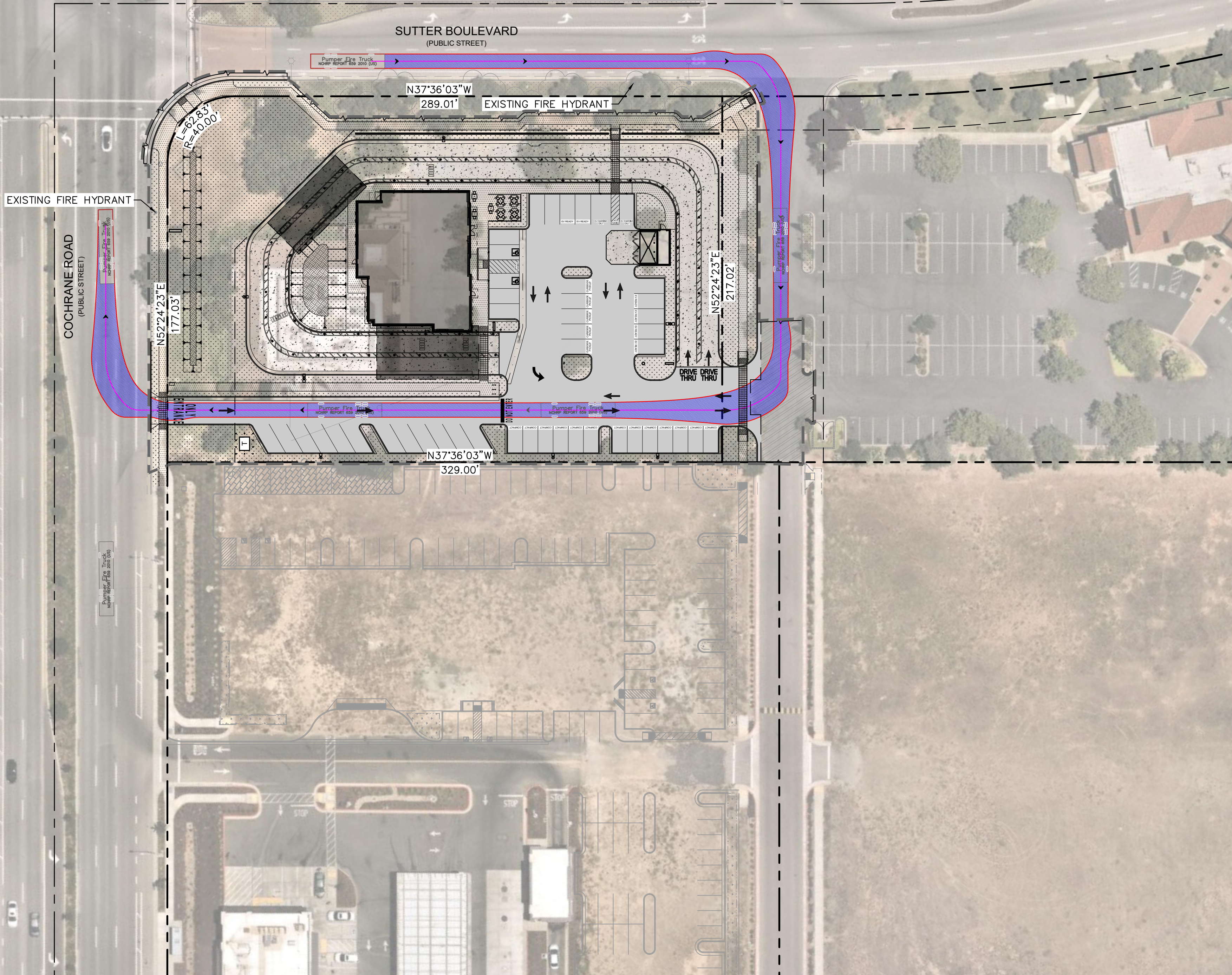
KHA PROJECT	DATE	SCALE	AS SHOWN	DESIGNED BY	SAL	DRAWN BY	CXC	CHECKED BY	JAK
097672127	06/09/2023								

NO.	REVISIONS	DATE	BY

CHICK-FIL-A
18599 SUTTER BOULEVARD
MORGAN HILL, CA 95037

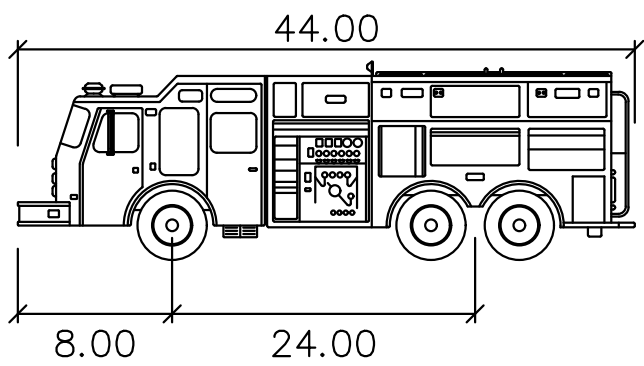
PRELIMINARY
STORMWATER
CONTROL PLAN

SHEET NUMBER
C5.0



LEGEND

- | | |
|---|--------------------------------------|
| | PROPERTY LINE |
| | APPROXIMATE CIVIL LIMIT OF WORK LINE |
| | EASEMENT OR SETBACK LINE |
| | SAWCUT LINE |



Pumper Fire Truck

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 37.8

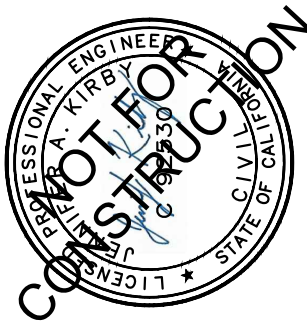
NCHRP REPORT 659 2010 FIRE TRUCK
NOT TO SCALE



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

Kimley»»Horn

4637 CHABOT DRIVE, SUITE 350, PLEASANTON, CA 94588
PHONE: 925-398-4840 FAX: 925-398-4849
WWW.KIMFY-HORN.COM

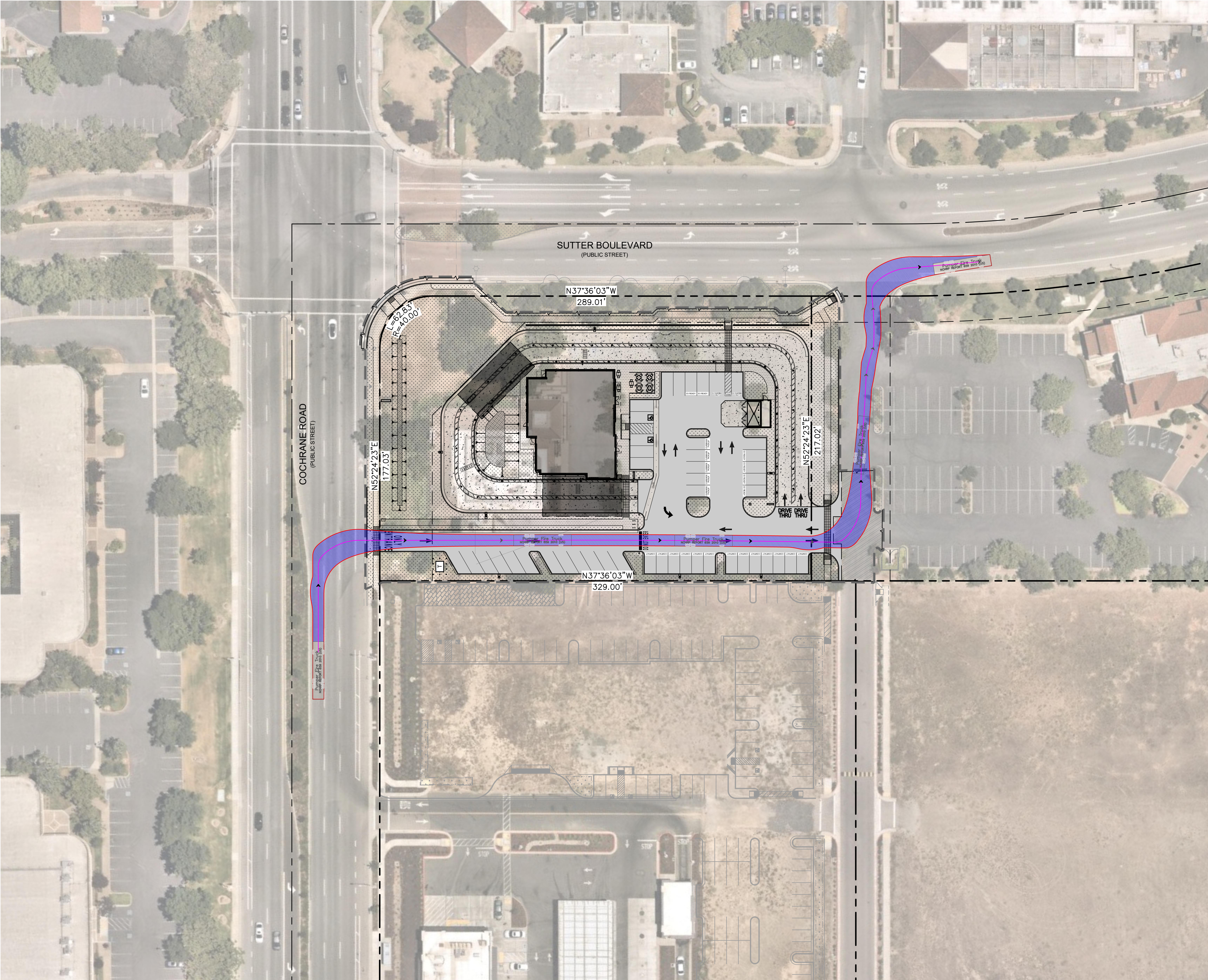
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CHICK-FIL-A
18599 SUTTER BOULEVARD
MORGAN HILL, CA 95037

APN: 726-32-002

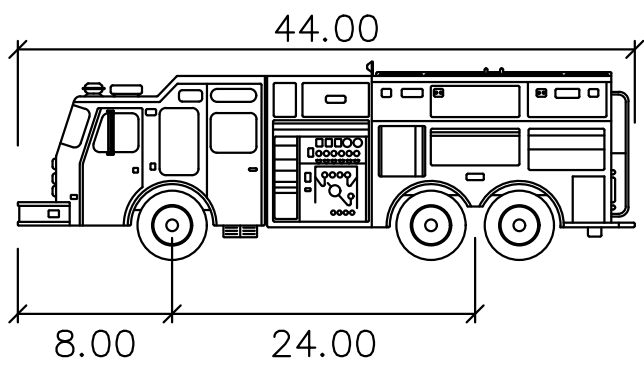
PRELIMINARY FIRE TRUCK TURN - OPTION 1

SHEET NUMBER
C7.0



LEGEND

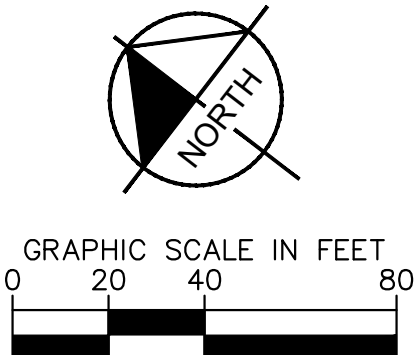
- PROPERTY LINE
- APPROXIMATE CIVIL LIMIT OF WORK LINE
- EASEMENT OR SETBACK LINE
- SAWCUT LINE



