PLANNING COMMISSION
REGULAR MEETING AGENDA

Thursday, May 1, 2025 | 6:00 PM

CITY COUNCIL CHAMBERS, CITY HALL
7351 ROSANNA STREET, GILROY, CA 95020

Chair: Manny Bhandal:
manny.bhandal@cityofgilroy.org

Vice Chair: Brian Dauenhauer:
brian.dauenhauer@cityofgilroy.org

Commissioners:

Patricia Bentson:
patricia.bentson@cityofgilroy.org

Stefanie Elle:
stefanie.elle@cityofgilroy.org

Annedore Kushner:
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Adriana Leongardt:
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Monica Valdez:
monica.valdez@cityofgilroy.org

Staff Liaison: Sharon Goei, Community Development Director | sharon.goei@cityofgilroy.org

Written comments can be submitted by email to planningdivision@cityofgilroy.org. Please note that written comments will not be read out loud, but will be part of the written record.

Comments by the public will be taken on any agenda item before action is taken by the Planning Commission. Persons speaking on any matter are asked to state their name and address for the record. Public testimony is subject to reasonable regulations, including but not limited to time restrictions on particular issues and for each individual speaker. A minimum of 12 copies of materials should be provided to the Clerk for distribution to the Commission and Staff. Public comments are limited to no more than three-minutes, at the Chair's discretion.

Comments on any agenda item may be emailed to the Planning Division at planningdivision@cityofgilroy.org or mailed to the City of Gilroy, Community Development Department at City Hall, 7351 Rosanna Street, Gilroy, CA 95020. Comments received by the Planning Division by 1:00 pm on the day of a Planning Commission meeting will be distributed to the Planning Commissioners prior to or at the meeting and are available for public inspection at the Planning Division counter at City Hall, 7351 Rosanna Street. Any correspondence received will be incorporated into the meeting record. Items received after the 1:00 pm deadline will be provided to the Planning Commission as soon as practicable.

In compliance with the American Disabilities Act (ADA), the City will make reasonable arrangements to ensure accessibility to this meeting. If you need special assistance to participate in this meeting, please contact the City Clerk 72 hours prior to the meeting at (408) 846-0491. A sound enhancement system is available in the City Council Chambers.

If you challenge any planning or land use decision made at this meeting in court, you may be limited to raising only those issues you or someone else raised at the public hearing held at this meeting, or in written correspondence delivered to the Planning Commission at, or prior to, the public hearing. Please take notice that the time within which to seek judicial review of any final administrative determination reached at this meeting is governed by Section 1094.6 of the California Code of Civil Procedure.

Persons who wish to speak on matters set for Public Hearing will be heard when the presiding officer calls for comments from those persons who are in support of or in opposition thereto. After persons have spoken, the hearing is closed and brought to the Planning Commission level for discussion and action. There is no further comment permitted from the audience unless requested by the Planning Commission.

A Closed Session may be called during this meeting pursuant to Government Code Section 54956.9(b)(1) if a point has been reached where, in the opinion of the legislative body of the City on the advice of its legal counsel, based on existing facts and circumstances, there is a significant exposure to litigation against the City.

Materials related to an item on this agenda submitted to the Planning Commission after distribution of the agenda packet are available for public inspection with the agenda packet in the lobby of Administration at City Hall, 7351 Rosanna Street during normal business hours. These materials are also available with the agenda packet on the City website at www.cityofgilroy.org

KNOW YOUR RIGHTS UNDER THE GILROY OPEN GOVERNMENT ORDINANCE. Government's duty is to serve the public, reaching its decisions in full view of the public. Commissions, task forces, councils and other agencies of the City exist to conduct the people's business. This ordinance assures that deliberations are conducted before the people and that City operations are open to the people's review.

FOR MORE INFORMATION ON YOUR RIGHTS UNDER THE OPEN GOVERNMENT ORDINANCE, TO RECEIVE A FREE COPY OF THE ORDINANCE OR TO REPORT A VIOLATION OF THE ORDINANCE, CONTACT THE OPEN GOVERNMENT COMMISSION STAFF AT (408) 846-0204 or by email at cityclerk@cityofgilroy.org.

1. OPENING

2. PLEDGE OF ALLEGIANCE

3. REPORT ON POSTING THE AGENDA AND ROLL CALL

4. PUBLIC COMMENTS

(Three-minute time limit). This portion of the meeting is reserved for persons desiring to address the Planning Commission on matters not on the agenda. The law does not permit the Planning Commission action or extended discussion of any item not on the agenda except under special circumstances. Comments on any agenda item may be emailed to the Planning Division at planningdivision@cityofgilroy.org or mailed to Community Development Department at City Hall, 7351 Rosanna Street, Gilroy, CA 95020. Comments received by the Planning Division by 1:00pm on the day of a Planning Commission meeting will be distributed to the Planning Commission prior to or at the meeting and available for public inspection with the agenda packet located in the lobby of Planning Division at City Hall, 7351 Rosanna Street

prior to the meeting. Any correspondences received will be incorporated into the meeting record. Items received after 1:00pm deadline will be provided to the Planning Commission as soon as practicable. All statements that require a response will be referred to staff for reply in writing.

PUBLIC HEARINGS FOR RELATED PROJECT APPLICATIONS WILL BE HEARD CONCURRENTLY AND ACTION WILL BE TAKEN INDIVIDUALLY. COMPANION PROJECTS UNDER NEW BUSINESS WILL BE TAKEN UP FOR ACTION PRIOR TO, OR IMMEDIATELY FOLLOWING THE RELATED PUBLIC HEARING. THIS REQUIRES DEVIATION IN THE ORDER OF BUSINESS AS NOTED WITHIN THE AGENDA.

5. CONSENT AGENDA

5.1. April 3, 2025 Planning Commission Meeting Minutes

6. PUBLIC HEARINGS

6.1. Architectural and Site Review for three light industrial buildings located at 8875 Murray Avenue, APN: 835-01-059, Application No. AS 23-06.

1. Staff Report: Erin Freitas, Senior Planner
2. Public Hearing:
3. Close Public Hearing:
4. Disclosure of Ex-Parte Communication:
5. Possible Action:

   Staff has analyzed the proposed project, and recommends that the Planning Commission:

   a) Based on its independent analysis, determine this project is exempt from further environmental review pursuant to State CEQA Guidelines Section 15183 (Consistency with a Community Plan or Zoning); and

   b) Adopt a resolution approving the Architectural and Site Review permit application AS 23-06.

7. NEW BUSINESS

7.1. Finding of Consistency for the Capital Improvement Program Project List for Fiscal Year 2026 and Fiscal Year 2027 to Determine its Consistency with the City's General Plan and the California Environmental Quality Act (CEQA).

1. Staff Report: John Doughty, Public Works Director
2. Public Comment:
3. Possible Action:

   Staff has analyzed the proposed projects and recommends the Planning Commission:

a) Receive report on proposed Capital Improvement Program (CIP) Project List for Fiscal Year 2026 and Fiscal Year 2027; and

b) Adopt a Resolution to make a Finding of Consistency with the General Plan (roll call vote).

8. INFORMATIONAL ITEMS

8.1. Planning Division Staff Approvals

9. PLANNING DIVISION REPORT

10. ASSISTANT CITY ATTORNEY REPORT

11. ADJOURNMENT To the Next Meeting of June 5, 2025 at 6:00 PM

City of Gilroy
Planning Commission
Regular Meeting Minutes
Thursday, April 3, 2025 | 6:00 PM

1. OPENING

Tonight's meeting was called to order by Chair Bhandal at 6:00 PM.

2. PLEDGE OF ALLEGIANCE

Chair Bhandal led the pledge of allegiance.

3. REPORT ON POSTING THE AGENDA AND ROLL CALL

The agenda was posted on Thursday, March 27, 2025 at 4:55 PM.

Attendance	Attendee Name
Present	Patricia Bentson, Commissioner Stefanie Elle, Commissioner Annedore Kushner, Commissioner Adriana Leongardt, Commissioner Monica Valdez, Commissioner Brian Dauenhauer, Vice Chair Manny Bhandal, Chair

4. PUBLIC COMMENTS

Chair Bhandal opened public comment for items not on the agenda.

There being no speakers, Chair Bhandal closed public comment for items not on the agenda.

5. CONSENT AGENDA

5.1. March 13, 2025 Planning Commission Meeting Minutes

A motion was made by Chair Bhandal; seconded by Commissioner Elle to approve the consent agenda.

RESULT: Pass [7 – 0]
MOVER: Chair Bhandal
SECONDER: Commissioner Elle
AYES: Commissioner Bentson, Elle, Kushner, Leongardt, Valdez, Vice Chair Dauenhauer, and Chair Bhandal

6. PUBLIC HEARINGS

6.1. None.

7. NEW BUSINESS

7.1. None.

8. INFORMATIONAL ITEMS

8.1. Civic Center Master Plan (presentation will be provided at the meeting by Project Manager Ryan Osenton)

Ryan Osenton, project manager for the Civic Center Master Plan, provided the Planning Commission with a presentation on the proposed layouts for the civic center. Ryan received feedback and answered the Commission's questions.

8.2. Planning Division Staff Approvals

There were no staff approvals since the last report provided to the Planning Commission at its March 13, 2025 regular meeting.

9. PLANNING DIVISION REPORT

Community Development Director, Sharon Goei, reminded the Commission of the upcoming district-based election community workshops and public hearings and the civic center master plan community workshops.

10. ASSISTANT CITY ATTORNEY REPORT

None.

11. ADJOURNMENT

Chair Bhandal adjourned the meeting at 6:36 PM.

Ariana Fabian

Ariana Fabian, Planning Technician

Community Development Department

Sharon Goei
DIRECTOR

7351 Rosanna Street, Gilroy, CA 95020-6197
Telephone: (408) 846-0451 | Fax: (408) 846-0429
cityofgilroy.org | planningdivision@cityofgilroy.org

DATE: May 1, 2025

TO: Planning Commission

FROM: Erin Freitas, Senior Planner

SUBJECT: Architectural and Site Review for three light industrial buildings located at 8875 Murray Avenue, APN: 835-01-059, Application No. AS 23-06.

RECOMMENDATION:

Staff has analyzed the proposed project, and recommends that the Planning Commission:

a) Based on its independent analysis, determine this project is exempt from further environmental review pursuant to State CEQA Guidelines Section 15183 (Consistency with a Community Plan or Zoning); and

b) Adopt a resolution approving the Architectural and Site Review permit application AS 23-06.

PROJECT DESCRIPTION:

Proposed Architectural and Site Review to construct three light industrial warehouse buildings for a total of approximately 120,786 square feet on a vacant 7.29-acre parcel located in the M1 (Limited Industrial)/Murray-Las Animas Avenue overlay combining zoning district (APN: 835-01-059). The proposed project would be constructed in three phases and consist of three buildings (Building 1 – 42,266 square feet; Building 2 – 48,600 square feet; and Building 3 – 29,920 square feet) with a mix of office, warehouse, and light industrial uses, associated parking, landscaping, and onsite/offsite infrastructure improvements.

The project applicant, Highly Visual LLC also known as Heatwave, has been headquartered in Gilroy since 2019 and has been incorporated since 2014. The business is currently located north of this site at 8840 Forest Street and is looking to expand their operations to one of the proposed warehouse buildings, Building 1. Heatwave designs and sells eyewear, namely sunglasses and safety glasses and is a direct-to-consumer brand corporation, shipping on average 605 small package orders a day through USPS, UPS, and FedEx. Tenants have not been identified currently for Buildings 2 and 3; however, the applicant may decide to use Buildings 2 and 3 for their own use as well depending on the market conditions.

Facility operation would require truck shipments to receive and send out products. For operation of the applicant's operations, the proposed project assumed one low

frequency LCL (less than a container load) truck shipment per week per building and is anticipated to require three LCL truck shipments per week at full buildout. Additionally, the proposed project is anticipated to require three daily truck trips per building per day for daily shipping and receiving of products from USPS, FedEx, and UPS.

It is anticipated that after construction of Phase I, Building 1 would generate approximately 35 employees. Phase II and Phase III are both anticipated to generate an additional 30 employees each and therefore, buildout of the proposed project would result in approximately 95 employees. General hours of operation would be Monday through Friday, 7:00 AM to 6:00 PM. However, if the applicant does not occupy all three buildings, the proposed project's combined 120,786 square feet of limited industrial designated building area would result in generation of approximately 190 employees. Therefore, buildout of the proposed project would generate approximately 95 to 190 total employees.

The proposed construction would occur in three phases as stated below:

- Phase I: Construction of Building 1 (42,266 square feet) and associated driveways along Forest Street, an internal driveway to the existing northern property to provide secondary emergency access during Phases II and III, parking areas, and infrastructure improvements.

- Phase II: Construction of Building 2 (48,600 square feet), parking areas, and infrastructure improvements.

- Phase III: Construction of Building 3 (29,920 square feet), a driveway on Murray Avenue, associated parking areas and infrastructure improvements.

Colors and Materials. The buildings are proposed in contemporary architecture with concrete facade and accent metal paneling. Large storefront windows face the public streets with metal awnings above. Building 1 proposes a second-floor outdoor deck facing Forest Street. The color palette is neutral with three colors in various shades of grey.

Parking. Parking is proposed for 293 passenger vehicles, 15 short-term bicycle stalls, and 9 long-term bicycle stalls to accommodate anticipated employee parking needs.

Site Improvements. The project will include two driveways accessed from Forest Street and one driveway accessed from Murray Avenue. An internal driveway to the adjacent parcel to the north with access to Kishimura Drive will be constructed in Phase I to provide temporary secondary emergency vehicle access until the driveway on Murray Avenue is constructed in Phase III. Site landscaping is provided along both frontages and the side property lines along with 6-foot-tall steel fencing along the side property lines.

BACKGROUND:

Subject Property and Surrounding Land Uses: The 7.29-acre project site is located

on the east side of Forest Street between Kishimura and Nagardea Drive and also includes frontage on the west side of Murray Avenue between Kishimura Drive and Gavilan Court. The project site's topography is generally level, undeveloped, and covered by non-native annual grasslands. The site is within the Murray-Las Animas Avenue overlay combining district and requires public notification and Planning Commission review to ensure compliance with the Murray-Las Animas Avenue overlay design criteria. The site and surrounding land uses are as follows:

LOCATION	EXISTING LAND USE	GENERAL PLAN	ZONING
Project Site	Undeveloped	Industrial Park	M1/Murray-Las Animas Overlay
North	Light Industrial	Industrial Park	M1/Murray-Las Animas Overlay
South	Undeveloped Parcel, Office, Single Family Residential	Industrial Park	M1/Murray-Las Animas Overlay
East	Single Family Residential	Industrial Park/Low Density	M1, R1 Single-Family Residential/Murray-Las Animas Overlay
West	Industrial	Industrial Park	M1, Limited Industrial

Environmental Assessment: A Section 15183 Consistency Evaluation provided by Stantec Consulting Services dated March 26, 2025 concludes that the proposed project qualifies for an exemption from additional environmental review because it is consistent with the development density and use characteristics established by the Gilroy General Plan and analyzed in the accompanying Environmental Impact Report (EIR, State Clearinghouse #2015082014), which were approved and certified by the Gilroy City Council on November 2, 2020. In accordance with CEQA Guidelines Section 15183, the proposed project qualifies for an exemption because the following findings can be made:

1. The proposed project is consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified.

2. There are no project-specific effects which are peculiar to the proposed project or its site, and which the General Plan EIR failed to analyze as significant effects.

3. There are no potentially significant offsite and/or cumulative impacts which the General Plan EIR failed to evaluate.

4. There is no substantial new information which results in more severe impacts than anticipated by the General Plan EIR.

5. The proposed project would undertake feasible policies and actions specified in the General Plan EIR.

DISCUSSION AND ANALYSIS:

General Plan Consistency: The City's General Plan designates the subject site for Industrial Park uses that can locate in proximity to residential and commercial uses with minimum environmental conflict. Typical uses include office, light manufacturing operations, and large warehouses which supports the proposed project request. As such, the proposal conforms to the goals and policies of the General Plan. Key goals and policies, which pertain to the proposed project are discussed below

POLICY #	TITLE AND SUMMARY	ANALYSIS
LU 1.1	**Pattern of Development** Ensure an orderly, contiguous pattern of development that prioritizes infill and avoids land use incompatibilities.	The proposed project is compatible with surrounding industrial and residential land uses, is an infill site, and avoids land use incompatibilities.
LU 5.1	**Industrial Design Standards** Ensure that new industrial developments contribute to the overall attractiveness of the community through appropriate site design, architectural design, and landscaping.	This site is located within the Murray-Las Animas Avenue overlay combining district which requires a higher level of design than normally required in industrial areas. The proposed project includes three new buildings constructed with contemporary architecture including a concrete façade accented with metal paneling. New, drought tolerant landscaping is provided around the perimeter of the site.
LU 5.3	**Screening in Industrial Areas** Encourage the screening of loading areas and open storage areas so that they are not visible from major roads	Loading areas are located on the interior of the site so they will not be visible from major roads. Open outdoor storage is not proposed.
LU 5.4	**Connectivity within Industrial Areas** Encourage greater automobile, bicycle,	This project is required to provide street improvements along both frontages on Forest Street and Murray Avenue including a new sidewalk and

	pedestrian, and transit connections within industrial areas	bike lane that will help connect pedestrians and bicyclists within the industrial area.
LU 8.12	**Outdoor Lighting Energy Efficiency** Select outdoor lighting fixtures to provide maximum energy efficiency as well as effective lighting.	Proposed outdoor lighting fixtures are LED and will meet CalGreen Building Code standards.
LU 8.13	**Limit Light Pollution** Encourage measures to limit light pollution from outdoor sources, and direct outdoor lighting downward and away from sensitive receptors.	Outdoor lighting is proposed in the parking lot and areas that highlight the building entrances, walkways, and landscape features. All light fixtures are directed downward and will not spillover to adjacent properties.
M 1.8	**Street Landscaping** Require landscaping as a part of all new street design, including street trees, landscaped medians and buffers, and high-quality street furniture.	New landscaping and street trees will be provided with this project along the frontages of Forest Street and Murray Avenue.
M 3.2	**New Development** Require new development to include a system of sidewalks, trails, and bikeways that link all land uses, provide accessibility to parks and schools, and connect to all existing or planned external street and trail facilities in accordance with the Mobility Diagrams.	The proposed project will install a new sidewalk and bike lane along the project frontage per the Planned Bicycle Network mobility diagram.
M 3.9	**Bicycle Parking** Require adequate short- and long-term bicycle parking for all land uses except for single-family residential uses.	Short- and long-term bicycle parking will be provided per the California Building Standards Code requirements.
EP 2.2	**Employment Retention** Support the development, retention, and expansion of all businesses including agricultural and tourism-related businesses, recognizing their vital importance	The proposed project provides an expansion to the existing local business Heatwave that will increase employment opportunities and retain existing employees for the local economy.

	to the City's economic future.	

Zoning Code Conformance: The proposed development is located in the M1 Limited Industrial/Murray-Las Animas Avenue overlay combining zoning district. In accordance with the Gilroy City Code (GCC), the proposed light industrial warehouse uses may be permitted with an approved Architectural and Site Review permit. The intent of the M1 limited industrial zoning district is to designate industrial areas in the city that are appropriate to locate in close proximity to residential and commercial zones. The M1 limited industrial district is suitable for small-scale light manufacturing and industrial park uses with low noise and traffic levels, not generally frequented by retail users. The proposed project use would include a light industrial park with low noise and traffic levels which meets the intention of the M1 limited industrial zoning district. Applicable development standards for the project have been considered for the proposed project, as follows:

STANDARD	REQUIRED	PROPOSED	CONFORMS?
Lot Coverage	60 % Maximum	32 %	Yes
Front Setback	41 feet	114 feet (Murray Ave)	Yes
Rear Setback	0 feet	N/A	Yes
Side Setback	0 feet	52 feet	Yes
Building Height	35 feet/2 stories	35 feet/2 stories	Yes
Off-Street Parking	293	293	Yes
Front Landscaping	21 feet	24 feet	Yes
Side/Rear Landscaping	5 feet	8 feet	Yes

Murray-Las Animas Avenue Overlay District Compliance: The Murray-Las Animas Avenue overlay combining district was formed due to the established single-family neighborhoods existing in the Murray-Las Animas Avenue area prior to industrial development occurring. The Murray-Las Animas Avenue zoning overlay and related policy are used to soften the impact of industrial buildings, especially when they are near existing residential homes.

The majority of the project site fronts along Forest Street which is not adjacent to existing residential homes and includes Buildings 1 and 2. A small portion of the site fronts on Murray Avenue is across the street from single-family homes and includes Building 3. Building 3 will be the last phase of the construction. The project proposes enhanced, contemporary architecture and new landscaping around the perimeter of the site. The maximum height of the buildings will be 35 feet which is consistent with the maximum allowed height of the M1 limited industrial zoning district and the R1 single family zoning district across from the site.

Architectural and Site Review (AS 23-06): The zoning code requires the Planning Commission to conduct a public hearing for any Architectural and Site Review permit within the Murray-Las Animas Avenue overlay combining district, subject to review for

compliance with the requirements of the overlay district policies and GCC Section 30.50.43 (Scope of Review), as follows:

a) Traffic Safety and Efficiency: The site layout provides adequate circulation for vehicles, parking, and traffic as follows:

i) Circulation: There are two driveways proposed on Forest Street and one driveway proposed on Murray Avenue that provide adequate access for ingress/egress on the site. The site circulation has been reviewed by Engineering and Fire Protection staff to comply with minimum road width and circulation standards.

ii) Passenger Vehicle Parking: Standard parking calculations require 293 total parking spaces for the facility, based on 1 space per 300 square feet of office area (68 spaces); 1 space per 5,000 square feet of warehouse area (10 spaces); and 1 space per 350 square feet of speculative industrial area (215 spaces). Proposed parking spaces (9' wide by 18' long) comply with the City's required parking stall dimensions. The project proposes 293 passenger vehicle spaces for the facility.

iii) Bicycle Parking: The project will provide 15 short-term bicycle stalls and 9 long-term bicycle stalls. The short-term bicycle parking exceeds minimum Reach Code requirements and the long-term bicycle parking meets minimum Reach Code requirements.

b) Signs: A separate sign permit will be required prior to installation of any future signs.

c) Site Development & Architectural Design: The building meets all applicable site and building development standards as noted above. In addition, the project complies with the applicable design criteria as follows:

1. <u>Industrial Policy:</u>
   i. *Design Intent and Scale*. High quality industrial land uses in scale with the site and area are encouraged. The building is in scale and character with other buildings within the same industrial development and proposes an efficient use of the site.
   ii. *Streetscape.* The development, as proposed and conditioned, would create an attractive streetscape with building storefronts facing Forest Street and Murray Avenue. Landscaping along the street frontage and the project boundary meets City standards and contributes to the attractiveness of the site and area.
   iii. *Access.* The site has adequate pedestrian and driveway access from both street frontages. The site plan would not create any safety conflicts with vehicles or pedestrians at intersections.
   iv. *Lighting and Utilities.* Light fixtures would be directed downward and shielded to avoid creating glare. Utilities will be placed in underground vaults or screened with landscaping.
   v. *Trash Enclosure.* Three trash enclosures would be located on the interior of the property and not visible from the public streets.
   vi. *Outdoor Storage*. No outdoor storage uses are proposed or

approved as a part of this project. If any is proposed in the future, a subsequent staff review would be required to ensure compliance with the zoning code including section 30.50.44.

2. Murray-Las Animas Policy and Gilroy City Code Section 30.20.40:
   i. *Enhanced Landscaping*. The proposed project exceeds the required 21-foot minimum front yard landscaping with 24-feet of landscaping along Murray Avenue and 35-feet along Forest Street.
   ii. *Attractive Architecture.* The architecture of the proposed buildings includes a contemporary style with flat roofs appropriate for an industrial use and comparable with other buildings in the area. Large window storefronts are along the entryways and public street frontages along with metal awnings and a second-floor balcony on Building 1.
   iii. *Colors and Materials*. The building proposes multi-materials including concrete façade and metal accent panels. Colors include neutral tones with three colors in compliance with applicable criteria.

d) Landscaping and Fencing: The landscaping provides water efficient irrigation and planting in compliance with Gilroy City Code Article XXXVIII, and compliance with section 30.38.70 and the Industrial design guidelines.

The applicant proposes to plant over 122 trees on this site, as well as shrubs, grasses and groundcover. The plant palette includes a total of eight tree species.

The applicant proposes a 6-foot-tall steel fence along the side property lines. The proposed fencing is considered appropriate and aesthetically pleasing for the industrial use.

e) Drainage: The proposed project would construct an underground stormwater treatment facility on the southwestern portion of the site to treat, retain, and/or detain stormwater runoff from the project site prior to it being discharged into the City's storm drainage system.

f) Fire Protection: The site is designed to comply with fire access and service requirements

g) Environmental Impacts: This infill site has no special or unique environmental constraints. The project would be subject to payment of fees in compliance with the Santa Clara Valley Habitat Plan. The industrial use would not create any potential objectionable noise, odors, or traffic.

Technical Advisory Committee (TAC): Project plans were routed to Engineering, Building, Police, and Fire representatives for internal review and comment. Recommendations of the TAC members have been incorporated into the project plans

and/or are included as recommended conditions in attached resolution(s). No unique conditions have been established, and the project has been conditioned to assure plans submitted for building permit shall meet the applicable development standards.

PUBLIC NOTICING:

Property owner information (i.e. list, labels, and map) within 500 feet of the subject site and within the Murray-Las Animas Avenue overlay combining district were generated by the City of Gilroy using current ownership data. Notices of this Planning Commission meeting were mailed to the property owners and residents along within other interested parties and published in the Gilroy Dispatch at least 10 days prior to the meeting. In addition, the property has been posted with on-site signage notifying passersby of pending development, and the Planning Commission public hearing packets are available through the City's webpage.

APPEAL PROCEDURE:

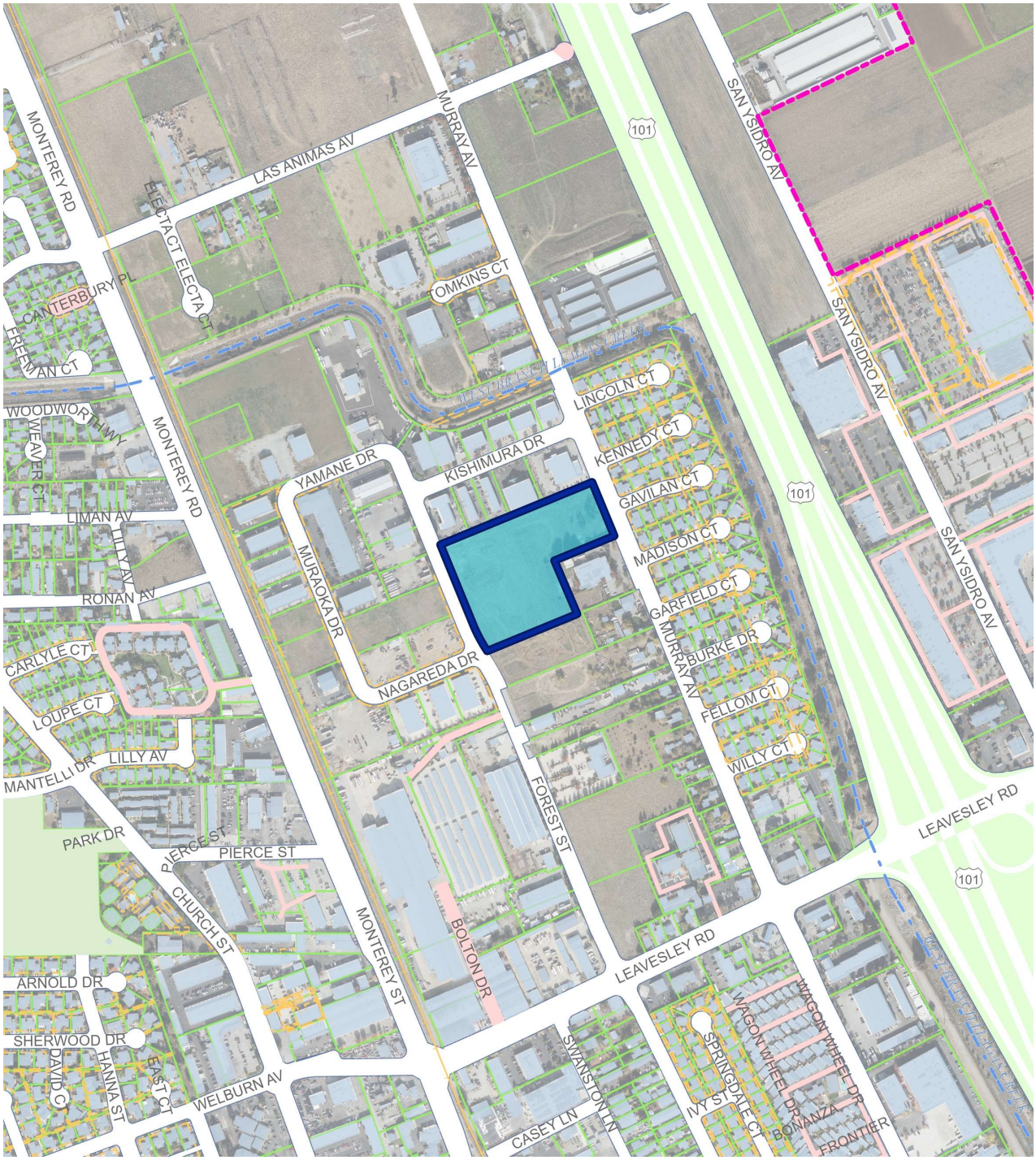
In accordance with Section 30.51.50 of the Gilroy City Code, the Planning Commission's decision may be appealed, in writing, to the City Council within 20 days of adoption of the resolution. Appeal forms may be obtained from the City Clerk and must be submitted with the appropriate fee before the end of the appeal period.

Attachments:

1. Vicinity Map
2. Project Plans
3. CEQA Consistency Checklist
4. Draft Resolution

AS 23-06, Heatwave

City of Gilroy



0.3 0 0.14 0.3 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere
City of Gilroy, GIS Services

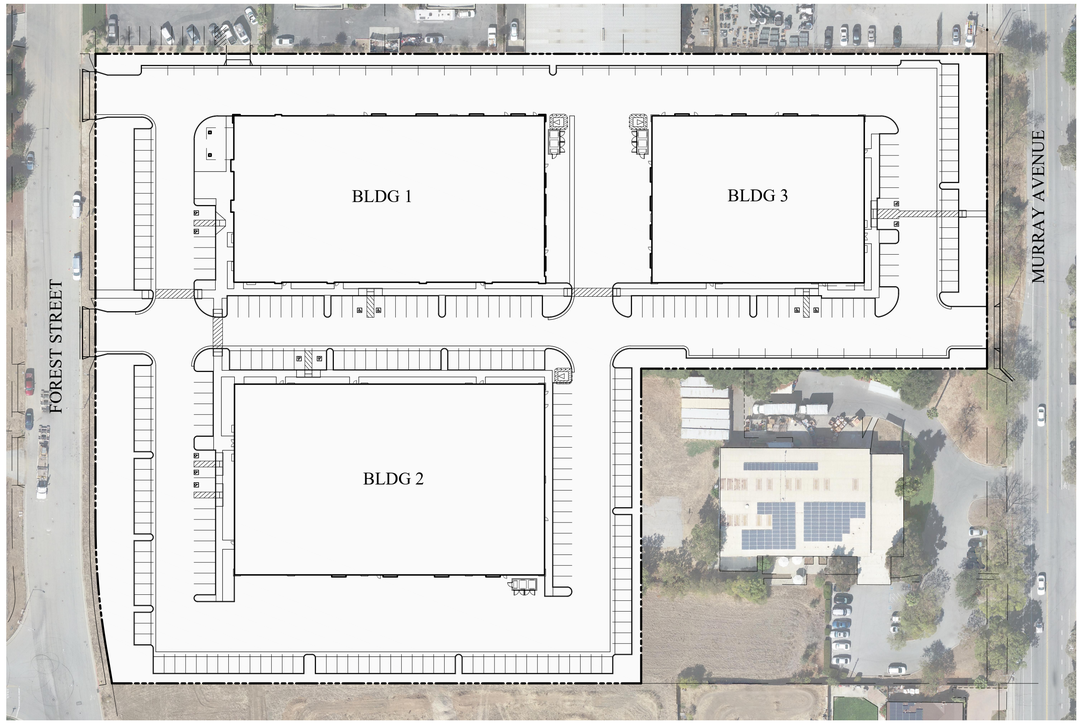
1: 9,028

Note: Map is for reference purposes only.