Pumper Fire Truck

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 37.8

NCHRP REPORT 659 2010 FIRE TRUCK
NOT TO SCALE

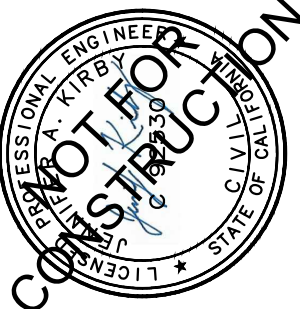




Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



Kimley-Horn



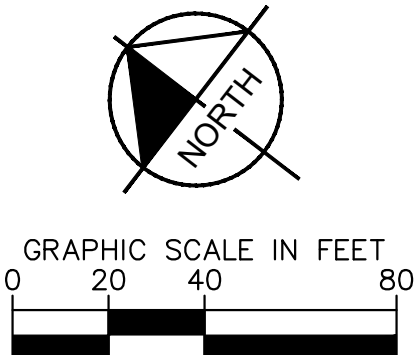
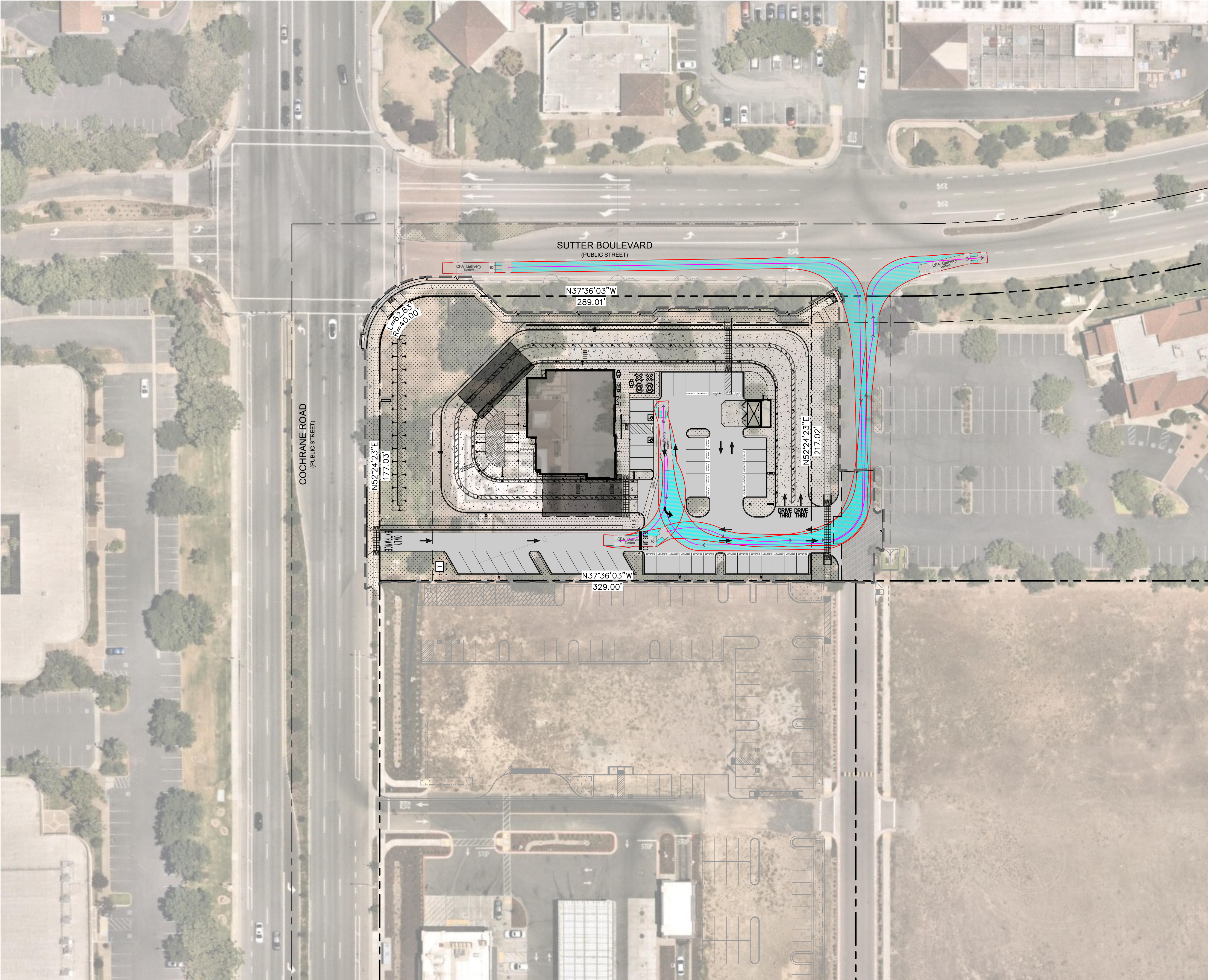
CHAD A. HORN
PROFESSIONAL ENGINEER
LICENSE NO. 11023
STATE OF CALIFORNIA

KHA PROJECT	097672127								
DATE	06/09/2023								
SCALE	AS SHOWN								
DESIGNED BY	SAL								
DRAWN BY	CXC								
CHECKED BY	JAK								

CHICK-FIL-A
18599 SUTTER BOULEVARD
MORGAN HILL, CA 95037
APN: 726-32-002

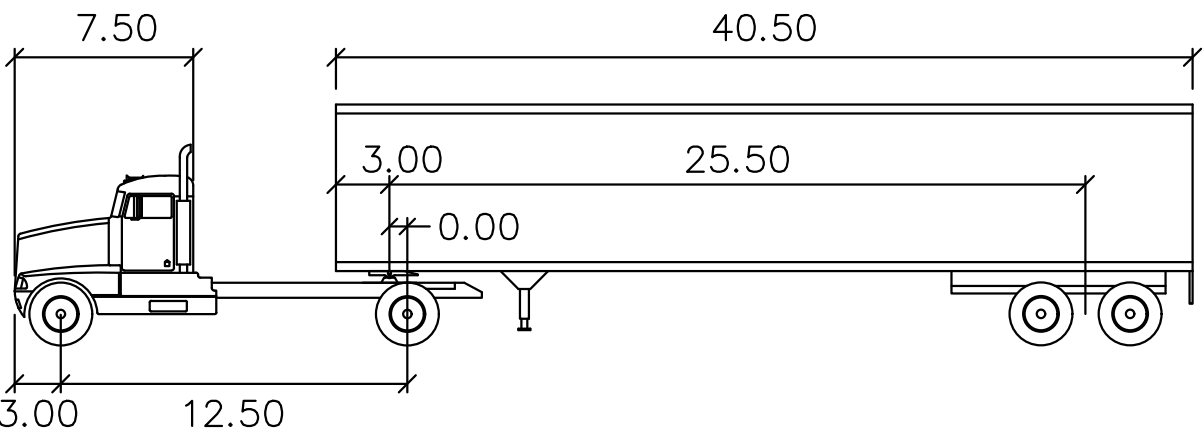
PRELIMINARY FIRE
TRUCK TURN -
OPTION 2

SHEET NUMBER
C7.1



LEGEND

- PROPERTY LINE
- APPROXIMATE CIVIL LIMIT OF WORK LINE
- EASEMENT OR SETBACK LINE
- SAWCUT LINE



CFA Delivery

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.00	Steering Angle	: 20.3
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.00		

CFA DELIVERY TRUCK
NOT TO SCALE



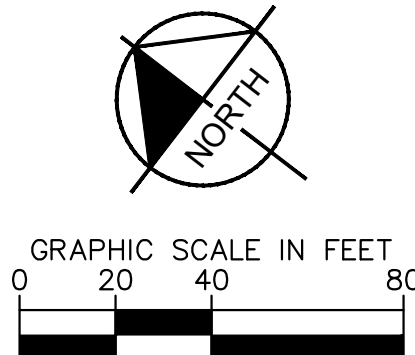
Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



Kimley-Horn

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PHONE: 925-398-4840 FAX: 925-398-4849
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KHA PROJECT		DATE		SCALE		DESIGNED BY		DRAWN BY		CHECKED BY	
097672127		06/09/2023		AS SHOWN		SAL		CXC		JAK	



 PROPERTY LINE
 APPROXIMATE CIVIL LIMIT OF WORK LINE
 EASEMENT OR SETBACK LINE
 SAWCUT LINE



TRASH TRUCK
NOT TO SCALE

CHICK-FIL-A
18599 SUTTER BOULEVARD
MORGAN HILL, CA 95037

2/13/2023 10:53:24 AM Autodesk Docs://CA_05180_Morgan Hill FSU_2022.10_FSR05180_Morgan Hill FSU_ARC.rvt 05-SE-05180-G-000-COVER SHEET

GOVERNMENTAL AGENCIES

BUILDING DEPARTMENT
City of Morgan Hill
Department of Blding & Fire
Prevention Division
17575 Peak Avenue
Morgan Hill, CA 95037
Phone: (408) 778-6480 general
Eric Blomquist, Building Official
eric.blomquist@morganhill.ca.gov

FIRE DEPARTMENT
City of Morgan Hill
Department of Blding & Fire
Prevention Division
17575 Peak Avenue
Morgan Hill, CA 95037
Phone: (408) 778-6480 general
Eric Blomquist, Building Official
eric.blomquist@morganhill.ca.gov

HEALTH DEPARTMENT
Santa Clara County Dept.
Environmental Health | Consumer
Protection Division
1555 Berger Dr. Bldg 2, 3rd Floor
San Jose, CA 95112
Phone: (408) 918-3400 general
Phone: (408) 918-3325 direct
Aziz Hussain, Senior
Environmental Health Specialist
aziz.hussain@cep.sccgov.org

BUILDING DATA

BUILDING CODE:
2019 California Building Code

PLUMBING CODE:
2019 California Plumbing Code

MECHANICAL CODE:
2019 California Mechanical Code

ELECTRICAL CODE:
2019 California Electrical Code

ACCESSIBILITY CODE:
2019 California Building Code

ENERGY CODE:
2019 California Energy Code

FIRE CODE:
2019 California Fire Code

GAS CODE:
2019 California Mechanical Code



05180
P14 SE LRG
MORGAN HILL FSU

18599 SUTTER BOULEVARD
MORGAN HILL, CALIFORNIA 95037



VICINITY MAP

REGION: WEST



DESIGNNOTES APPLIED IN CURRENT PROJECT

DESIGNNOTE #	REV #	DESCRIPTION
2022-014	0	SRI A - BUILDING LIGHTING
2022-015	0	EXPANDED DIGITAL COCKPIT
2022-016	0	DRIVE - THRU COCKPIT CLEARANCE
2022-017	0	SRI EXTERIOR PAINT
2022-018	0	PROJECT DESIGN WORKFLOW
2022-019	0	ACT CEILING RISER ROOM
2022-020	0	ADD CHEROKEE BRICK AS PREFERRED SUPPLIER & BRICK REGIONAL STRATEGY MAP
2022-021	0	UPDATES TO SOIL-FRETREATMENT PROGRAM AND CONTACT INFO
2022-022	0	DRIVE-THRU DUMP SINK AND HAND SINK

ITEMS OF IMPORTANCE

INCLUDED IN PROJECT	ITEM NUMBER	ITEM DESCRIPTION
Yes	1	ITEMS OF IMPORTANCE

*NOTE: REVISION SCHEDULE ABOVE MAY NOT LIST REVISIONS TO ALL DISCIPLINES. REFER TO REVISED DRAWINGS FOR CHANGES TO SHEETS NOT LISTED HERE.

ARCHITECT

WARE MALCOMB
2777 E. CAMELBACK RD,
SUITE #325
PHOENIX, AZ, 85016
Phone: 480.767.1001
JOSH DICKSON
jdickson@waremalcomb.com

ELECTRICAL

ACIES ENGINEERING
400 N. MCCARTHY BLVD, SUITE
250, MILPITAS CA 95035
Phone: (408) 522-5255 x121
Fax: (408) 522-5260
CHRISTIAN DALIMARTA, PE
christian@acies.net

CIVIL

KIMLEY-HORN
4637 CHABOT DRIVE, SUITE 350
PLEASANTON, CA 94588
Phone: (669) 800 4168
JENNIFER KIRBY, PE
jennifer.kirby@kimley-horn.com

LANDSCAPE

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107 AVENIDA MIRAMAR #D
SAN CLEMENTE, CA 92672
Phone: 949.489.5623 x 101
C: 949.412.8888
NICOLE HOURIAN, ASLA
nhourian@hourianassociates.com

Use Permit
UP2022-0007: Sutter - Chick-Fil-A

SHEET INDEX

SHEET NUMBER	SHEET NAME	ISSUED FOR BID	ISSUED FOR PERMIT	ISSUED FOR CONSTRUCTION
G-000	COVER SHEET			
A-100	SITE PLAN			
A-103	REFUSE ENCLOSURE			
A-201	FLOOR PLAN			
A-301	EXTERIOR ELEVATIONS			
A-302	EXTERIOR ELEVATIONS			
A-401	PERSPECTIVES			
ES-0	SINGLE LINE DIAGRAM			
EP1-0	SITE PHOTOMETRIC PLAN			
EP1-1	EXTERIOR LIGHTING CUTSHEET			
EP1-2	EXTERIOR LIGHTING CUTSHEET			
EP1-3	EXTERIOR LIGHTING CUTSHEET			
ES1-0	EXTERIOR LIGHTING PLAN			

Item 2
Attachment 15



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

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Leading Design for Commercial Real Estate

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PHOENIX, AZ, 85016
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CHICK-FIL-A
MORGAN HILL FSU

18599 SUTTER BOULEVARD
MORGAN HILL, CALIFORNIA 95037

FSR#05180

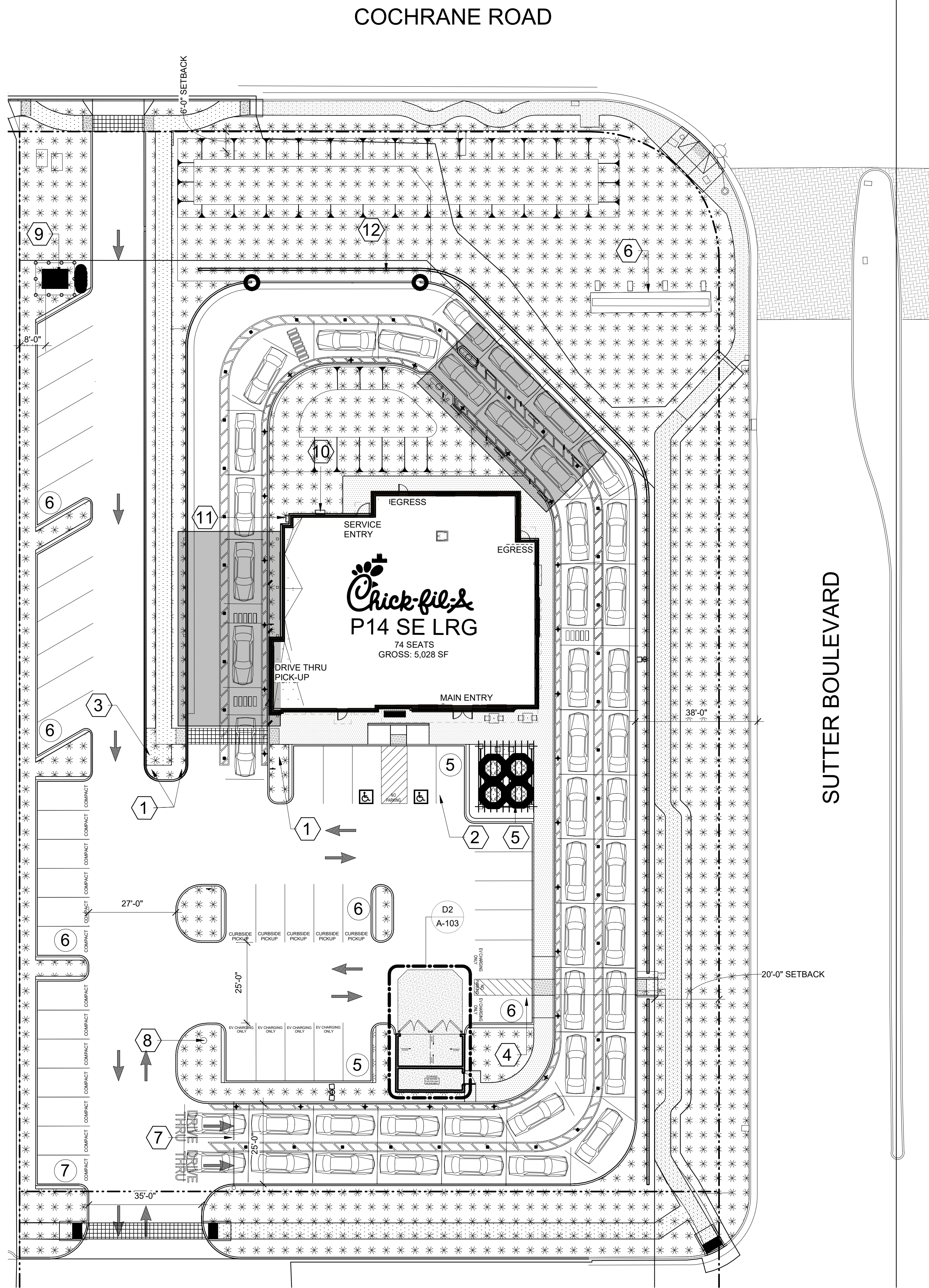
BUILDING TYPE / SIZE: P14 SE LRG
RELEASE: 22-08
PRINTED FOR:
ENTITLEMENT PACKAGE
REVISION SCHEDULE
NO. DATE DESCRIPTION

ENTITLEMENT PACKAGE

CONSULTANT PROJECT # PHX22-0187-00
DATE: 01/31/2023
DRAWN BY: J.M. / V.Z.
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SHEET COVER SHEET
SHEET NUMBER

G-000

B1 SITE PLAN
1" = 20'-0"



SITE PLAN KEYNOTES	
1	SIGNAGE PER SIGNAGE PACKAGE, TYP.
2	ADA PARKING.
3	SHORT-TERM BIKE PARKING.
4	LOCATION OF LONG-TERM BIKE STORAGE.
5	PATIO PLAN.
6	EXISTING MONUMENT.
7	CLEARANCE BAR PER SIGNAGE.
8	FLAG POLE.
9	TRANSFORMER.
10	ELECTRICAL METER
11	GAS METER.
12	NEW SITE WALL.

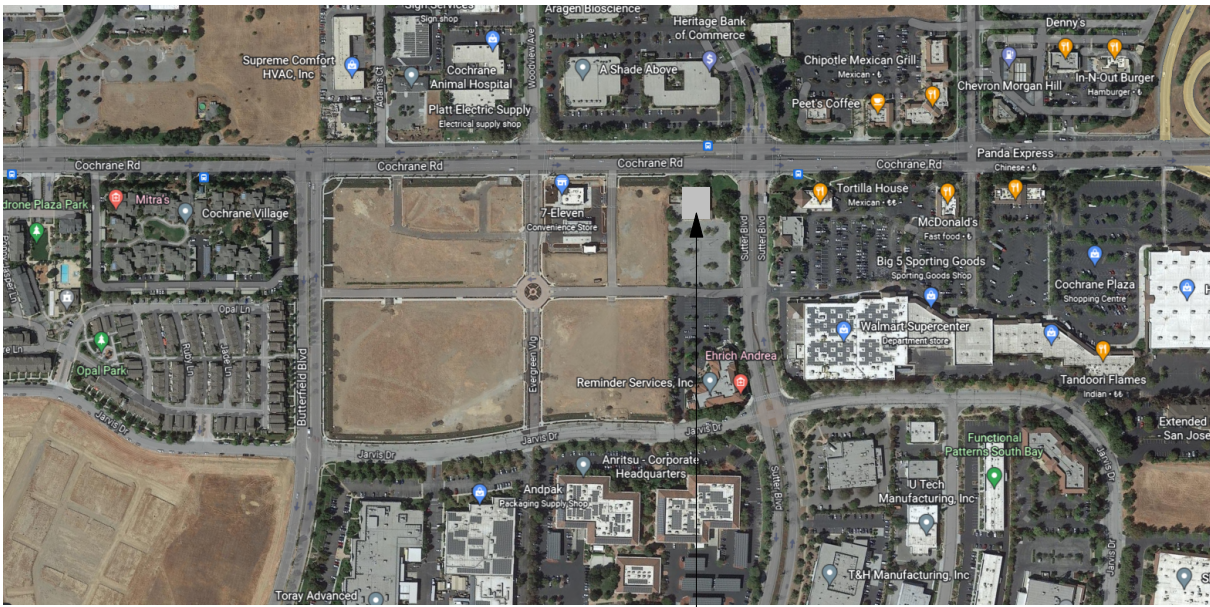
GENERAL NOTES:

FOR ACCESSIBLE ROUTE MAX SLOPE 2% AND CROSS SLOPE 2% ALONG PATH AND 2% SLOPE IN ANY DIRECTION AT EACH TURN AND INTERSECTION OF THE PATH OF TRAVEL.