ARCHITECTURAL AND SITE REVIEW

HEAT WAVE

CITY OF GILROY, CALIFORNIA



LOCATION MAP

GENERAL NOTES:

1. BUILDING NUMBERS ARE FOR IDENTIFICATION ONLY AND ARE NOT INTENDED AS FINAL.
2. THE EXISTING TOPOGRAPHY, AS SHOWN, IS BASED ON AERIAL SURVEYS DATED OCTOBER 2022. THE SPOT ELEVATIONS SHOWN ON THIS PLAN REPRESENT GROUND ELEVATIONS, AS DETERMINED AT TIME OF SAID SURVEY.
3. CERTIFICATION OF GRADES AND SOIL COMPACTION REQUIRED PRIOR TO BUILDING PERMIT FINAL.
4. ALL FUTURE BUILDINGS SHALL BE SPRINKLERED FOR FIRE SAFETY PER THE CITY OF GILROY FIRE AND BUILDING DEPARTMENT STANDARDS.
5. ALL RETAINING WALLS (IF REQUIRED) SHALL BE MASONRY. WOOD RETAINING WALLS SHALL NOT BE PERMITTED.
6. PIPE SIZES, ELEVATIONS AND LENGTHS ARE SUBJECT TO CHANGE; TO BE CONFIRMED DURING FINAL DESIGN.
7. THE PROJECT WILL INCORPORATE STORM WATER BMP MEASURES FOR STORM WATER QUALITY AND LOW IMPACT DEVELOPMENT ACCORDING TO THE ADOPTED STANDARDS IN PLACE AT THE TIME OF THE FIRST ENTITLEMENT APPROVALS. THE LAYOUT AND DESIGN OF BMP'S ARE SUBJECT TO FINAL DESIGN.
8. ALL WORK IS TO BE DONE IN COMPLIANCE WITH THE CITY OF GILROY SPECIFICATIONS STANDARDS AND DESIGN CRITERIA.
9. THE FINAL LOT GRADING SHALL BE CONFIRMED BY LETTER BY THE PROJECT ENGINEER PRIOR TO THE FINAL INSPECTION OF THE BUILDING(S).
10. ALL GRADING WILL BE DONE IN CONFORMANCE WITH THE RECOMMENDATIONS AND CONDITIONS OF THE GEOTECHNICAL ENGINEERING REPORT.
11. PROPOSED SURFACE GRADES, PAD GRADES AND PIPE INVERT ELEVATIONS AS SHOWN ARE PRELIMINARY. ALL GRADES AND INVERT ELEVATIONS ARE SUBJECT TO CHANGE DURING FINAL DESIGN.
12. GRADING, SURFACE IMPROVEMENTS, AND UTILITIES ARE CONCEPTUAL AND ARE SUBJECT TO REVISION DURING FINAL DESIGN.
13. IF THE PROJECT REQUIRES ADDITIONAL EARTH TO BE MOVED TO OR FROM A SITE WITHIN THE CITY LIMITS OF GILROY, AN ADDITIONAL PERMIT IS REQUIRED.
14. PROPOSED ON-SITE CIRCULATION IS PRIVATE. DRIVE AISLES AND PARKING ON-SITE WILL BE PRIVATELY MAINTAINED.
15. PROJECT TO BE PHASED AS SHOWN ON SHEET C13. MURRAY AVENUE FRONTAGE IMPROVEMENTS AND STORM DRAINAGE EXTENSION TO BE CONSTRUCTED WITH PHASE 3.
16. ADJACENT LAND USES:
    NORTH: INDUSTRIAL
    SOUTH: INDUSTRIAL
    EAST: RESIDENTIAL
    WEST: INDUSTRIAL
17. GROSS ACREAGE: 7.29± AC
    NET ACREAGE: 7.29± AC
18. LOT COVERAGE:
    BUILDING: 102,980± SF
    PARKING/STREET: 159,780± SF
    LANDSCAPE: 43,930± SF
    HARDSCAPE: 10,780± SF
19. REFER TO THE GEOTECHNICAL REPORT PREPARED BY STEVENS, FERRONE, & BAILEY FOR SITE SPECIFIC SOIL PROFILES.
20. CONSTRUCTION TRAFFIC TRAVELING TO AND FROM THE PROJECT SHALL ACCESS THE SITE VIA LEAVESLEY AVE TO FOREST STREET. CONSTRUCTION TRAFFIC IS NOT TO ACCESS THE SITE VIA MURRAY AVENUE.
21. ALL ELECTRIC GATES WILL NEED TO BE SETBACK AT LEAST 30 FEET FROM THE ROADWAY. ANY GATES SHALL BE EQUIPPED WITH "CLICK 2 ENTER" AND DUAL POLICE/FIRE KNOX SWITCH TO OPEN ANY GATE.
22. APPLICANT RESERVES THE RIGHT TO ADJUST PARKING STALL DEPTHS SO LONG AS THEY MEET APPLICABLE CITY STANDARDS.
23. PROJECT WILL INCREASE THE TWO MURRAY AVENUE SOUTHBOUND LEFT TURN LANES QUEUE LENGTH AT THE LEAVESLEY INTERSECTION PER THE HEATWAVE INDUSTRIAL DEVELOPMENT TRANSPORTATION ANALYSIS PREPARED BY HEXAGON TRANSPORTATION CONSULTANTS, INC. DATED SEPTEMBER 10, 2024.

PROJECT INFORMATION

1.	PROPERTY LOCATION:	NO PHYSICAL ADDRESS. SOUTH OF KISHIMURA DRIVE, EAST OF FOREST STREET, AND WEST OF MURRAY AVENUE
2.	ASSESSOR PARCEL NUMBER:	835-01-059
3.	PRESENT LAND USE:	VACANT
4.	EXISTING GENERAL PLAN:	INDUSTRIAL PARK
5.	PROPOSED GENERAL PLAN:	INDUSTRIAL PARK
6.	EXISTING ZONING DISTRICT:	M-1 (LIMITED INDUSTRIAL) & MURRAY LAS ANIMAS OVERLAY
7.	PROPOSED ZONING DISTRICT:	M-1 (LIMITED INDUSTRIAL) & MURRAY LAS ANIMAS OVERLAY
8.	THIS PROJECT IS LOCATED IN FLOOD ZONE 'X' PER FLOOD INSURANCE RATE MAPS NO. 06085C0639H EFFECTIVE DATE MAY 18, 2009. ZONE 'X' IS DEFINED AS AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.	
9.	WATER	CITY OF GILROY
10.	GAS & ELECTRIC	PG&E
11.	SANITARY SEWER	CITY OF GILROY
12.	STORM DRAIN	CITY OF GILROY
13.	TELEPHONE	VERIZON
14.	CABLE	CHARTER COMMUNICATIONS

ABBREVIATIONS

BNDY	BOUNDARY	NO.	NUMBER
BVC	BEGINNING OF VERTICAL CURVE	N.T.S.	NOT TO SCALE
CB	CATCH BASIN	O.C.	ON CENTER
CL	CENTERLINE	O.S.	OPEN SPACE
C.O.G.	CITY OF GILROY	PAD	PAD ELEVATION
DWY	DRIVEWAY	PAV	PAVEMENT
EVA	EMERGENCY VEHICLE ACCESS	PL or ℄	PROPERTY LINE
ELECT	ELECTROLIER	PSUE	PUBLIC SERVICE UTILITY EASEMENT
ELEV	ELEVATION	PTE	PUBLIC TRAIL EASEMENT
EP	EDGE OF PAVEMENT	R	RADIUS
EVC	END OF VERTICAL CURVE	R/W	RIGHT OF WAY
EX	EXISTING	S	SLOPE
FC	FACE OF CURB	SD	STORM DRAIN
FH	FIRE HYDRANT	SDMH	STORM DRAIN MANHOLE
FI	FIELD INLET	SS	SANITARY SEWER
GB	GRADE BREAK	SSMH	SANITARY SEWER MANHOLE
GR	GRATE	STD	STANDARD
HOA	HOMEOWNERS' ASSOCIATION	SWK	SIDEWALK
HP	HIGH POINT	SWQ	STORM WATER QUALITY
INV	INVERT	TC	TOP OF CURB
JT	JOINT TRENCH	TYP	TYPICAL
LF	LINEAR FEET	W	WATER
LP	LOW POINT	W-REC	RECYCLED WATER
MAX	MAXIMUM	W-Z1	WATER (ZONE 1)
MIN	MINIMUM	W-Z2	WATER (ZONE 2)

APPLICANT/OWNER:
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CONTACT: JUSTIN HERTEL
(408) 309-9004
JUSTIN@HEATWAVEVISUAL.COM

CIVIL ENGINEER:
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8055 CAMINO ARROYO
GILROY, CA 95020
CONTACT: CHRIS PATTON, P.E., RCE #66271
(408) 848-0300
CPATTON@RJA-GPS.COM

PLANNER:
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8055 CAMINO ARROYO
GILROY, CA 95020
CONTACT: ROSS DOYLE
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RDOYLE@RJA-GPS.COM

ARCHITECT:
E2 ARCHITECTURE
1501 THE ALAMEDA, STE 105
SAN JOSE, CA 95216
CONTACT: JEFFERY EATON
(408) 691-8998
JEFFERY@E2STUDIO.COM

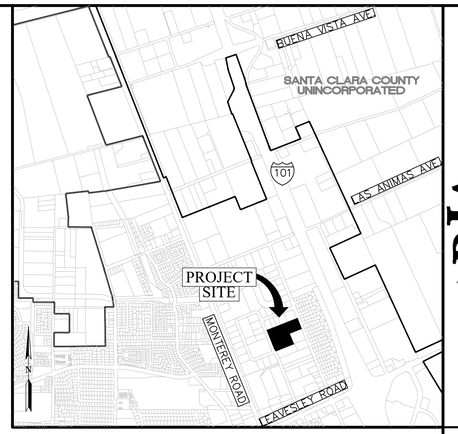
LANDSCAPE ARCHITECT:
AITKEN ASSOCIATES
8262 RANCHO REAL
GILROY, CA 95020, STE 2239
CONTACT: KAREN AITKEN
(408) 842-0245
KAREN@KAA.DESIGN

GEOTECHNICAL ENGINEER:
STEVENS, FERRONE, & BAILEY ENGINEERING
1600 WILLOW PASS COURT
CONCORD, CA 94520
CONTACT: KEN FERRONE
(925) 688-1001
KEN@SFANDB.COM

JOINT TRENCH & PHOTOMETRIC:
VIZION UTILITY PARTNERS
7901 STONERIDGE DRIVE, STE. 200
PLEASANTON, CA 94588
CONTACT: KARLO MENDOZA
(925) 682-1114
KMENDOZA@VIZIONUTILITY.COM

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	PROJECT BOUNDARY	
	LOT LINE	
	CENTERLINE	
	SIDEWALK	
	STORM DRAIN	EX SD
	SANITARY SEWER	EX SS
	WATER	EX W
	MANHOLE	
	INLET	
	FIRE HYDRANT	
	ELECTROLIER	
	CONTOUR	300
P 295.0	PAD ELEVATION	
FF 345.0	FINISH FLOOR ELEVATION	
× 302.6	SPOT ELEVATION	×343.7
0.5% OR	SLOPE & DIRECTION	
OR	DIRECTION OF SURFACE FLOW	
	OVERLAND RELEASE	



VICINITY MAP

NO SCALE

SHEET LIST TABLE

SHEET NO.	TITLE
C1	TITLE SHEET
C2	EXISTING CONDITIONS
C3	SITE PLAN
C4	8840 FOREST STREET EVA & PARKING PLAN
C5	STREET SECTIONS
C6	PRELIMINARY GRADING PLAN
C7	PRELIMINARY GRADING SECTIONS
C8	PRELIMINARY UTILITY PLAN
C9	STORMWATER MANAGEMENT PLAN
C10	STORMWATER MANAGEMENT DETAILS
C11	FIRE TRUCK CIRCULATION PLAN
C12	SOLID WASTE HANDLING PLAN
C13	CA-65 TRUCK MOVEMENT PLAN
C14	PHASING PLAN
AP0	COVER SHEET
AP1	EXISTING PHOTOS - EAST
AP2	EXISTING PHOTOS - WEST
AP3	PHASING SITE PLAN - PHASE 1
AP4	PHASING SITE PLAN - PHASE 2
AP5	PHASING SITE PLAN - PHASE 3
AP6	PROPOSED SITE PLAN
AP7	BUILDING 1 - PROPOSED FLOOR PLAN
AP8	BUILDING 1 - PROPOSED FLOOR PLAN LEVEL 2
AP9	BUILDING 1 - PROPOSED ROOF PLAN
AP10	BUILDING 1 - PROPOSED EXTERIOR ELEVATIONS
AP11	BUILDING 2 - PROPOSED FLOOR PLAN
AP12	BUILDING 2 - PROPOSED FLOOR PLAN LEVEL 2
AP13	BUILDING 2 - PROPOSED ROOF PLAN
AP14	BUILDING 2 - PROPOSED EXTERIOR ELEVATIONS
AP15	BUILDING 3 - PROPOSED FLOOR PLAN
AP16	BUILDING 3 - PROPOSED FLOOR PLAN LEVEL 2
AP17	BUILDING 3 - PROPOSED ROOF PLAN
AP18	BUILDING 3 - PROPOSED EXTERIOR ELEVATIONS
AP19	COLOR AND MATERIALS SAMPLE BOARD
AP20	PROPOSED TRASH ENCLOSURES
AP21	PARKING DETAILS
AP22	BUILDING 1 - CROSS SECTION OF FULL RIGHT-OF-WAY
AP23	BUILDING 2 & 3 - CROSS SECTION OF FULL RIGHT-OF-WAY
L1	MASTER PLANTING PLAN
L2	BUILDING 1 LANDSCAPE PLAN
L3	BUILDING 2 LANDSCAPE PLAN
L4	BUILDING 3 LANDSCAPE PLAN
L5	IRRIGATION MASTER PLAN
L6	BUILDING 1 IRRIGATION PLAN
L7	BUILDING 2 IRRIGATION PLAN
L8	BUILDING 3 IRRIGATION PLAN
L9	DETAIL SHEET
L10	CONSTRUCTION DETAILS
	PHASE 1 - JOINT TRENCH
JT PH1-1	TITLE SHEET
JT PH1-2	NOTES
JT PH1-3	DETAILS
JT PH1-4	INTENT
	PHASE 2 & 3 - JOINT TRENCH
JT PH2&3-1	TITLE SHEET
JT PH2&3-2	NOTES
JT PH2&3-3	DETAILS
JT PH2&3-4	INTENT
	PHOTOMETRIC OFF-SITE
PM-1	PHOTOMETRIC TITLE SHEET OFF-SITE
PM-2	PHOTOMETRIC NOTES AND DETAILS OFF-SITE
PM-3	PHOTOMETRIC PLAN OFF-SITE

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ARCHITECTURAL AND SITE REVIEW
TITLE SHEET
HEAT WAVE
GILROY, CALIFORNIA

FOR: HIGHLY VISUAL LLC.