PROJECT DATA:	
SITE AREA GROSS:	1.82 AC 79,473 SF
BUILDING FOOTPRINT: CHICK-FIL-A	5,028 SF
TOTAL FOOTPRINT:	5,028 SF
COVERAGE:	6%
PARKING REQUIRED:	RESTAURANT (3,028 SF) MAX. COMPACT ALLOWED
	1,968 SF / 60 PUBLIC SP= 33.3 3,030 SF / 250 GFA = 12.12 30%
	46 STALLS 15 STALLS
PARKING PROVIDED:	STANDARD: 48 STALLS REG. ACCESSIBLE (810,341,000 SF) 2 STALLS
DT STACK	62 CARS
OP CANOPY	8TH CAR AT INNER LANER
DEVELOPMENT STANDARDS:	
ZONING:	PUD (CG)
MAX. HEIGHT:	35'-0" FT
BUILDING SETBACKS:	FRONT: 25'-0" FT FROM SUTTER BLVD: 30'-0" FT FROM COCHRANE BLVD: 40'-0" FT REAR: 20'-0" FT
LANDSCAPE SETBACKS:	FRONT: 25'-0" FT SIDE: 0'-0" FT REAR: 20'-0" FT
LANDSCAPE REQ:	10%
OFF-STREET PARKING:	STANDARD: 8X16 COMPACT: 8X16 COMPACT %: 30% DRIVE AISLE: 25 FT FIRE LANE: 20 FT OVERHANG: 2 FT TREE WELL: 5 FT
REQ. PARKING RATIO BY USE:	RESTAURANT: 1,100 SF RETAIL: 1,050 SF OFFICE: 1,050 SF
NOTES:	1. TYPE A, FOR PARKING AREAS LESS THAN 50,000 SF-5% OTHERWISE 8%.
PARKING CALCULATION:	ACCESSIBLE STALL REQUIRED PER CBC ACCESSIBLE STALLS PROVIDED 10% OF REQUIRED PARKING SHORT TERM BIKE STORAGE REQUIRED SHORT TERM PARKING REQUIRED
	3 3 3 6 6

SITE PLAN LEGEND

LANDSCAPE	
PROPERTY LINE	
BUILDING LINE	
EXISTING 6" CURB	
EXISTING SIDEWALK	
EXISTING CURBS AND SIDEWALKS	
OUTDOOR SEATING	
ACCESSIBLE ROUTE 2% MAX SLOPE	
4" WIDE DIAGONAL STRIPPING	
PARKING LIGHT FIXTURE (SEE ELECTRICAL DRAWING)	
EASEMENT LINE	
VEHICLE (20'-0" LENGTH TYP.)	



PROJECT SITE
PROJECT SITE



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

WARE MALCOMB
Leading Design for Commercial Real Estate

2777 E. CAMELBACK RD, SUITE #325
PHOENIX, AZ, 85016
P 480.767.1001

CHICK-FIL-A
MORGAN HILL FSU
18599 SUTTER BOULEVARD
MORGAN HILL, CALIFORNIA 95037

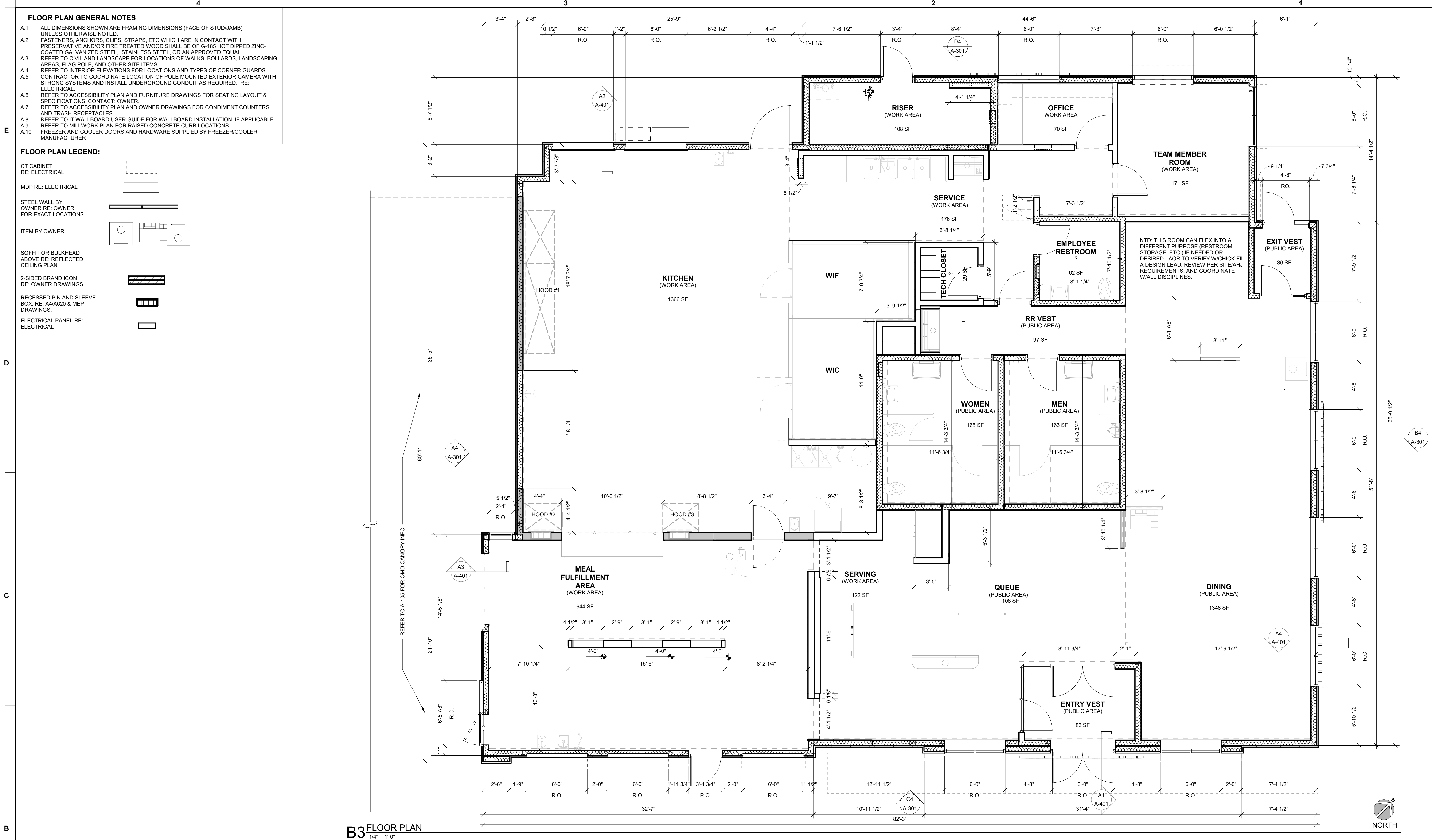
FSR#05180

BUILDING TYPE / SIZE: P14 SE LRG
RELEASE: 22-08
PRINTED FOR
ENTITLEMENT PACKAGE
REVISION SCHEDULE
NO. DATE DESCRIPTION

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CONSULTANT PROJECT # PHX22-0187-00
DATE: 01/31/2023
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SHEET
SITE PLAN
SHEET NUMBER

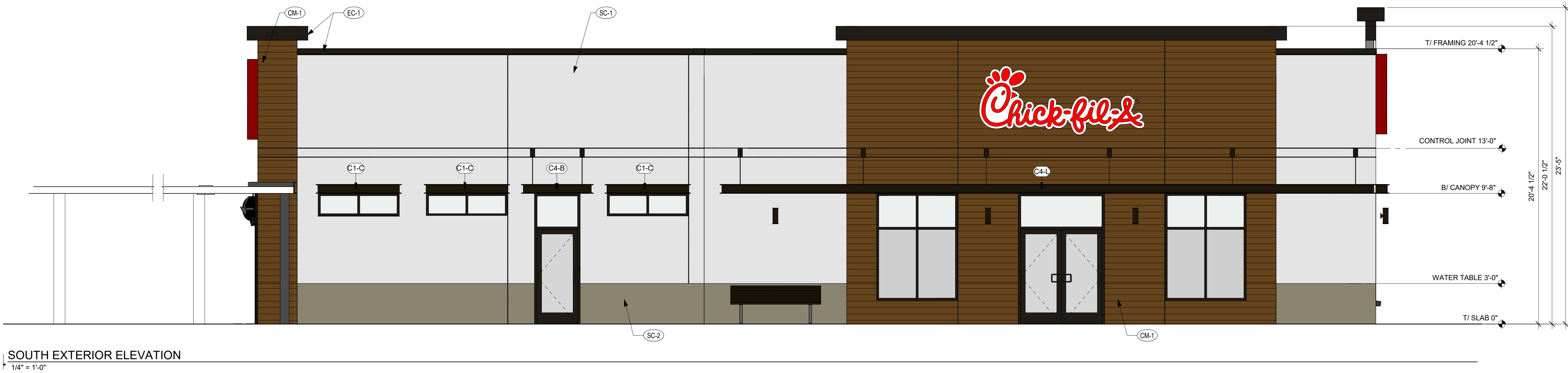
A-100



2/13/2023 10:52:13 AM Autodesk Docs/CA_05180_Morgan Hill FSU_2022.10_FSR05180_Morgan Hill FSU_ARC.rvt
10-SE-05180-A-301-EXTERIOR ELEVATIONS



NORTH EXTERIOR ELEVATION
1/4" = 1'-0"



SOUTH EXTERIOR ELEVATION
1/4" = 1'-0"

FINISH SCHEDULE - EXTERIOR						
MARK	DESCRIPTION	MANUFACTURER	MODEL NAME	MODEL NUMBER	COLOR	NOTE
CM-1	WOOD CLADDING	AZEK EXTERIORS	TIMBER TECH ADVANCED PVC BY AZEK; VINTAGE COLLECTION		MAHOGANY	
EC-1	PARAPET WALL COPING	DUROLAST / EXCEPTIONAL METALS			MIDNIGHT BRONZE	
PT-100	EXTERIOR PAINT	SHERWIN WILLIAMS	SHER-CRYL HIGH PERFORMANCE ACRYLIC #B66-350	SW 2807	ROOKWOOD	REFUSE ENCLOSURE - FINISH: SEMI-GLOSS ON DOOR FRAMES, SATIN ON WALLS
PT-113	EXTERIOR PAINT	SHERWIN WILLIAMS	SHER-CRYL HIGH PERFORMANCE ACRYLIC #B66-350		DARK BRONZE	FINISH: SEMI-GLOSS
SC-1	STUCCO	STO	POWERWALL	SW 7566	WESTHIGHLAND WHITE	FINISH: SAND MEDIUM
SC-2	STUCCO	STO	POWERWALL	SW 6172	HARDWARE	FINISH: SAND MEDIUM
ST-1	STOREFRONT	YKK	YES 45		DARK BRONZE (MATTE)	

ATTACHED CANOPY SCHEDULE						
Mark	Description	Count	Overall Width	Overall Depth (Offset From Top)	Tie Back Mounting	Integral Lighting
C1-C	Exterior Canopy	12	6'-4"	1'-0"	No	
C4-A	Exterior Canopy	1	5'-0"	4'-0"	2'-4"	Yes
C4-B	Exterior Canopy	2	5'-4"	4'-0"	2'-4"	Yes
C4-L	Exterior Canopy	1	48'-6"	4'-0"	2'-4"	Yes
Grand total		16				
CANOPY NOTES:						
BUILDING MOUNTED CANOPIES			- 8" THICK CANOPY - KYNAR FINISH OF STRUCTURE, FASCIA, & DECKING TO MATCH (CP-1)			
COLUMN MOUNTED CANOPIES			- 10" THICK CANOPY - FINISH OF STRUCTURE TO BE (CP-1) - FINISH OF DECKING TO BE (CP-2)			

LEGEND		EXPANSION JOINT, SEALANT COLOR TO MATCH MORTAR COLOR		OIL EXTRACTION PORT ACCESS BOX	
	CM-1		EC-1		CO2 FILL BOX - RE: KITCHEN
	SC-1		MDP - 6T-113 RE: ELECTRICAL		LIGHT FIXTURE - RE: ELECTRICAL
	SC-2		CT CABINET - 6T-113 RE: ELECTRICAL		
	EC-1				



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

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PHOENIX, AZ, 85016
P 480.767.1001

CHICK-FIL-A
MORGAN HILL FSU

18599 SUTTER BOULEVARD
MORGAN HILL, CALIFORNIA 95037

FSR#05180

BUILDING TYPE / SIZE: P14 SE LRG
RELEASE: 22.08

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REVISION SCHEDULE
NO. DATE DESCRIPTION

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CONSULTANT PROJECT # PHX22-0187-00
DATE 01/31/2023

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EXTERIOR ELEVATIONS

SHEET NUMBER

A-301

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10-SE-05180-A-302-EXTERIOR ELEVATIONS (COLOR)



FINISH SCHEDULE - EXTERIOR						
MARK	DESCRIPTION	MANUFACTURER	MODEL NAME	MODEL NUMBER	COLOR	NOTE
CM-1	WOOD CLADDING	AZEK EXTERIORS	TIMBER TECH ADVANCED PVC BY AZEK VINTAGE COLLECTION		MAHOGANY	
EC-1	PARAPET WALL COPING	DUROLAST / EXCEPTIONAL METALS	SHER-CRYL HIGH PERFORMANCE ACRYLIC #B66-350	SW 2807	MIDNIGHT BRONZE	REFUSE ENCLOSURE - FINISH: SEMI-GLOSS ON DOOR FRAMES, SATIN ON WALLS
PT-100	EXTERIOR PAINT	SHERWIN WILLIAMS	SHER-CRYL HIGH PERFORMANCE ACRYLIC #B66-350		ROCKWOOD	FINISH: SEMI-GLOSS
PT-113	EXTERIOR PAINT	SHERWIN WILLIAMS	SHER-CRYL HIGH PERFORMANCE ACRYLIC #B66-350		DARK BRONZE	FINISH: SEMI-GLOSS
SC-1	STUCCO	STO	POWERWALL	SW 7566	WESTHIGHLAND WHITE	FINISH: SAND MEDIUM
SC-2	STUCCO	STO	POWERWALL	SW 6172	HARDWARE	FINISH: SAND MEDIUM
ST-1	STOREFRONT	YKK	YES 45		DARK BRONZE (MATTE)	

ATTACHED CANOPY SCHEDULE						
Mark	Description	Count	Overall Width	Overall Depth	Tie Back Mounting (Offset From Top)	Integral Lighting
C1-C	Exterior Canopy	12	6'-4"	1'-0"	0"	No
C4-A	Exterior Canopy	1	5'-0"	4'-0"	2'-4"	Yes
C4-B	Exterior Canopy	2	5'-4"	4'-0"	2'-4"	Yes
C4-L	Exterior Canopy	1	48'-6"	4'-0"	2'-4"	Yes
Grand total		16				
CANOPY NOTES:						
BUILDING MOUNTED CANOPIES			- 8" THICK CANOPY - KYNAR FINISH OF STRUCTURE, FASCIA, & DECKING TO MATCH (CP-1)			
COLUMN MOUNTED CANOPIES			- 10" THICK CANOPY - FINISH OF STRUCTURE TO BE (CP-1) - FINISH OF DECKING TO BE (CP-2)			

LEGEND		EXPANSION JOINT, SEALANT COLOR TO MATCH MORTAR COLOR		OIL EXTRACTION PORT ACCESS BOX	
	CM-1				
	SC-1				CO2 FILL BOX - RE: KITCHEN
	SC-2				LIGHT FIXTURE - RE: ELECTRICAL
	EC-1				OT CABINET - ET-113 RE: ELECTRICAL
			CARD READER BY SECURITY VENDOR - RE: ELEC		
			MDP - ET-113 RE: ELECTRICAL		



Chick-fil-A

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

WARE MALCOMB
Leading Design for Commercial Real Estate

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CHICK-FIL-A
MORGAN HILL FSU
18599 SUTTER BOULEVARD
MORGAN HILL, CALIFORNIA 95037

FSR#05180

BUILDING TYPE / SIZE: P14 SE LRG
RELEASE: 22-08

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CONSULTANT PROJECT # PHX22-0187-00
DATE 01/31/2023

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EXTERIOR ELEVATIONS

SHEET

SHEET NUMBER

A-302

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SE-05180-A-401-EXTERIOR PERSPECTIVES



C2 PERSPECTIVES



C1 PERSPECTIVES



A2 PERSPECTIVES



A1 PERSPECTIVES



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

WARE MALCOMB
Leading Design for Commercial Real Estate

2777 E. CAMELBACK RD, SUITE #325
PHOENIX, ARIZONA, 85016
P 480.767.1001

CHICK-FIL-A
MORGAN HILL FSU
18599 SUTTER BLVD
MORGAN HILL, CALIFORNIA 95037

FSR#05180

BUILDING TYPE / SIZE: P14 SE LRG
RELEASE: 22.08

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REVISION SCHEDULE
NO. DATE DESCRIPTION

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CONSULTANT PROJECT # PHX22-0187-00
DATE: 08/11/2023

DRAWN BY: V.Z.
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**EXTERIOR
PERSPECTIVES**

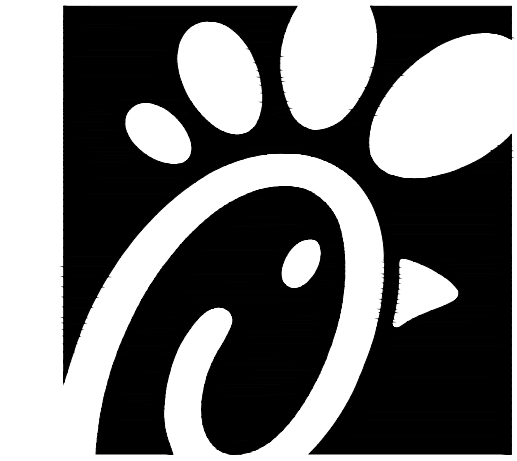
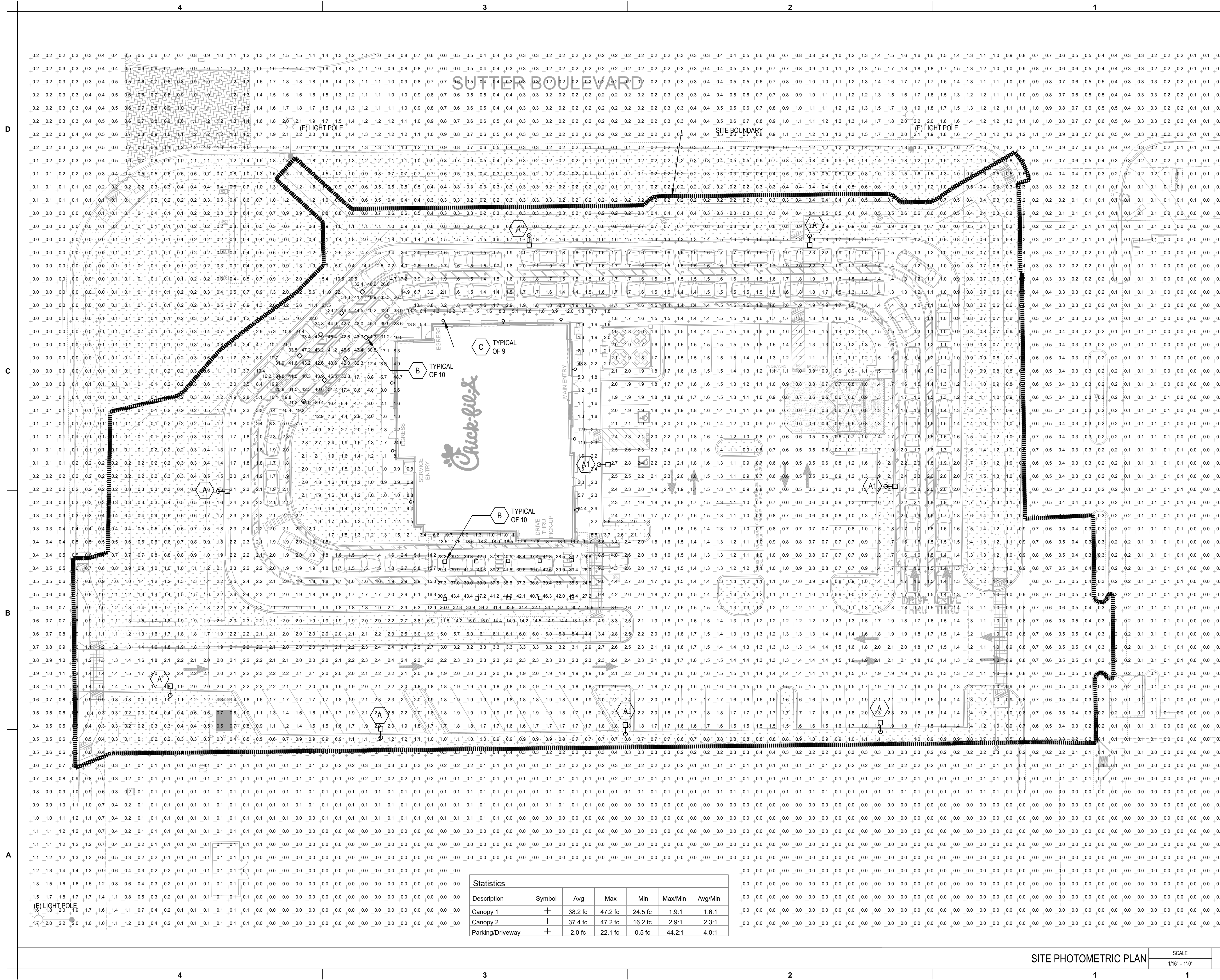
SHEET NUMBER