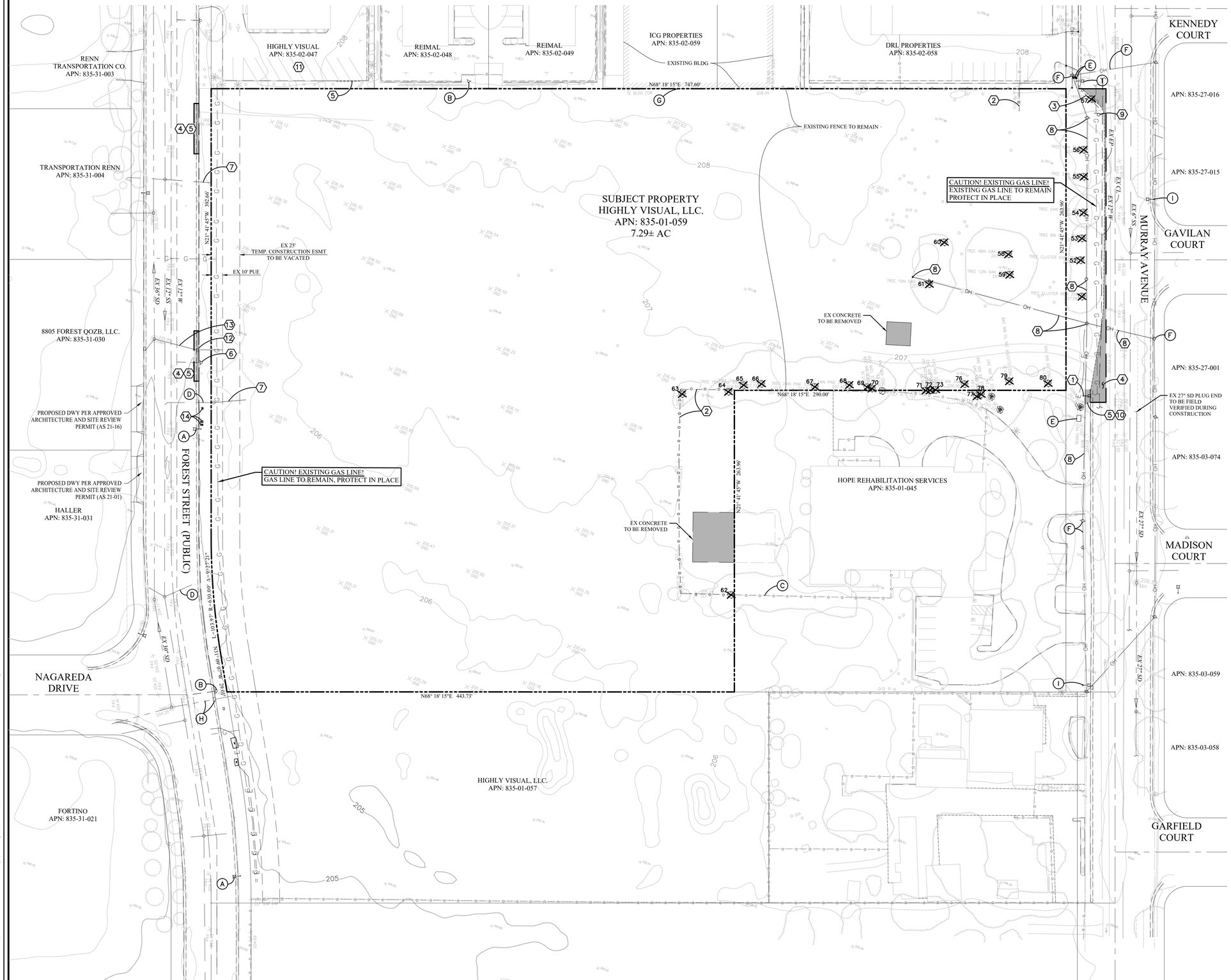
SCALE	DATE
NONE	NOV 2023

DATE	BY	CK	SHEET REVISIONS
18Sept23	MK		Edits to address June 22, 2023 comment letter
06Nov23			Remove southern entrance and connection to northern property
19Dec24			Edits to address City of Gilroy comment letter dated October 19, 2023

SHEET
C1
OF 59 SHEETS

JOB NO.
212030

PLOT DATE: January 10, 2025
FILE PATH: W:\Jobs 21\212030 - Heatwave, Gilroy\Drawings\Prelim\Applications\A&S\C1 TITLE SHEET.dwg



LEGEND

- PROJECT BOUNDARY
- EXISTING GASLINE
- EXISTING WATER
- EXISTING STORMDRAIN
- EXISTING SEWER
- EXISTING EASEMENT
- EXISTING CL
- EXISTING OVERHEAD UTILITY
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- EXISTING CONCRETE TO BE REMOVED
- EXISTING PAVEMENT TO BE REMOVED

PRESERVATION NOTES
(PROTECT IN PLACE)

- (A) EXISTING STREET LIGHT TO REMAIN
- (B) EXISTING FIRE HYDRANT TO REMAIN
- (C) EXISTING FENCE TO REMAIN
- (D) EXISTING SANITARY SEWER TO REMAIN
- (E) EXISTING UTILITY BOXES TO REMAIN
- (F) EXISTING OVERHEAD UTILITY AND POLE TO REMAIN
- (G) EXISTING BUILDING CORNER IS APPROXIMATELY 0.1' FROM BOUNDARY.
- (H) EXISTING STORM DRAIN TO REMAIN.
- (I) EXISTING STREET LIGHT TO BE MODIFIED PER PHOTOMETRIC PLANS.

DEMOLITION NOTES

- (1) EXISTING STREET LIGHT TO BE RELOCATED
- (2) EXISTING FENCE TO BE REMOVED
- (3) EXISTING BARRICADE TO BE REMOVED
- (4) EXISTING PAVEMENT TO BE REMOVED
- (5) EXISTING CURB AND GUTTER TO BE REMOVED
- (6) EXISTING FIRE HYDRANT TO BE RELOCATED
- (7) EXISTING SANITARY SEWER LATERAL TO BE ABANDONED
- (8) EXISTING OVERHEAD UTILITY & POLE TO BE REMOVED.SEE JOINT TRENCH INTENT PLANS BY VIZION UTILITY PARTNERS.
- (9) EXISTING SIGN TO BE RELOCATED
- (10) EXISTING SIDEWALK TO BE REMOVED
- (11) EXISTING STRIPING TO BE REMOVED
- (12) EXISTING STORM DRAIN CATCH BASIN TO BE REMOVED
- (13) EXISTING STORM DRAIN TO BE ABANDONED AT MAIN.
- (14) EXISTING UTILITY BOXES TO BE REMOVED OR RELOCATED BEHIND SIDEWALK.

GENERAL NOTES

EXISTING UTILITIES NOTED FOR DEMOLITION WITHIN THE PUBLIC RIGHT-OF-WAY TO BE REMOVED/ABANDONED AT AT MAIN/MANHOLE.

TREE NUMBERS ARE BASED ON THE ARBORIST REPORT PREPARED BY LIVE OAK ASSOCIATES DATED DECEMBER 30, 2022.

ANY/ALL EXISTING WELLS ON-SITE TO BE REMOVED IN ACCORDANCE WITH VALLEY WATER REQUIREMENTS.

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ARCHITECTURAL AND SITE REVIEW
EXISTING CONDITIONS
HEAT WAVE
GILROY, CALIFORNIA

FOR: HIGHLY VISUAL LLC.

SCALE: AS SHOWN
DATE: NOV 2023

DATE	MK	SHEET REVISIONS	BY	CK
18Sep23		Edits to address June 22, 2023 comment letter		
06Nov23		Remove southern entrance and connection to northern property		
13Dec24		Edits to address City of Gilroy comment letter dated October 19, 2023		

SHEET
C2
OF 59 SHEETS

JOB NO.
212030

PLOT DATE: January 10, 2025
FILE PATH: W:\Jobs 21\212030 - Heatwave, Gilroy\Drawings\Prelim\Applications\A&S\C2 EXISTING CONDITIONS.dwg

SEE SHEET C4

20' EVAE TEMPORARY

DRIVE AISLE A (PRIVATE)

DRIVE AISLE B (PRIVATE)

DRIVE AISLE C (PRIVATE)

DRIVE AISLE D (PRIVATE)

DRIVE AISLE E (PRIVATE)

DRIVE AISLE F (PRIVATE)

FOREST STREET (PUBLIC)

MURRAY AVENUE (PUBLIC)

BLDG 1

BLDG 2

BLDG 3

LOADING AREA

TRANSFORMER LOCATION (SEE JT PLANS)

TRASH ENCLOSURE (TYP.) SEE ARCHITECT PLANS

PARKING OVERHANG (TYP.)

50' STREET

60' STREET

62' STREET

66' STREET

82' STREET

90' STREET

40' CITY STD DWY

86' R/W

70' R/W

EX 10' PUE

15' PSE

10' PSE

250' LANE TAPER

EVC

EVCH

TYP.

22' TYP.

PARKING TABLE:

PARKING USE	SQUARE FOOTAGE	PARKING RATIO	PARKING REQUIRED
OFFICE	20,330	1:300	68
WAREHOUSE	25,266	1:5000	10
LIGHT INDUSTRIAL	75,190	1:350	215
TOTAL PARKING REQUIRED			293
TOTAL PARKING PROVIDED			293

PARKING BREAKDOWN:
TOTAL EV CAPABLE SPACES (EVC): 29
TOTAL EV CHARGING SPACES (EVCH): 29
TOTAL TEMPORARY BIKE PARKING: 15
TOTAL LONG TERM BIKE PARKING: 9 (INSIDE BUILDINGS)

NOTES: SITE PLAN AND ARCHITECTURE SHOWN IS PRELIMINARY AND SUBJECT TO REVISION DURING FINAL DESIGN.

ADDITIONAL PARKING BREAKDOWN PROVIDED ON SHEET AP5.

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	PROJECT BOUNDARY	
	LOT LINE OR R/W	
	CENTERLINE	
	EASEMENT	
	CURB	
	PARKING OVERHANG	
	ASPHALT PAVEMENT	
	CONCRETE PAVEMENT	

DEVELOPMENT STANDARDS:

BUILDING COVERAGE: 60% (MAXIMUM)
SETBACKS:
FRONT 41' (FROM FACE-OF-CURB)
REAR NONE
SIDE NONE
SIDE/CORNER 31' (FROM FACE-OF-CURB)
BUILDING HEIGHT: 35' MAXIMUM (TWO STORIES)

N

0 30 60 90

SCALE IN FEET: 1"= 30'

PLOT DATE: January 10, 2025
FILE PATH: W:\Jobs 2\212030 - Heatwave, Gilroy\Drawings\Prelim\Applications\A&S\C3 SITE PLAN.dwg

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ARCHITECTURAL AND SITE REVIEW
SITE PLAN
HEAT WAVE
GILROY, CALIFORNIA

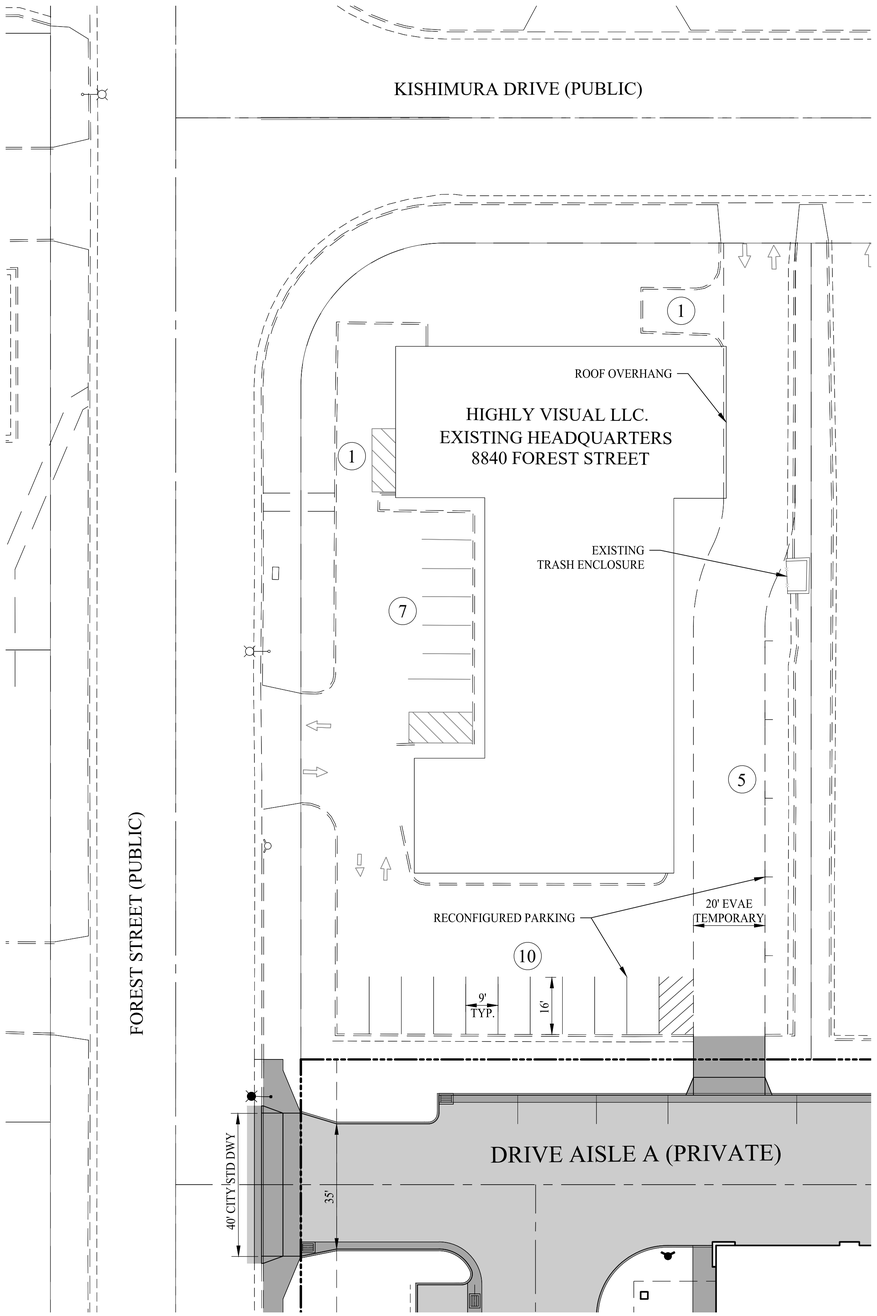
FOR: HIGHLY VISUAL, LLC

SCALE: AS SHOWN
DATE: NOV 2023

DATE	MK	SHEET REVISIONS	BY	CK
18Sept23		Edits to address June 22, 2023 comment letter		
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SHEET
C3
OF 59 SHEETS

JOB NO. 212030



SEE SHEET C3 FOR PROJECT SITE PLAN

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	PROJECT BOUNDARY	
	LOT LINE OR R/W	
	CENTERLINE	
	EASEMENT	
	CURB	
	PARKING OVERHANG	
	ASPHALT PAVEMENT	
	CONCRETE PAVEMENT	

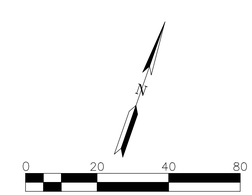
8840 FOREST STREET PARKING TABLE

PARKING STALLS REQUIRED

USE (PER ZONING CODE)	STALLS REQUIRED
OFFICE (4,950 SF)	14 (1 PER 350 SF)
WAREHOUSE LESS THAN 10,000 SF	6 (6 PER BUSINESS)
TOTAL	20 PARKING STALLS

PARKING STALLS PROPOSED

USE (PER ZONING CODE)	STALLS PROVIDED
OFFICE (4,950 SF)	18
WAREHOUSE LESS THAN 10,000 SF	6
TOTAL	24 PARKING STALLS



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ARCHITECTURAL AND SITE REVIEW
8840 FOREST STREET EVA & PARKING PLAN
HEAT WAVE
GILROY, CALIFORNIA

FOR: HIGHLY VISUAL, LLC.