A-401

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Chick-fil-A

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

WARE MALCOMB
Leading Design for Commercial Real Estate

4683 Chabot Drive, Ste 300
Pleasanton, CA 94588
P 925.244.9620
F 925.244.9621

CHICK-FIL-A
18599 SUTTER BOULEVARD
MORGAN HILL, CA 95037

FSR# 0000

BUILDING TYPE / SIZE:
RELEASE:
REVISION SCHEDULE

CONSULTANT PROJECT #
PRINTED FOR
DATE
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SHEET

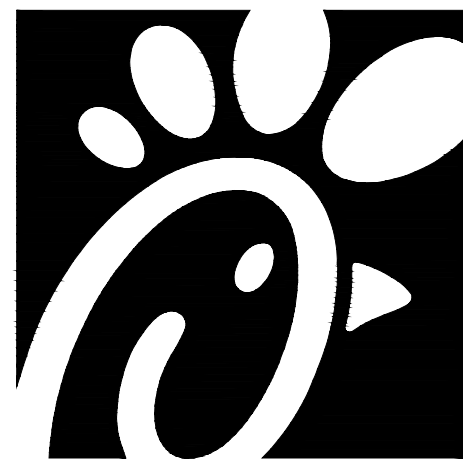
SITE PHOTOMETRIC PLAN

SHEET NUMBER

SITE PHOTOMETRIC PLAN
SCALE
1/16" = 1'-0"

1

EP1.0



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SHEET

EXTERIOR LIGHTING PLAN

SHEET NUMBER

ES1.0

SUTTER BOULEVARD

SITE BOUNDARY

(E) LIGHT POLE

(E) LIGHT POLE

Chick-fil-A

TYPICAL
OF 9

TYPICAL
OF 10

TYPICAL
OF 10

MAIN ENTRY

SERVICE ENTRY

EGRESS

EGRESS

EV CHARGING ONLY

EV CHARGING ONLY

DRIVE THRU

DRIVE THRU

SCHEDULE

SYMBOL	TAG	QTY	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	FILE NAME	(QTY) LAMP	LUMENS	LLF	WATTS	DISTRIBUTION	MOUNTING HEIGHT
	A1	2	COOPER LIGHTING	PRV-PA2A-730-U-T4W	PREVAIL AREA AND ROADWAY LUMINAIRE (2) 70 CRI, 3000K, 720mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS	PRV-PA2A-730-U-T4W.ies	1	14,170	0.9	113.0	BUG RATING : B3-U0-G3	25 FT
	A	7	COOPER LIGHTING	PRV-PA2A-730-U-T4W-HSS	PREVAIL AREA AND ROADWAY LUMINAIRE (2) 70 CRI, 3000K, 720mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD	PRV-PA2A-730-U-T4W-HSS.ies	1	10,262	0.9	113.0	BUG RATING : B1-U0-G3	25 FT
	B	20	DECO LIGHTING	D533R-PRO-55-30-U-5-W-M	LED CANOPY LUMINAIRE, 3000K, 80 CRI		1	7910	0.9	55		RECESS
	C	9	PROGRESS LIGHTING	P5675-31	5" UP/DOWN CYLINDER WITH HEAVY DUTY ALUMINUM CONSTRUCTION, WET LISTED, WITH TWO GENERAL ELECTRIC RETROFIT LAMPS #LED12P30RW83025		2		0.9	24	BUG RATING : B1-U0-G1	8 FT

(E) LIGHT POLE

EXTERIOR LIGHTING PLAN

SCALE
1/16" = 1'-0"

1

EXISTING TREE LEGEND

BOTANICAL NAME	COMMON NAME	HGT./CALIPER	ACTION
1 PLATANUS ACERIFOLIA	LONDON PLANE TREE	8'	REMAIN
2 PLATANUS ACERIFOLIA	LONDON PLANE TREE	7'	REMAIN
3 PLATANUS ACERIFOLIA	LONDON PLANE TREE	7'	REMAIN
4 PLATANUS ACERIFOLIA	LONDON PLANE TREE	7'	REMAIN
5 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMOVE
6 PLATANUS ACERIFOLIA	LONDON PLANE TREE	8'	REMOVE
7 PLATANUS ACERIFOLIA	LONDON PLANE TREE	4',5',6',5',6'	REMOVE
8 PLATANUS ACERIFOLIA	LONDON PLANE TREE	7'	REMOVE
9 PLATANUS ACERIFOLIA	LONDON PLANE TREE	7'	REMOVE
10 PLATANUS ACERIFOLIA	LONDON PLANE TREE	9'	REMOVE
11 PLATANUS ACERIFOLIA	LONDON PLANE TREE	8'	REMOVE
12 PLATANUS ACERIFOLIA	LONDON PLANE TREE	15'	REMOVE
13 PLATANUS ACERIFOLIA	LONDON PLANE TREE	9'	REMOVE
14 PLATANUS ACERIFOLIA	LONDON PLANE TREE	13'	REMOVE
15 PLATANUS ACERIFOLIA	LONDON PLANE TREE	16'	REMOVE
16 QUERCUS AGRIFOLIA	COAST LIVE OAK	24'	REMOVE
17 PALM	PALM	6'	REMOVE
18 PALM	PALM	5'	REMOVE
19 PALM	PALM	6'	REMOVE
20 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMOVE
21 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMOVE
22 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMOVE
23 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMOVE
24 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMOVE
25 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMOVE
26 PLATANUS ACERIFOLIA	LONDON PLANE TREE	16'	REMOVE
27 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMOVE
28 PLATANUS ACERIFOLIA	LONDON PLANE TREE	6'	REMOVE
29 PLATANUS ACERIFOLIA	LONDON PLANE TREE	11'	REMOVE
30 ACER PALMATUM	JAPANESE MAPLE	3',3',3',6',4'	REMOVE
31 PLATANUS ACERIFOLIA	LONDON PLANE TREE	12'	REMOVE
32 PLATANUS ACERIFOLIA	LONDON PLANE TREE	10'	REMOVE
33 QUERCUS AGRIFOLIA	COAST LIVE OAK	19'	REMOVE
34 QUERCUS AGRIFOLIA	COAST LIVE OAK	24'	REMAIN
35 QUERCUS AGRIFOLIA	COAST LIVE OAK	28'	REMAIN
36 PLATANUS ACERIFOLIA	LONDON PLANE TREE	16'	REMOVE
37 PYRUS KAWAKAMII	EVERGREEN PEAR	30'	REMOVE
38 PYRUS KAWAKAMII	EVERGREEN PEAR	11'	REMOVE
39 PYRUS KAWAKAMII	EVERGREEN PEAR	4',4',2'	REMOVE
40 OLEA EUROPAEA 'WILSONI'	FRUITLESS OLIVE	4',4',4',4',4',3'	REMAIN
41 OLEA EUROPAEA 'WILSONI'	FRUITLESS OLIVE	3'	REMOVE
42 PYRUS KAWAKAMII	EVERGREEN PEAR	6'	REMOVE

ORDINANCE TREES TO BE REMOVED:
INDIGENOUS 4
NON-INDIGENOUS 0
ORDINANCE TREES TO REMAIN: 2

PLANTING NOTES

- CONTRACTOR IS TO REVIEW PLANS, VERIFY SITE CONDITIONS AND PLANT QUANTITIES PRIOR TO INSTALLATION. CONFLICTS BETWEEN THE SITE AND THESE PLANS OR WITHIN THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO LANDSCAPE INSTALLATION. ANY DEVIATIONS FROM THE PLANS OR SPECIFICATIONS IS TO HAVE WRITTEN APPROVAL.
- ALL PLANT MATERIAL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF 'AMERICAN NURSERY AND LANDSCAPE ASSOCIATION' STANDARDS. WWW.ANLA.ORG
- LANDSCAPE ARCHITECT SHALL APPROVE PLANT MATERIAL PLACEMENT BY CONTRACTOR PRIOR TO INSTALLATION.
- CONTRACTOR TO INCLUDE IN HIS BID THE REPAIR OF ANY AND ALL DAMAGE RESULTING FROM INSTALLATION OF PLANTING ITEMS. CONNECT TO EXISTING CONDITIONS.
- PERIMETER OF ALL RAISED PLANTERS TO HAVE A ROOT BARRIER TO REDIRECT ROOT GROWTH PER MANUFACTURER'S SPECIFICATIONS.
- FINISH GRADE TO BE 3" BELOW TOP OF CURB OR SIDEWALK FOR PLANTING AREAS.
- FERTILIZER FOR ALL PLANTING AREAS SHALL BE AS SPECIFIED WITHIN THE SOILS REPORT.
- FOR LANDSCAPE INSTALLATIONS, COMPOST AT A RATE OF A MINIMUM OF FOUR (4) CUBIC YARDS PER ONE THOUSAND SQUARE FEET OF PERMEABLE AREA SHALL BE INCORPORATED TO A DEPTH OF SIX INCHES INTO THE SOIL.
- ALL PLANTING AND IRRIGATION ON THIS PROJECT TO MEET OR EXCEED CITY LANDSCAPE GUIDELINES, STANDARDS AND AGENCY REQUIREMENTS.
- ALL PLANTER AREAS SHALL BE TOP DRESSED WITH 3" MINIMUM RECYCLED REDWOOD BARK MULCH COVER.
- ALL PLANTING AREAS SHALL BE IRRIGATED WITH SUB-GRADE BUBBLERS FOR TREES AND DRIP-IRRI OR DRIP EMITTERS/GRIND COVERS. CONNECTED TO AUTOMATIC REMOTE CONTROL VALVES (SEPARATE VALVES FOR TREES AND DRIP IRRIGATION) AND TIED INTO AN AUTOMATIC IRRIGATION 'SMART' CONTROLLER WITH RAIN SENSOR DEVICE.
- THE LANDSCAPE CONTRACTOR SHALL MAINTAIN ALL PLANTED AREAS BY MEANS OF CONTINUOUS WATERING, PRUNING, RAISING TREE BALLS WHICH SETTLE BELOW GRADE, FERTILIZING, APPLICATION OF SPRAYS WHICH ARE NECESSARY TO KEEP THE PLANTINGS FREE OF INSECTS AND DISEASES, WEEDING, AND/OR OTHER OPERATIONS NECESSARY FOR PROPER CARE AND UPKEEP. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN ALL PLANTINGS AS SPECIFIED ABOVE FOR A PERIOD OF NINETY (90) DAYS.
- ALL PLANTER BEDS TO BE AMENDED WITH SOIL PREPARATION PER SPECIFICATIONS. NO DEVIATIONS ARE ALLOWED.
- ALL PLANTING TO BE IRRIGATED WITH POTABLE WATER (NO RECYCLED WATER IS AVAILABLE FOR THIS SITE).
- SUBSEQUENT TO MASS GRADING ON SITE AND PRIOR TO PLANTING, THE CONTRACTOR SHALL SUBMIT A SOIL SAMPLE TO A CERTIFIED SOILS LABORATORY FOR A SOIL ANALYSIS REPORT AND ADHERE TO ALL RECOMMENDATIONS OF THE SOILS LABORATORY.