SCALE: AS SHOWN
DATE: NOV 2023

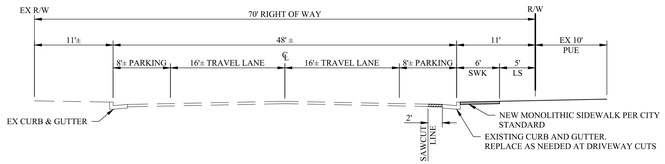
DATE	MK	BY	CK
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06Nov23			
13Dec24			

SHEET REVISIONS
Edits to address June 22, 2023 comment letter
Remove southern entrance and connection to northern property
Edits to address City of Gilroy comment letter dated October 19, 2023

SHEET
C4
OF 59 SHEETS

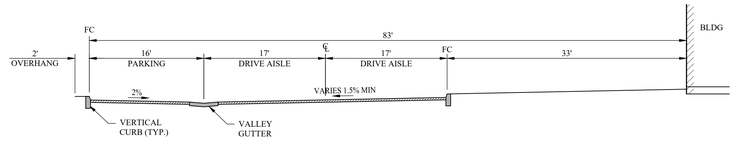
JOB NO.
212030

PLOT DATE: January 10, 2025
FILE PATH: W:\Jobs 21\212030 - Heatwave, Gilroy\Drawings\Prelim\Applications\A&S\C4 8840 FOREST STREET EVA & PARKING PLAN.dwg



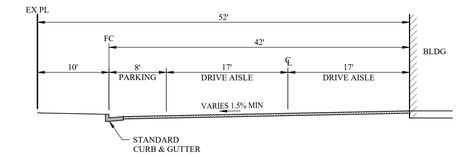
FOREST STREET (K)

FOREST STREET (PUBLIC)



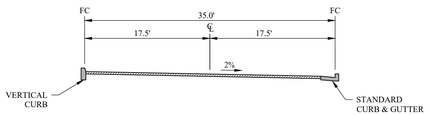
DRIVE AISLE SECTION (F)

DRIVE AISLE D (PRIVATE)

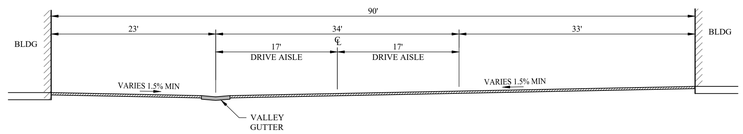


DRIVE AISLE SECTION (A)

DRIVE AISLE A (PRIVATE)

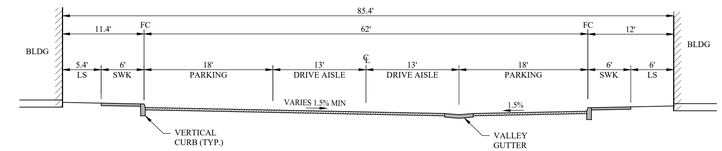


DRIVE AISLE SECTION (L)



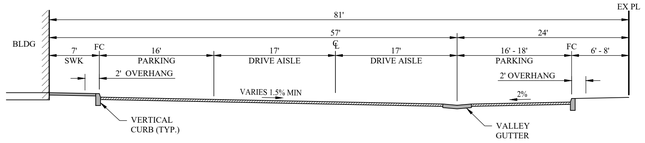
DRIVE AISLE SECTION (G)

DRIVE AISLE E (PRIVATE)



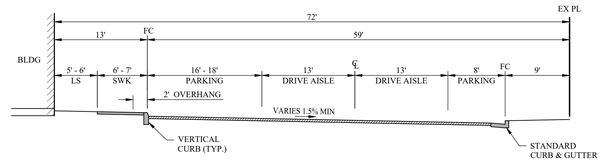
DRIVE AISLE SECTION (B)

DRIVE AISLE B (PRIVATE)



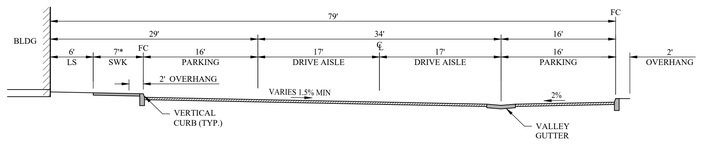
DRIVE AISLE SECTION (H)

DRIVE AISLE E (PRIVATE)



DRIVE AISLE SECTION (C)

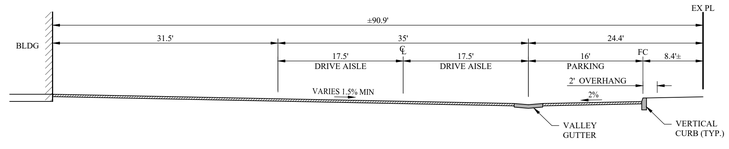
DRIVE AISLE B (PRIVATE)



*SIDEWALK WIDTH VARIES WITH ADA STALLS

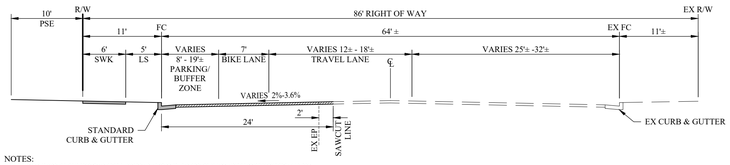
DRIVE AISLE SECTION (I)

DRIVE AISLE F (PRIVATE)



DRIVE AISLE SECTION (D)

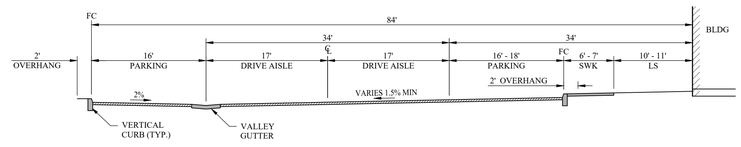
DRIVE AISLE C (PRIVATE)



NOTES:
1. EXISTING CROWN LOCATION VARIES ALONG THE PROJECT FRONTAGE.
2. MURRAY AVENUE FRONTAGE IMPROVEMENTS TO BE COMPLETED IN TANDEM WITH THE CONSTRUCTION OF HEATWAVE PHASE 3.
3. PAVEMENT SECTION SHALL A MINIMUM T.I. = 9.0 AND MINIMUM ASPHALT THICKNESS OF 6-INCHES.

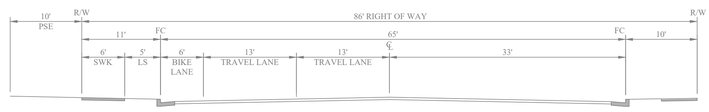
MURRAY AVENUE (J)

MURRAY AVENUE (PUBLIC)
(INTERIM STRIPING CONDITION)



DRIVE AISLE SECTION (E)

DRIVE AISLE D (PRIVATE)



MURRAY AVENUE (ULTIMATE CONDITION)

NOTE:
THE ULTIMATE MURRAY AVENUE CROSS SECTION IS SHOWN HERE FOR REFERENCE ONLY. NOT A PART OF PROJECT.

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ARCHITECTURAL AND SITE REVIEW
STREET SECTIONS
HEAT WAVE
GILROY, CALIFORNIA

FOR: HIGHLY VISUAL, LLC.

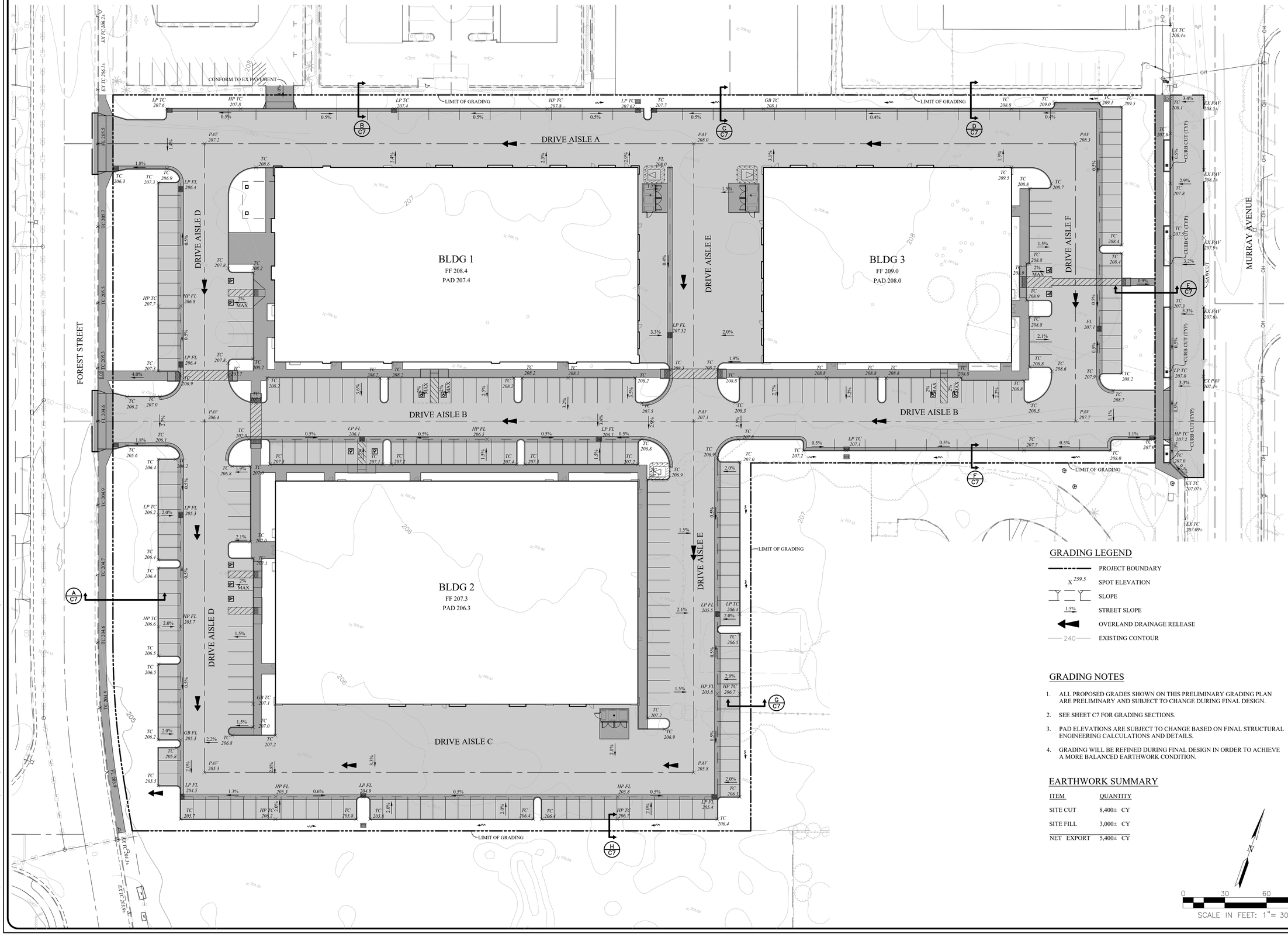
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DATE	MK	SHEET REVISIONS	BY	CK
18Sep23		Edits to address June 22, 2023 comment letter		
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SHEET
C5
OF 59 SHEETS

JOB NO.
212030

PLOT DATE: January 10, 2025
FILE PATH: W:\Jobs 2\212030 - Heatwave, Gilroy\Drawings\Preim\Applications\A&S\C5 STREET SECTIONS.dwg



GRADING LEGEND

- PROJECT BOUNDARY
- X 259.5 — SPOT ELEVATION
- SLOPE
- 1.5% — STREET SLOPE
- OVERLAND DRAINAGE RELEASE
- 240 — EXISTING CONTOUR

GRADING NOTES

1. ALL PROPOSED GRADES SHOWN ON THIS PRELIMINARY GRADING PLAN ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.
2. SEE SHEET C7 FOR GRADING SECTIONS.
3. PAD ELEVATIONS ARE SUBJECT TO CHANGE BASED ON FINAL STRUCTURAL ENGINEERING CALCULATIONS AND DETAILS.
4. GRADING WILL BE REFINED DURING FINAL DESIGN IN ORDER TO ACHIEVE A MORE BALANCED EARTHWORK CONDITION.

EARTHWORK SUMMARY

ITEM	QUANTITY
SITE CUT	8,400± CY
SITE FILL	3,000± CY
NET EXPORT	5,400± CY

0 30 60 90
SCALE IN FEET: 1"= 30'

PLOT DATE: January 10, 2025
FILE PATH: W:\Jobs 21\212030 - Heatwave, Gilroy\Drawings\Prelim\Applications\A&S\C6 PRELIMINARY GRADING PLAN.dwg

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PRELIMINARY GRADING PLAN
HEAT WAVE
GILROY, CALIFORNIA

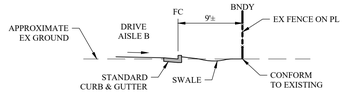
FOR: HIGHLY VISUAL LLC.

SCALE: AS SHOWN
DATE: NOV 2023

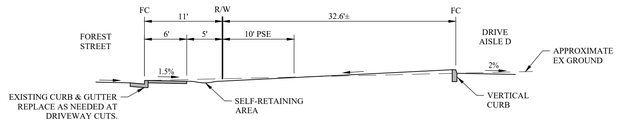
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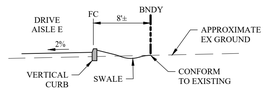
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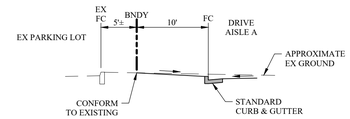
GRADING SECTION (F)



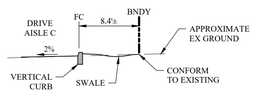
GRADING SECTION (A)



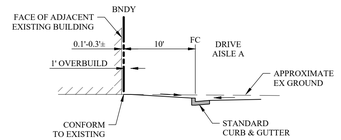
GRADING SECTION (G)



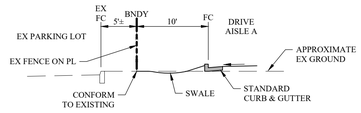
GRADING SECTION (B)



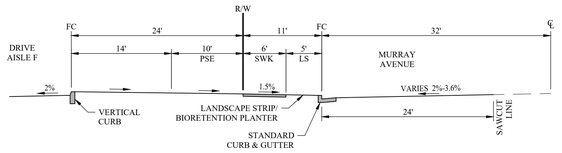
GRADING SECTION (H)



GRADING SECTION (C)



GRADING SECTION (D)



GRADING SECTION (E)

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PRELIMINARY GRADING SECTIONS
HEAT WAVE
GILROY, CALIFORNIA

FOR: HIGHLY VISUAL LLC

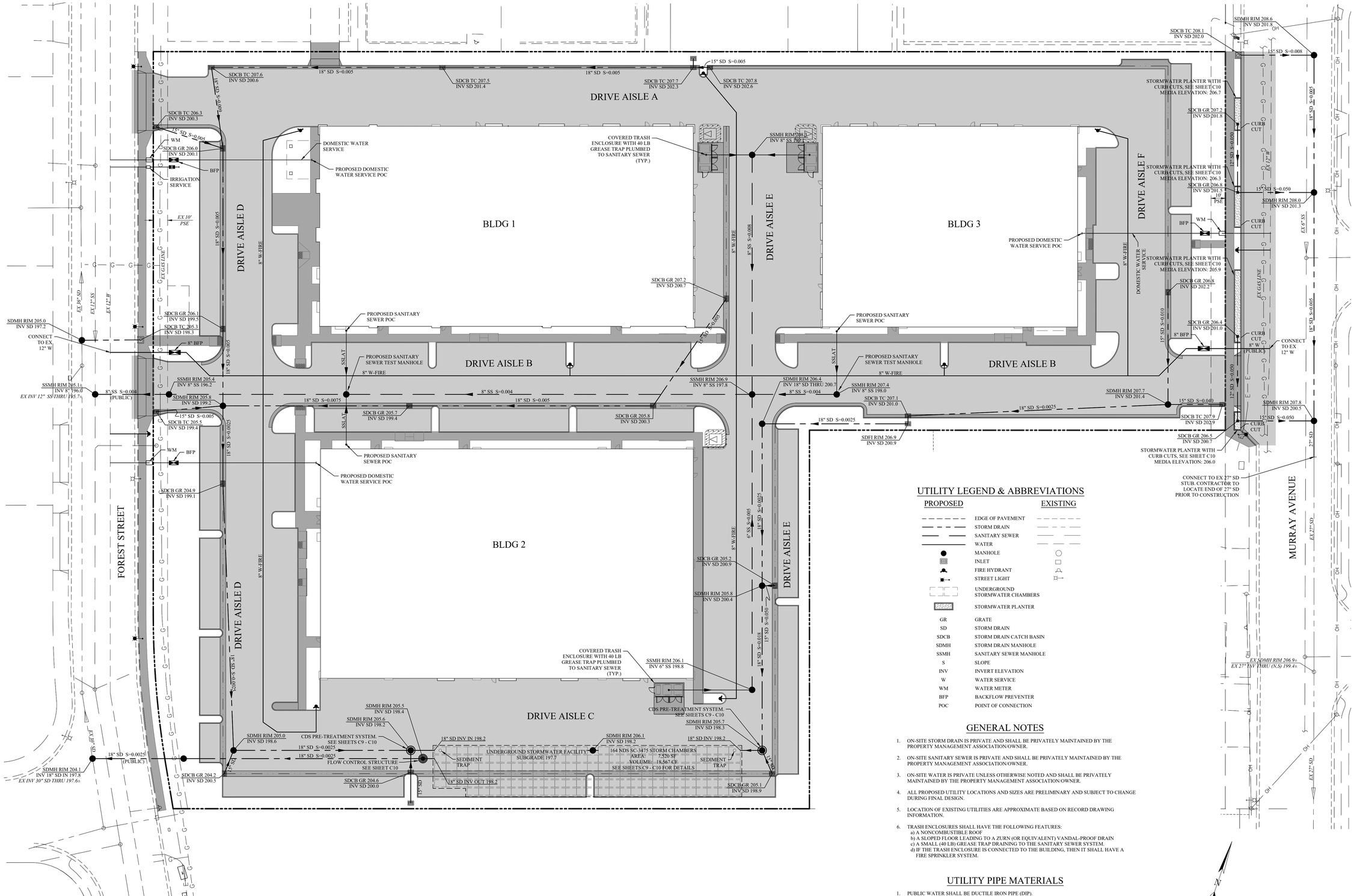
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UTILITY LEGEND & ABBREVIATIONS

PROPOSED	EXISTING
EDGE OF PAVEMENT	
STORM DRAIN	
SANITARY SEWER	
WATER	
MANHOLE	
INLET	
FIRE HYDRANT	
STREET LIGHT	
UNDERGROUND STORMWATER CHAMBERS	
STORMWATER PLANTER	

GR	GRATE
SD	STORM DRAIN
SDCB	STORM DRAIN CATCH BASIN
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
S	SLOPE
INV	INVERT ELEVATION
W	WATER SERVICE
WM	WATER METER
BFP	BACKFLOW PREVENTER
POC	POINT OF CONNECTION

GENERAL NOTES

1. ON-SITE STORM DRAIN IS PRIVATE AND SHALL BE PRIVATELY MAINTAINED BY THE PROPERTY MANAGEMENT ASSOCIATION/OWNER.
2. ON-SITE SANITARY SEWER IS PRIVATE AND SHALL BE PRIVATELY MAINTAINED BY THE PROPERTY MANAGEMENT ASSOCIATION/OWNER.
3. ON-SITE WATER IS PRIVATE UNLESS OTHERWISE NOTED AND SHALL BE PRIVATELY MAINTAINED BY THE PROPERTY MANAGEMENT ASSOCIATION/OWNER.
4. ALL PROPOSED UTILITY LOCATIONS AND SIZES ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN.
5. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE BASED ON RECORD DRAWING INFORMATION.
6. TRASH ENCLOSURES SHALL HAVE THE FOLLOWING FEATURES:
   a) A NONCOMBUSTIBLE ROOF
   b) A SLOPED FLOOR LEADING TO A ZURN (OR EQUIVALENT) VANDAL-PROOF DRAIN
   c) A SMALL (40 LB) GREASE TRAP DRAINING TO THE SANITARY SEWER SYSTEM.
   d) IF THE TRASH ENCLOSURE IS CONNECTED TO THE BUILDING, THEN IT SHALL HAVE A FIRE SPRINKLER SYSTEM.

UTILITY PIPE MATERIALS

1. PUBLIC WATER SHALL BE DUCTILE IRON PIPE (DIP).
2. PRIVATE WATER ARE PVC C-900, OR DUCTILE IRON PIPE (DIP).
3. PUBLIC STORM DRAIN SHALL BE REINFORCED CONCRETE PIPE (RCP).
4. PRIVATE STORM DRAIN SHALL BE HIGH DENSITY POLYETHYLENE (HDPE), OR RCP.
5. PUBLIC AND PRIVATE SANITARY SEWER SHALL BE PVC SDR-26.

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ARCHITECTURAL AND SITE REVIEW
PRELIMINARY UTILITY PLAN
HEAT WAVE
GILROY, CALIFORNIA

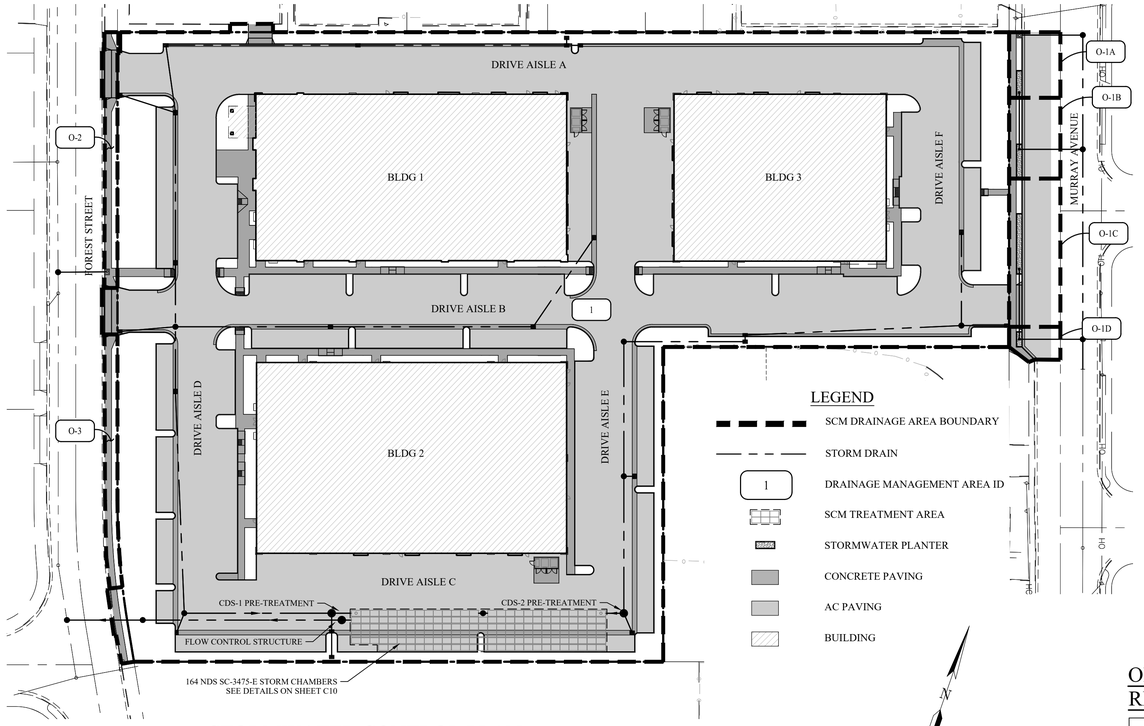
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SCALE 1"=30'
DATE NOV 2023

SHEET C8
OF 59 SHEETS
JOB NO. 212030

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FILE PATH: W:\Jobs 21\212030 - Heatwave, Gilroy\Drawings\Prelim\Applications\A&S\C8 PRELIMINARY UTILITY PLAN.dwg



STORMWATER CONTROL PLAN

STORMWATER CONTROL PLAN NOTES:

1) THIS PROJECT IS TRIBUTARY TO THE RONAN CHANNEL, WHICH ULTIMATELY DRAINS TO THE MONTEREY BAY VIA THE PAJARO RIVER. HOWEVER, THE CITY OF GILROY HAS ITS MUNICIPAL DISCHARGE PERMIT WITH THE CENTRAL COAST REGIONAL WATER QUALITY BOARD (CCRWQB). THEREFORE, STORM WATER RUNOFF MANAGEMENT SHALL ADHERE TO THE CCRWQCB CRITERIA IDENTIFIED IN THE "STORMWATER MANAGEMENT GUIDANCE MANUAL FOR LOW IMPACT DEVELOPMENT & POST CONSTRUCTION REQUIREMENTS FOR THE CITY OF GILROY, CITY OF MORGAN HILL, AND COUNTY OF SANTA CLARA", DATED JUNE 2015.

2) THIS PRELIMINARY STORMWATER RUNOFF MANAGEMENT PLAN IS CONCEPTUAL AND SUBJECT TO REVISION BASED ON FINAL DESIGN AND ULTIMATE SITE CONFIGURATION.

3) ALL STORMWATER CALCULATIONS SHOWN HEREIN ARE PRELIMINARY AND SUBJECT TO CHANGE DURING FINAL DESIGN. THE LID MEASURES AND STORMWATER CONTROL FACILITIES MAY BE CHANGED OR MODIFIED DURING FINAL DESIGN AS LONG AS THE PROJECT CAN SHOW CONFORMANCE WITH THE CITY OF GILROY, THE SANTA CLARA COUNTY DRAINAGE MANUAL (2007), AND CCRWQCB POST-CONSTRUCTION STORMWATER REGULATIONS IN EFFECT AT THE TIME OF APPROVAL OF THE ENTITLEMENT DOCUMENT.

4) THE SUBSURFACE INFILTRATION FACILITIES (NDS STORM CHAMBERS SC-3475, OR APPROVED EQUAL) PROPOSED ONSITE WILL SERVE AS THE MAIN RETENTION SYSTEM FOR THE PROJECT. THE FACILITY WAS SIZED TO RETAIN THE 25-YEAR STORM WITH 25% FREEBOARD VOLUME. THE CALCULATIONS WERE PERFORMED VIA THE ROUTING METHOD USING CIVILSTORM COMPUTER PROGRAM BY BENTLEY SYSTEM INCORPORATED. ALL CCRWQCB REQUIREMENTS ARE MET VIA INFILTRATION IN THE UNDERGROUND SYSTEM.

5) CDS PRE-TREATMENT MANHOLE UNITS, OR APPROVED EQUAL, ARE PROPOSED AS POTENTIAL PRETREATMENT SYSTEMS UPSTREAM OF THE CHAMBER SYSTEMS IN ORDER TO REMOVE A LARGE QUANTITY OF DEBRIS, SEDIMENT, OIL, GREASE, ETC. PRIOR TO THE STORMWATER ENTERING THE UNDERGROUND RETENTION SYSTEM. THE PRETREATMENT SYSTEM IS PRELIMINARY AND SUBJECT TO CHANGE BASED ON FINAL DESIGN.

6) THERE IS AN EXISTING 30" STORM DRAIN MAIN WITHIN MURRAY AVENUE. IT IS UNKNOWN IF THE STORM DRAIN MAIN EXTENDS UP TO THE PROJECT FRONTAGE AND WILL NEED TO BE FIELD VERIFIED DURING FINAL DESIGN OR EXTENDED UP TO THE PROJECT. THE PROJECT WILL BE DESIGNED TO OVERLAND RELEASE IN A MANNER CONSISTENT WITH THIS PREDEVELOPMENT CONDITION.

7) SITE SPECIFIC INFILTRATION TESTS WERE PERFORMED IN JULY 7, 2022 USING THE DOUBLE-RING INFILTROMETER TEST METHOD AND RESULTED IN INFILTRATION RATES OF 15 IN/HR TO 18 IN/HR AT THE LOCATION OF THE PROPOSED SCM LOCATION. REFER TO THE GEOTECHNICAL INVESTIGATION REPORT BY STEVENS, FERRONE & BAILEY ENGINEERING CO., DATED SEPT 19, 2022 FOR FURTHER INFORMATION.

8) THE OFFSITE PUBLIC SIDEWALK ALONG FOREST AVENUE SHALL DIRECT RUNOFF INTO THE PROPOSED LANDSCAPE STRIP.

PRELIMINARY STORMWATER TABLE

Project Information

Onsite

Area =	318,950	ft²	*Total onsite project area*
Existing Impervious Area =	430	ft²	
	0.1%		*Existing Percent impervious area*
Ex Imperv Area To Remain =	0	ft²	*Total existing impervious surface to remain*
Replaced Imperv Area =	430	ft²	*Total existing impervious surface to be replaced as part of project*
New Imperv Area =	273,540	ft²	*Total new impervious surface to be installed as part of project*
Total Impervious Area =	273,970	ft²	*Total project impervious area*
	86%		*Percent impervious area*

Offsite

Area =	16,450	ft²	*Total offsite project area*
Existing Impervious Area =	3,280	ft²	
	19.9%		*Existing Percent impervious area*
Ex Imperv Area To Remain =	0	ft²	*Total existing impervious surface to remain*
Replaced Imperv Area =	3,280	ft²	*Total existing impervious surface to be replaced as part of project*
New Imperv Area =	10,340	ft²	*Total new impervious surface to be installed as part of project*
Total Impervious Area =	13,620	ft²	*Total project impervious area*
	83%		*Percent impervious area*
Water Management Zone =	1		

Performance Requirements

No. 1 = Implement site design and runoff reduction strategies
No. 2 = Provide water quality treatment for 85th% storm event
No. 3 = Prevent offsite discharge from events up to the 95th% storm event via optimizing infiltration
No. 4 = Reduce peak flows to pre-project levels for 2-yr through 10-yr storm events
No. 5 = N/A

Rainfall Design Information

MAP =	21.05	in	*Mean Annual Precipitation*
$P_{85\%}$ =	1.0	in	*85th% 24-hr rainfall depth*
$P_{95\%}$ =	1.5	in	*95th% 24-hr rainfall depth*
$P_{2\text{-}YR}$ =	2.3	in	*2-Year 24-hr rainfall depth*
$P_{10\text{-}YR}$ =	4.0	in	*10-Year 24-hr rainfall depth*
$P_{25\text{-}YR}$ =	4.8	in	*25-Year 24-hr rainfall depth*

Soil Type Design Information

Site HSG =	C		*NRCS Hydrologic Soil Group Classification*
Infiltration Rate =	15	in/hr	*Lowest in-situ infiltration rate at location of proposed SCM by Stevens, Ferrone & Bailey dated Sept. 19, 2022*
Safety Factor =	3		
Design Infiltration Rate =	5.0	in/hr	

OFFSITE 85% PERFORMANCE REQUIREMENT CALCULATIONS

DMA	EXISTING IMPERVIOUS AREA (SF)	PROPOSED IMPERVIOUS AREA (SF)	TOTAL IMPERVIOUS AREA (SF)	IMPERVIOUS AREA THRESHOLD (SF)	APPLICABLE PERFORMANCE REQUIREMENT
O-1 to O-3	3,280	10,340	13,620	< 15,000	PR-2

OFFSITE 85% WATER QUALITY TREATMENT UNIFORM INTENSITY METHOD

		Pervious Surface Correction Factor				
		0.20	0.10	0.60	0.15	0.10
		Impervious Surface (SF)			Pervious Surface (SF)							Water Quality Calculations			Stormwater Control Measure Sizing		
DMA	Area (SF)	Building Roof	Street/Parking	Sidewalk/Driveway	Total	Managed Turf	Landscape/Grass	Pervious Pavement	Turf Block	Pavers	Native Landscape/ Undisturbed	SCM	Total	Equivalent Impervious Surface Area (ft²)	% Impervious	Minimum Required Biofiltration Area (ft²)	Proposed SCM	Biofiltration Planter Area Provided (ft²)	Stormwater Planter Dimensions (ft²)
O-1A	2,370	0	1,790	330	2,120		162					88	250	2,136	89%	85	Stormwater Planter	88	4'x22'
O-1B	2,910	0	2,200	410	2,610		188					112	300	2,629	90%	105	Stormwater Planter	112	4'x28'
O-1C	5,350	0	4,040	920	4,960		190					200	390	4,979	93%	199	Stormwater Planter	200	4'x50'
O-1D	1,120	0	840	210	1,050		22					48	70	1,052	94%	42	Stormwater Planter	48	4'x12'
Total	11,750	0	8,870	1,870	10,740	0	562	0	0	0	0	448	1,010	10,796	91%	**432**		**448**	

Governing Equations:

$$Area_{BMP} = \frac{EISA * R}{LR}$$

Area = *Minimum Biotreatment Area*
R = 0.2 *Rainfall Intensity (in/hr)*
LR = 5 *Maximum Loading Rate (in/hr)*
EISA *Equivalent Impervious Surface Area*