REQUIRED CITY SOIL AMENDMENT NOTES

PRIOR TO THE PLANTING OF ANY MATERIALS, COMPACTED SOILS SHALL BE TRANSFORMED TO A FRIABLE CONDITION. ON ENGINEERED SLOPES, ONLY AMENDED PLANTING HOLES NEED MEET THIS REQUIREMENT.

SOIL AMENDMENTS SHALL BE INCORPORATED ACCORDING TO RECOMMENDATIONS OF THE SOIL REPORT AND WHAT IS APPROPRIATE FOR THE PLANTS SELECTED.

FOR LANDSCAPE INSTALLATIONS, COMPOST AT A RATE OF A MINIMUM OF FOUR CUBIC YARDS PER ONE THOUSAND SQUARE FEET OF PERMEABLE AREA SHALL BE INCORPORATED TO A DEPTH OF SIX INCHES INTO THE SOIL. SOILS WITH GREATER THAN SIX PERCENT ORGANIC MATTER IN THE TOP SIX INCHES OF SOIL ARE EXEMPT FROM ADDING COMPOST AND TILLING.

A MINIMUM THREE-INCH LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF CURBS, IN TURF AREAS, CREEPING OR ROOTING PLANTS, OR DIRECT SEEDING APPLICATIONS WHERE MULCH IS CONTRAINDICATED. TO PROVIDE HABITAT FOR BENEFICIAL INSECTS AND OTHER WILDLIFE, UP TO FIVE PERCENT OF THE LANDSCAPE AREA MAY BE LEFT WITHOUT MULCH. DESIGNATED INSECT HABITAT MUST BE INCLUDED IN THE LANDSCAPE DESIGN PLAN AS SUCH.

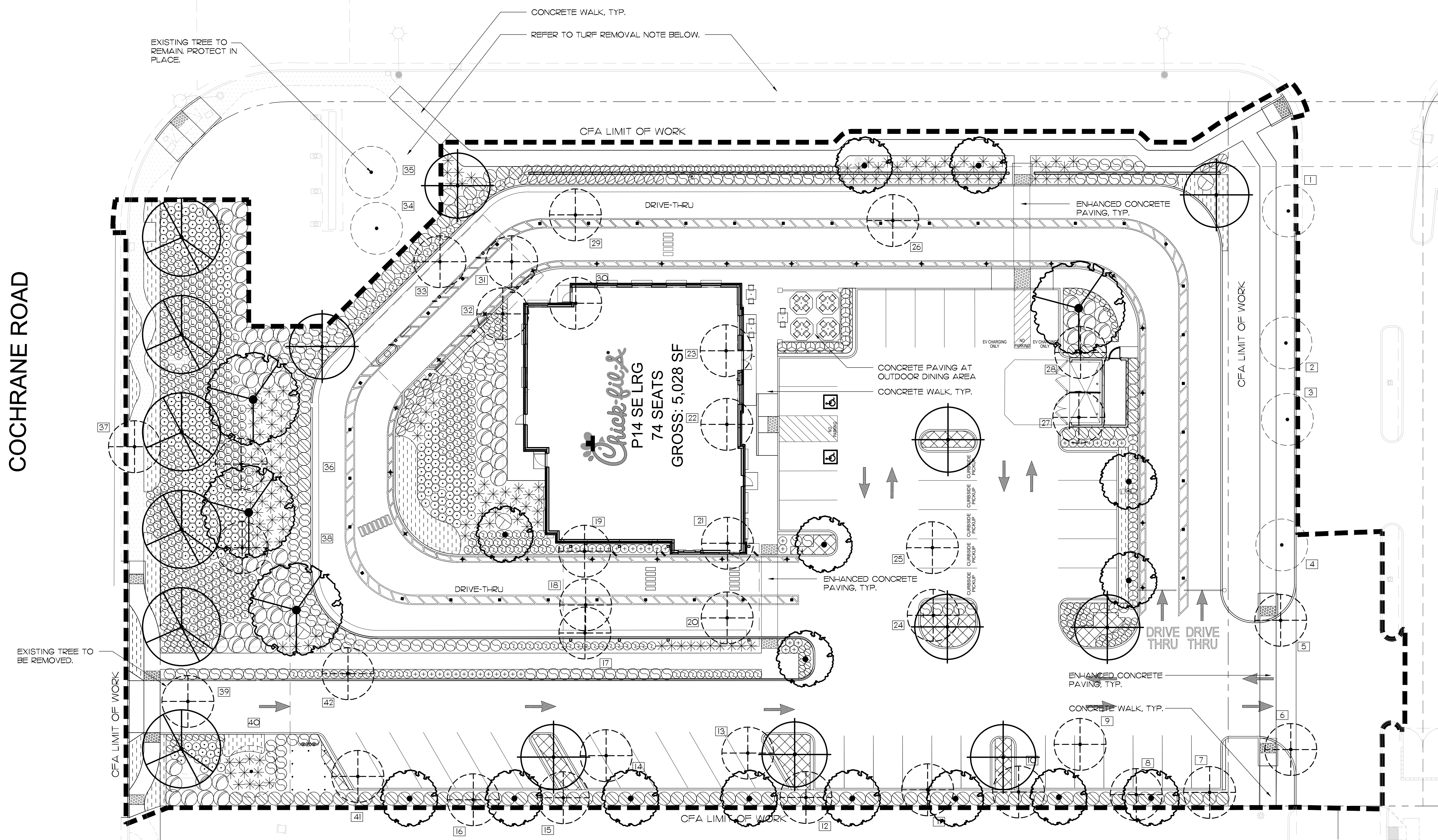
STABILIZING MULCHING PRODUCTS SHALL BE USED ON SLOPES THAT MEET CURRENT ENGINEERING STANDARDS.

THE MULCHING PORTION OF THE SEED/MULCH SLURRY IN HYDRO-SEEDED APPLICATIONS SHALL MEET THE MULCHING REQUIREMENT.

ORGANIC MULCH MATERIALS MADE FROM RECYCLED OR POST-CONSUMER SHALL TAKE PRECEDENCE OVER INORGANIC MATERIALS OR VIRGIN FOREST PRODUCTS UNLESS THE RECYCLED POST-CONSUMER ORGANIC PRODUCTS ARE NOT LOCALLY AVAILABLE. ORGANIC MULCHES ARE PROHIBITED WHERE PROHIBITED BY LOCAL FUEL MODIFICATION PLAN GUIDELINES OR OTHER APPLICABLE LOCAL ORDINANCES. (THE USE OF BARK MULCH, GORILLA MULCH, SHREDED CEDAR ARE STRONGLY DISCOURAGED AND SHOULD NOT BE USED IN ANY PROJECT.)

COCHRANE ROAD

SUTTER BOULEVARD



PLANTING PLAN

SCALE: 1" = 16'-0"

PLANTING LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	REMARKS	WUCOLS IV REGION I
	LAGERSTROEMIA X MUKOGOE	GRAPE MYRTLE	24" BOX	12	STANDARD DECIDUOUS	LOW
	OLEA EUROPAEA 'SWAN HILL'	FRUITLESS OLIVE	36" BOX	9	MULTI-TRUNK DECIDUOUS	LOW
	QUERCUS AGRIFOLIA	COAST LIVE OAK	36" BOX	4	STANDARD EVERGREEN	LOW
	ULMUS PARVIFOLIA	EVERGREEN ELM	24" BOX	6	STANDARD EVERGREEN	LOW
	TYP. EXISTING TREE TO BE REMOVED (35 TOTAL), SEE LISTING THIS SHEET.					
	TYP. EXISTING TREE TO REMAIN (7 TOTAL), SEE LISTING THIS SHEET.					

REQUIRED CITY NOTES:

THIS IS A NEW PROJECT TO BE PRIVATELY MAINTAINED.

WATER SUPPLY TO BE POTABLE WATER. CITY OF MORGAN HILL WATER DIVISION IS THE WATER PURVEYOR.

THE DEVELOPER WILL SUBMIT RECEIPTS AND/OR INVOICES FOR ALL COMPOST AND MULCH PURCHASES TO ENVIRONMENTAL SERVICES DIVISION AFTER FINAL CONSTRUCTION AND HAVE THIS STATEMENT SIGNED BY THE OWNER/DEVELOPER.

OWNER/DEVELOPER

DATE

TURF REMOVAL NOTE:

WILL COMPLY WITH LETTER RECEIVED FROM THE CITY OF MORGAN HILL DATED JUNE 9TH. THE FINAL LANDSCAPING DESIGN PLANS WILL INCLUDE ALL PARTS OF THE PROPERTY AND ENSURE THAT THE WHOLE PROPERTY IS IN COMPLIANCE WITH ALL SECTIONS OF 18.64 AND 18.148 OF THE MUNICIPAL CODE.

LANDSCAPE CALCULATIONS

SHRUB AND GROUND COVER AREA:	20,108 S.F.
BIO-RETENTION BASINS	2,295 S.F.
TURF AREA:	0 S.F.
TOTAL LANDSCAPE AREA:	22,403 S.F.

COMPLIANCE STATEMENT:

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

ROBERT A. GARCIA 8-8-2023
DATE

COMPLIANCE STATEMENT:

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE.

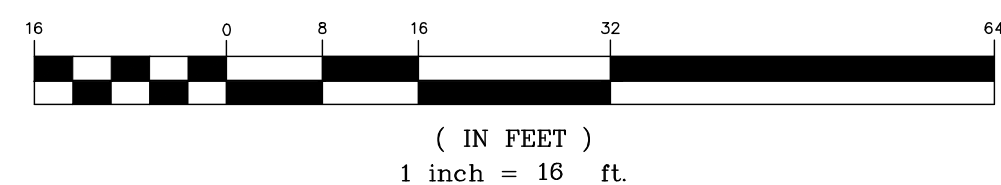
ROBERT A. GARCIA 8-8-2023
DATE

APPLICANT STATEMENT:

AFTER INSTALLATION OF LANDSCAPING ON PROPERTY, I AGREE TO HAVE AN IRRIGATION AUDIT, LANDSCAPE AUDIT, IRRIGATION SCHEDULE, AND MAINTENANCE SCHEDULE CONDUCTED BY A CERTIFIED IRRIGATION AUDITOR AND SUBMIT IT TO THE CITY FOR FINAL PROJECT SIGN OFF.