95% RAINFALL DEPTH RUNOFF RETENTION VOLUME

		Pervious Surface Correction Factor				
		0.20	0.10	0.60	0.15	0.10
		Impervious Surface (SF)			Pervious Surface (SF)							Runoff Rentention Volume Calculation				SCM Summary					
DMA	Area (SF)	Roof	Street/ Parking Lot	Handicape	Total	Managed Turf	Landscape/Grass	Pervious Concrete	Turf Block	Pavers	Native Landscape/ Undisturbed	Infiltration SCM	Total	Equivalent Impervious Surface Area (ft²)	% Impervious	Runoff Coefficient	95th% Volume, V_{95} (ft³)	SCM Description	Design Infiltration Rate (in/hr)	95th% Volume Required (ft³)	95th% Volume Provided (ft³)	Ratio of Impervious/ Pervious Area (2:1 max)	Drawdown Time (hr)
DMA 1	318,950	102,980	159,780	10,780	273,540		45,410						45,410	278,081	86%	0.67	26,765	Underground Chambers	5	26,765	2,752	n/a	8.5
DMA O-1[1]	11,750			1,870	10,740		1,010						1,010	10,841	91%	0.75	1,103	Stormwater Planter	n/a	n/a	-	-	-
DMA O-2[2]	2,430			1,590	1,590		840						840	1,674	65%	0.45	138	Self-Retaining	n/a	n/a	1.9	-	
DMA O-3[3]	2,270			1,290	1,290		980						980	1,388	57%	0.39	109	Self-Retaining	n/a	n/a	1.3	-	
Total	335,400	102,980	159,780	15,530	287,160	0	48,240	0	0	0	0	0	48,240	291,984	86%	0.67	28,115						

Notes:

1. Underground stormwater chambers were sized using the Routing Method in Conjunction with the CivilStorm Computer Program by Bentley Systems Incorporated. The routing model utilizes the design infiltration rate shown in the Table above. Because the model accounts for infiltration during the theoretical 24-hour storm event, the total volume provided is less than the total volume required. The routing model demonstrated that the SCM can infiltrate the full 95th% runoff volume before discharging to downstream stormwater facilities.
2. Offsite DMAs do not create or replace 15,000 SF or more of impervious surface. According to Resolution No. R3-2013-0032, performance requirements No. 1 and 2 apply to the offsite DMAs and the noted SCMs meet these requirements.

Governing Equations:

$$V_{95} = \frac{C * P_{95} * A}{12}$$

V_{95} = *95% Rainfall Depth Runoff Retention Volume (ft³)*
$C = 0.85i^3 - 0.78i^2 + 0.774i + 0.04$
P_{95} = 1.50 *24-hr 95th percentile rainfall depth (in)*
A = *drainage area (ft²)*
i = *% impervious*

$$Area = \frac{V_{95} * 12}{D_F + D_{BSM} * R_{BSM} + D_S * R_S}$$

Area = *Design SCM area based on 95% runoff retention volume (ft2)*
D = *SCM Layer depth (in)*
R = *SCM Layer porosity (in)*

$$T_D = \frac{V_{95} * 12 * SF}{I * Area}$$

T_D = *Drawdown time (hr)*
A = *Available SCM area (ft²)*
I = 5.0 *Infiltration Rate (in/hr)*

PRELIMINARY PEAK FLOW MANAGEMENT ANALYSIS

Total Chamber Volume= 18,567 CF

RETURN EVENT	PRE-DEVELOPMENT FLOW (CFS)	POST-DEVELOPMENT FLOW (CFS)	Max Volume in Chamber System (CF)	Freeboard (%)
2-YEAR	0.52	0.45	5,790	69%
10-YEAR	3.73	3.36	11,660	37%
25-YEAR	5.29	5.09	13,670	26%

CDS UNIT SIZING

CDS ID	TRIBUTARY AREA (AC)	PERCENT IMPERVIOUS	TREATMENT INTENSITY (IN/HR)	TREATMENT FLOWRATE (CFS)*
1	5.2	85%	0.2	0.89
2	2.1	85%	0.2	0.35

*CONTECH CDS2020-5-C EXCEEDS THESE FLOWRATES.
CDS2020-5-C REMOVES 75 MICRONS AT 80% AND 100% TRASH.

ROUTINE MAINTENANCE ACTIVITIES:

ROUTINE MAINTENANCE ACTIVITIES FOR SUBSURFACE INFILTRATION SYSTEMS

NO.	MAINTENANCE TASK	FREQUENCY OF TASK
1	MONITOR OBSERVATION WELL TO CONFIRM THAT THE SUBSURFACE INFILTRATION SYSTEM HAS DRAINED DURING DRY SEASON. IF INSPECTION INDICATES THAT THE SYSTEM IS PARTIALLY OR COMPLETELY CLOGGED, RESTORE TO DESIGN CONDITIONS.	ANNUALLY, DURING DRY SEASON
2	REMOVE OBSTRUCTIONS, DEBRIS AND TRASH NEAR INLET AND DISPOSE OF PROPERLY.	MONTHLY DURING WET SEASON, OR AS NEEDED AFTER STORM EVENTS
3	CHECK OBSERVATION WELL 2 TO 3 DAYS AFTER STORMS TO CONFIRM DRAINAGE. THE SUBSURFACE INFILTRATION SYSTEM SHOULD COMPLETELY DEWATER WITHIN 3 DAYS (PREFERRED) OR WITHIN 5 DAYS TO AVOID MOSQUITO PRODUCTION.	MONTHLY DURING WET SEASON, OR AS NEEDED AFTER STORM EVENTS
4	CHECK FOR EROSION AT INFLOW OR OVERFLOW STRUCTURES. REPAIR AS NECESSARY.	MONTHLY, OR AS NEEDED AFTER STORM EVENTS
5	INSPECT SUBSURFACE INFILTRATION SYSTEM USING THE ATTACHED INSPECTION CHECKLIST.	MONTHLY, OR AFTER LARGE STORM EVENTS, AND AFTER REMOVAL OF ACCUMULATED DEBRIS OR MATERIAL

ROUTINE MAINTENANCE ACTIVITIES FOR MODULAR BIORETENTION SYSTEMS

NO.	MAINTENANCE TASK	FREQUENCY OF TASK
1	INSPECT THE PLANTER SURFACE AREA, INLETS AND OUTLETS FOR OBSTRUCTIONS AND TRASH; CLEAR ANY OBSTRUCTIONS AND REMOVE TRASH.	QUARTERLY
2	INSPECT PLANTER FOR STANDING WATER. IF STANDING WATER DOES NOT DRAIN WITHIN 2-3 DAYS, THE SURFACE BIOTREATMENT SOIL SHOULD BE TILLED OR REPLACED WITH THE APPROVED SOIL MIX AND REPLANTED. USE THE CLEANOUT RISER TO CLEAR ANY UNDERDRAINS OF OBSTRUCTIONS OR CLOGGING MATERIAL.	QUARTERLY
3	CHECK FOR ERODED OR SETTLED BIOTREATMENT SOIL MEDIA. LEVEL SOIL WITH RAKE AND REMOVE/REPLANT VEGETATION AS NECESSARY.	QUARTERLY
4	MAINTAIN THE VEGETATION AND IRRIGATION SYSTEM. PRUNE AND WEED TO KEEP FLOW-THROUGH PLANTER NEAT AND ORDERLY IN APPEARANCE.	QUARTERLY
5	EVALUATE HEALTH AND DENSITY OF VEGETATION. REMOVE AND REPLACE ALL DEAD AND DISEASED VEGETATION. REMOVE EXCESSIVE GROWTH OF PLANTS THAT ARE TOO CLOSE TOGETHER.	ANNUALLY, BEFORE THE WET SEASON BEGINS
6	USE COMPOST AND OTHER NATURAL SOIL AMENDMENTS AND FERTILIZERS INSTEAD OF SYNTHETIC FERTILIZERS, ESPECIALLY IF THE SYSTEM USES AN UNDERDRAIN.	ANNUALLY, BEFORE THE WET SEASON BEGINS
7	INSPECT THE OVERFLOW PIPE TO MAKE SURE THAT IT CAN SAFELY CONVEY EXCESS FLOWS TO A STORM DRAIN. REPAIR OR REPLACE ANY DAMAGED OR DISCONNECTED PIPING. USE THE CLEANOUT RISER TO CLEAR UNDERDRAINS OF OBSTRUCTIONS OR CLOGGING MATERIAL.	ANNUALLY, BEFORE THE WET SEASON BEGINS
8	INSPECT THE ENERGY DISSIPATOR AT THE INLET TO ENSURE IT IS FUNCTIONING ADEQUATELY, AND THAT THERE IS NO SCOUR OF THE SURFACE MULCH. REMOVE ANY ACCUMULATION OF SEDIMENT.	ANNUALLY, BEFORE THE WET SEASON BEGINS
9	INSPECT AND, IF NEEDED, REPLACE WOOD MULCH. IT IS RECOMMENDED THAT 2" TO 3" OF COMPOSTED ARBOR MULCH BE APPLIED ONCE A YEAR.	ANNUALLY, BEFORE THE WET SEASON BEGINS
10	INSPECT SYSTEM FOR EROSION OF BIOTREATMENT SOIL MEDIA, LOSS OF MULCH, STANDING WATER, CLOGGED OVERFLOWS, WEEDS, TRASH AND DEAD PLANTS. IF USING ROCK MULCH, CHECK FOR 3" OF COVERAGE.	ANNUALLY AT THE END OF THE RAINY SEASON, AND/OR AFTER LARGE STORM EVENTS
11	INSPECT SYSTEM FOR STRUCTURAL INTEGRITY OF WALLS, FLOW SPREADERS, ENERGY DISSIPATORS, CURB CUTS, OUTLETS AND FLOW SPLITTERS.	ANNUALLY AT THE END OF THE RAINY SEASON, AND/OR AFTER LARGE STORM EVENTS

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ARCHITECTURAL AND SITE REVIEW
STORMWATER MANAGEMENT PLAN
HEAT WAVE
GILROY, CALIFORNIA

FOR: HIGHLY VISUAL, LLC.

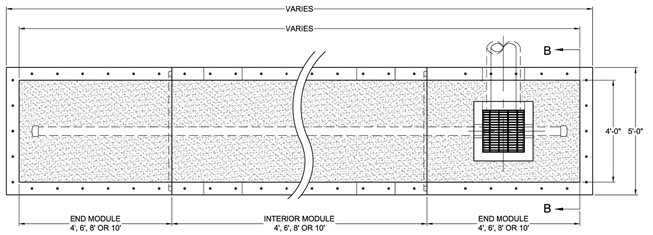
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DATE: NOV 2023

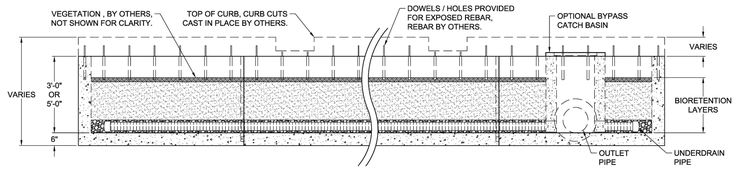
SHEET C9 OF 59 SHEETS
JOB NO. 212030

PLOT DATE: January 10, 2025
FILE PATH: W:\Jobs 21\212030 - Heatwave, Gilroy\Drawings\Prelim\Applications\A&S\C9 STORMWATER MANAGEMENT PLAN.dwg

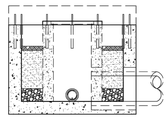
SITE SPECIFIC DATA			
Structure ID			ID
Treatment Media Surface Area			XX sf
Rim Elevation			X.XX'
TerraMod Module Height			3' or 5'
Pipe Data	**Pipe Size**	**Pipe Type**	**Invert Elevation**
Outlet	XX"	XXX	X.XX'
Underdrain	XX"	XXX	X.XX'
Notes: -			
PERFORMANCE SPECIFICATIONS			
WA Ecology GULD Equivalency			



PLAN VIEW



ELEVATION VIEW



SECTION B-B

NOTES:

1. DESIGN LOADINGS:
   A. 300 PSF PEDESTRIAN LOADING.
   B. ASSUMED WATER TABLE = BELOW BOTTOM OF PRECAST.
   C. DRY LATERAL EARTH PRESSURE (EPP) = 45 PCF.
   D. LATERAL LIVE LOAD SURCHARGE=80 PSF.
   E. NO LATERAL SURCHARGE FROM ADJACENT BUILDINGS, WALLS, PIERS, OR FOUNDATIONS.
2. CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE 5,000 PSI MINIMUM.
3. STEEL REINFORCEMENT: REBAR, ASTM A-615 OR A-706, GRADE 60.
4. MESH REINFORCEMENT: ASTM C-1064, GRADE 80.
5. CEMENT: ASTM C-150 SPECIFICATION.
6. REQUIRED NATIVE ALLOWABLE SOIL BEARING PRESSURE = 2,500 PSF.
7. REFERENCE STANDARD:
   A. ASTM C 890
   B. ASTM C 913
7. THIS STRUCTURE IS DESIGNED TO THE PARAMETERS NOTED HEREIN. PLEASE VERIFY THAT THESE PARAMETERS MEET PROJECT REQUIREMENTS. IF DESIGN PARAMETERS ARE INCORRECT, REVIEWING ENGINEER/AUTHORITY SHALL NOTIFY OLDCASTLE INFRASTRUCTURE UPON REVIEW OF THIS SUBMITTAL.
8. OVERSIZED HOLES TO ACCOMMODATE SPECIFIC PIPE TYPE MUST BE CONCENTRIC TO PIPE ID. AFTER PIPES ARE INSTALLED, ALL ANNULAR SPACES SHALL BE FILLED WITH A MINIMUM OF 3000 PSI CONCRETE FOR FULL THICKNESS OF PRECAST WALLS. PIPES ARE TO BE FLUSH WITH THE INSIDE SURFACE OF THE CONCRETE STRUCTURE.
9. CONTRACTOR RESPONSIBLE TO VERIFY ALL SIZES, LOCATIONS AND ELEVATIONS OF OPENINGS.
10. CONTRACTOR RESPONSIBLE TO ENSURE ADEQUATE BEARING SURFACE IS PROVIDED (I.E. COMPACTED & LEVEL PER PROJECT SPECIFICATIONS).
11. ALL EXTERIOR SURFACES SUPPLIED WITH "FORM FINISH."
12. SYSTEM SHIPPED EMPTY. UNDERDRAIN, SOIL/FILTER MEDIA, DRAIN ROCK PROVIDED & INSTALLED BY OTHERS.
13. ADAPTORS/ANGLES AND EXTERNAL PIPING BY OTHERS.

Oldcastle Infrastructure
A CRH COMPANY

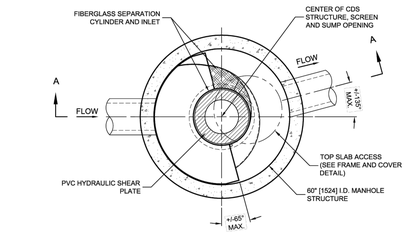
Ph: 800.579.8818 | www.oldcastleinfrastructure.com/stormwater

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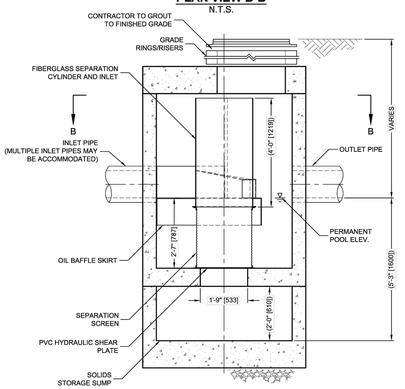
TerraMod™ Modular Bioretention System	(STANDARD)	
CUSTOMER:		
PROJECT NAME: -		
SHEET NAME: Specifier Drawing TM-4	REVISION / REV DATE	SHEET: 1 OF 1

Bioretention Biofiltration

STORMWATER PLANTER DETAIL



PLAN VIEW B-B
N.T.S.



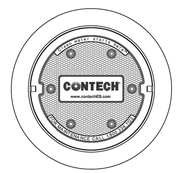
ELEVATION A-A
N.T.S.