APPLICANT SIGNATURE 8-8-2023
DATE

GRAPHIC SCALE



UNDERGROUND SERVICE ALERT

CALL: TOLL FREE
1-800-227-2600

TWO WORKING DAYS BEFORE YOU DIG

"CAUTION": REMEMBER THAT THE USA CENTER NOTIFIES ONLY THOSE UTILITIES BELONGING TO THE CENTER. THERE COULD BE OTHER UTILITIES PRESENT AT THE WORK SITE. THE CENTER WILL INFORM YOU OF WHOM THEY WILL NOTIFY.

FOR BUILDING - NEEDS TO BE SIGNED BY OWNER

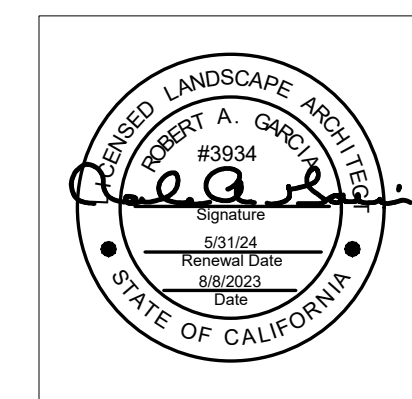


Chick-fil-A

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



hourian associates, inc.
landscape architecture + design
san diego | santa barbara | calistoga
c 949.489.5623 f 858.810.0335



CHICK-FIL-A

COCHRANE ROAD AND SUTTER BLVD.
MORGAN HILL, CALIFORNIA 95037

FSR #05180

BUILDING TYPE / SIZE: P14 SE LRG 21.11

RELEASE: PRINTED FOR REVIEW

PROJECT STATUS

REVISION SCHEDULE

NO. DATE DESCRIPTION

CONSULTANT PROJECT #

DATE 8-8-2023

DRAWN BY NH/mdm

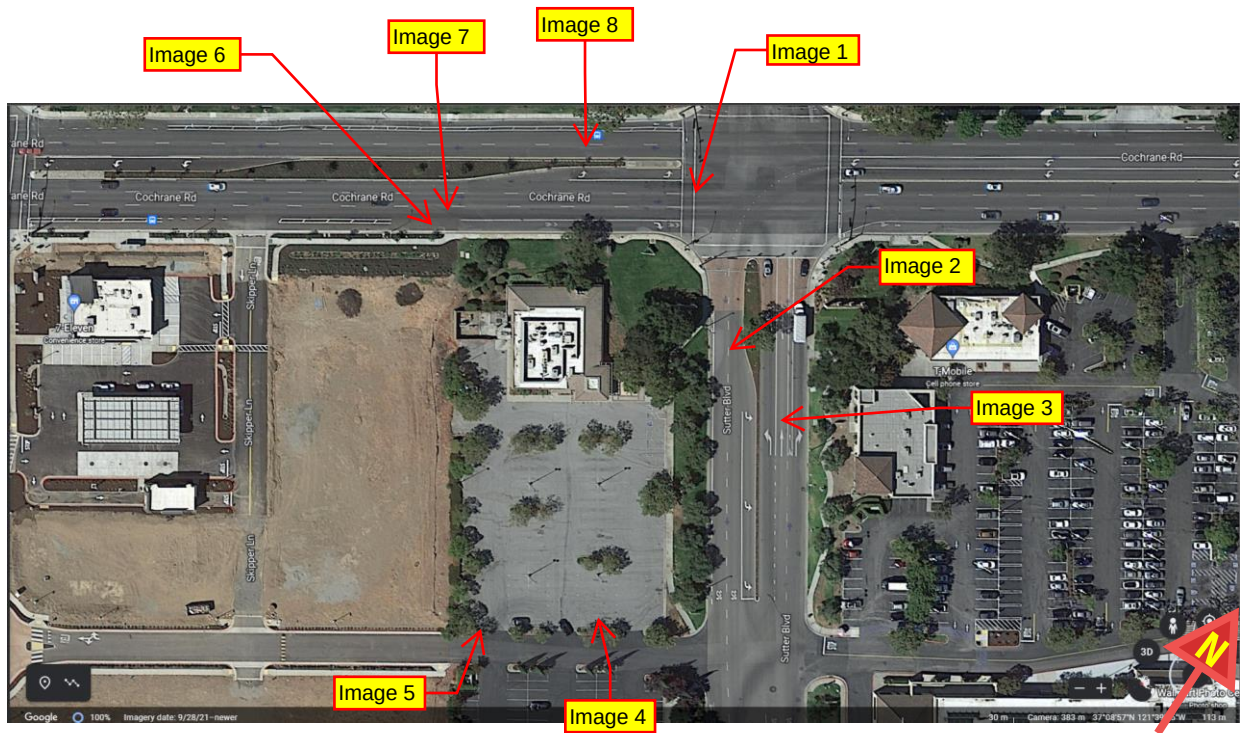
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SHEET

PLANTING PLAN

SHEET NUMBER

L1.0



Aerial Image with Photo Index

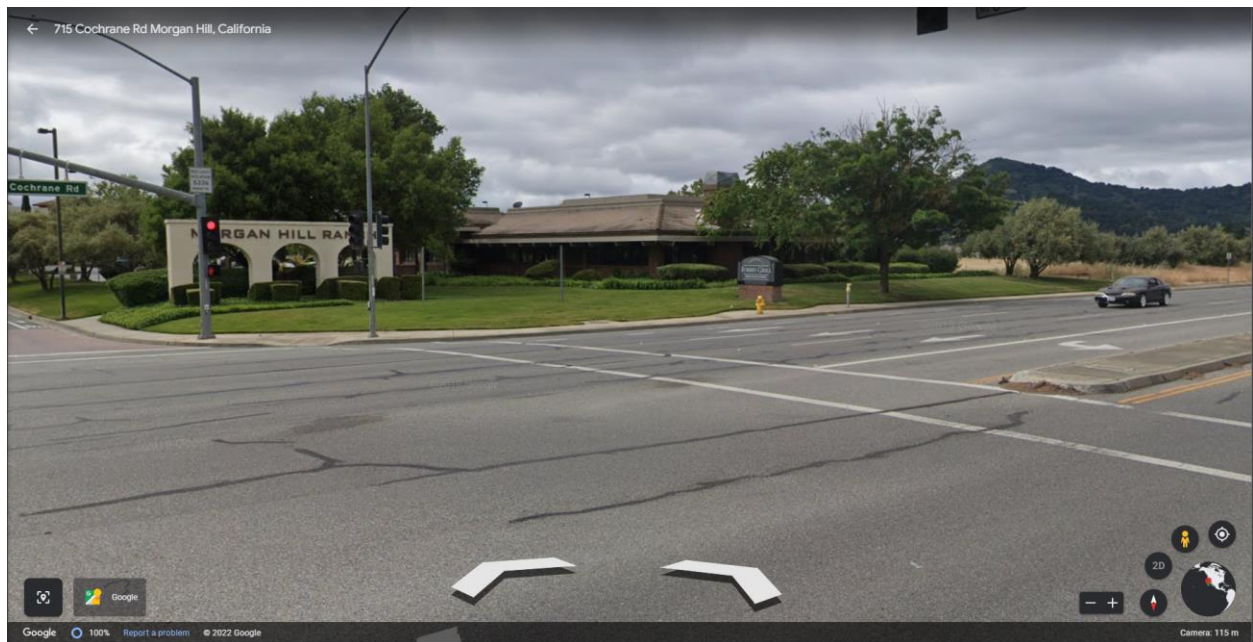


Image 1: Looking due south from the intersection of Cochrane Rd and Sutter Blvd.



Image 2: Looking West (slightly northwest) from standing in Sutter Blvd.



Image 3: Eastern property line from NB Sutter Blvd

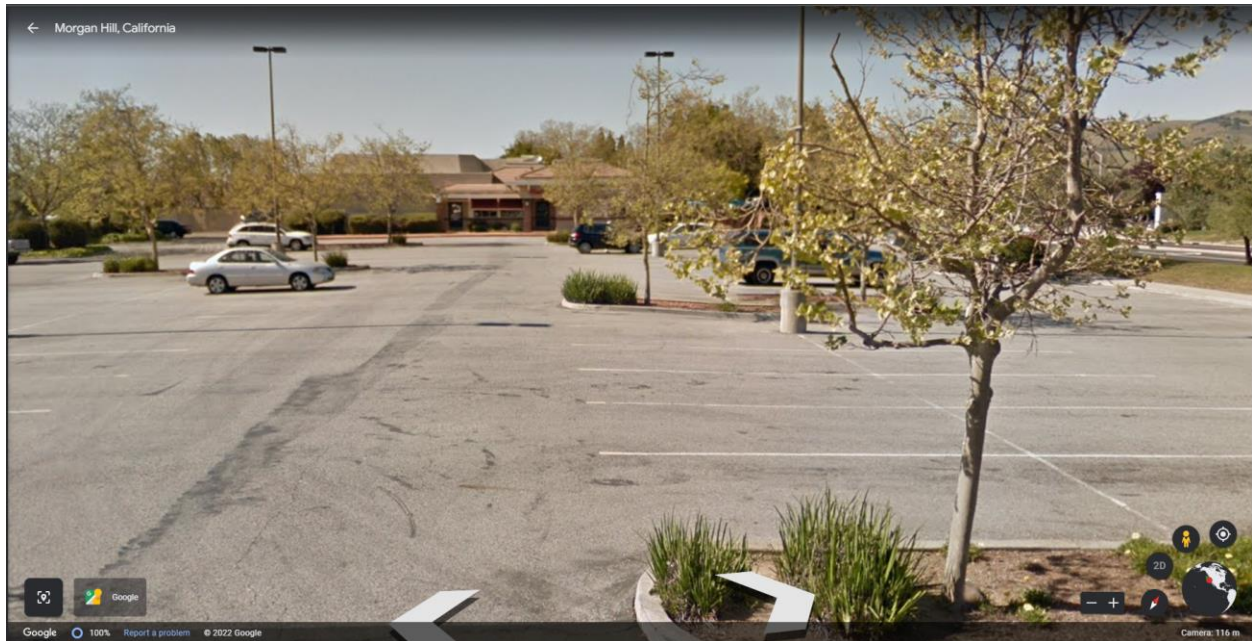


Image 4: Looking Northwest at the entrance to the parking lot from the drive access off Sutter Blvd.



Image 5: Looking down the western property line.



Image 6: Looking south from Cochrane Rd Eastbound.



Image 7: Looking at the western property line from Cochrane Rd.



Image 8: View looking south from the bus stop on Cochrane Rd West bound