THIS PRODUCT MAY BE COVERED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 7,425,262; 7,470,366; 8,470,173; 8,431,016; 8,802,430 AND OTHER U.S. AND FOREIGN PATENTS PENDING. CDS® IS A REGISTERED TRADEMARK OF CONTECH ENGINEERED SOLUTIONS LLC.

CDS2020-5-C DESIGN NOTES

THE STANDARD CDS3020-5-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST		WIDTH	HEIGHT
		*	*
NOTES/SPECIAL REQUIREMENTS: * PER ENGINEER OF RECORD			

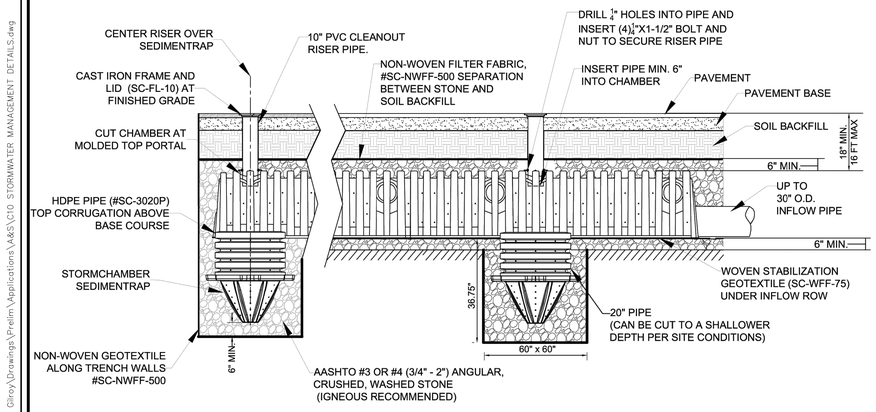
GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

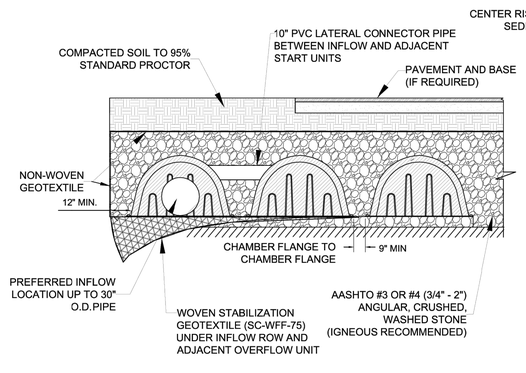
CONTECH® ENGINEERED SOLUTIONS LLC
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9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS2020-5-C
INLINE CDS
STANDARD DETAIL

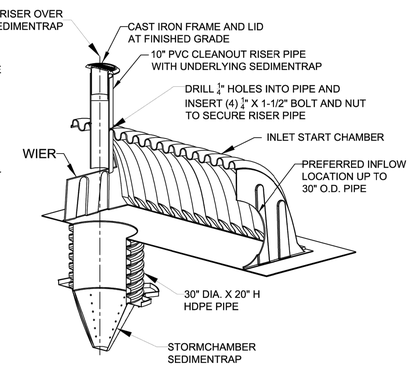
CDS PRE-TREATMENT MANHOLE DETAIL



TYPICAL SIDE VIEW

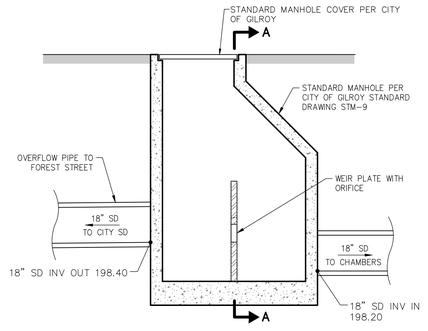


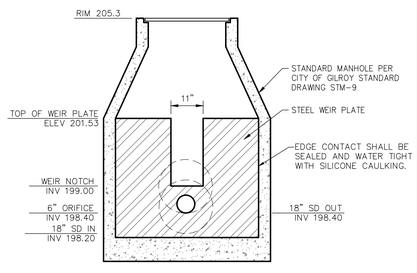
TYPICAL FRONT VIEW



START CHAMBER CUTAWAY

NDS UNDERGROUND STORMDRAIN CHAMBERS MODEL SC-3475





SECTION A-A

MANHOLE/FLOW CONTROL STRUCTURE
NO SCALE

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ARCHITECTURAL AND SITE REVIEW
STORMWATER MANAGEMENT DETAILS
HEAT WAVE
GILROY, CALIFORNIA

FOR: HIGHLY VISUAL LLC

SCALE	DATE
AS SHOWN	NOV 2023

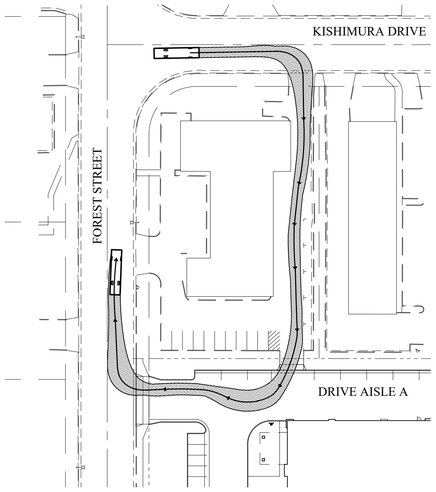
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SHEET
C10
OF 59 SHEETS

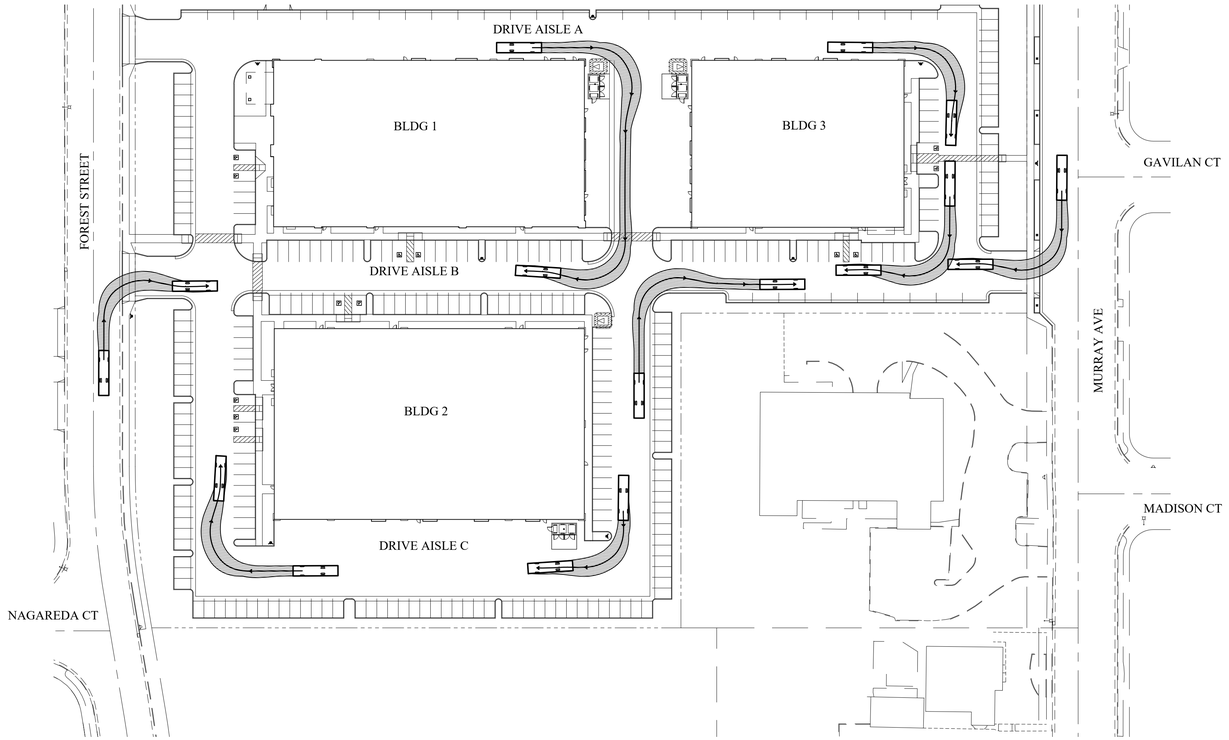
JOB NO.
212030

PLOT DATE: January 10, 2025
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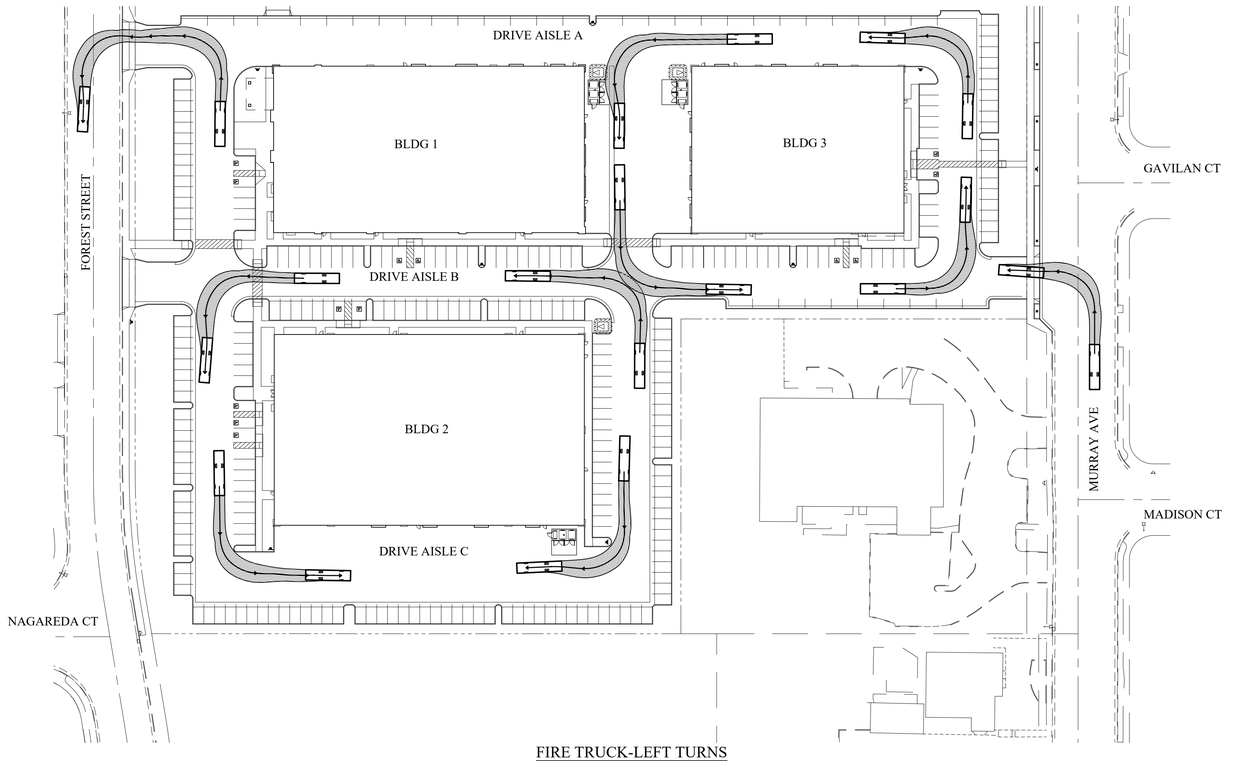
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FIRE TRUCK-EVA RIGHT TURNS
SCALE: 1" = 60'



FIRE TRUCK-RIGHT TURNS
SCALE: 1" = 60'



FIRE TRUCK-LEFT TURNS
SCALE: 1" = 60'

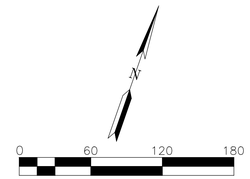
LEGEND

VEHICLE BODY

DIRECTION OF TRAVEL

Gilroy Ladder Truck

	FEET
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 28.2



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ARCHITECTURAL AND SITE REVIEW
FIRE TRUCK CIRCULATION PLAN
HEAT WAVE
GILROY, CALIFORNIA

COR: HIGHLY VISUAL, LLC

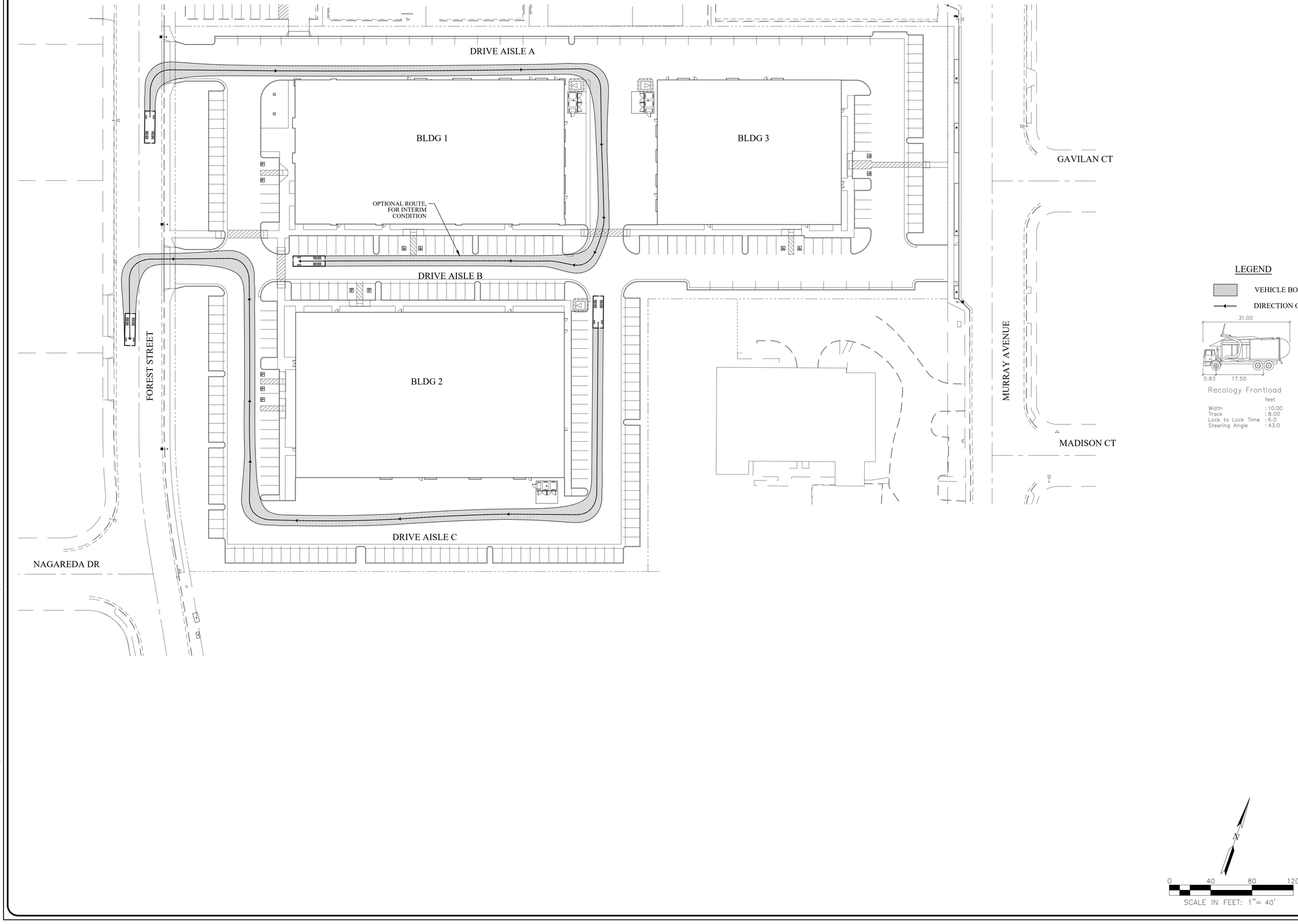
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ARCHITECTURAL AND SITE REVIEW
SOLID WASTE HANDLING PLAN
HEAT WAVE
GILROY, CALIFORNIA

FOR: HIGHLY VISUAL LLC.

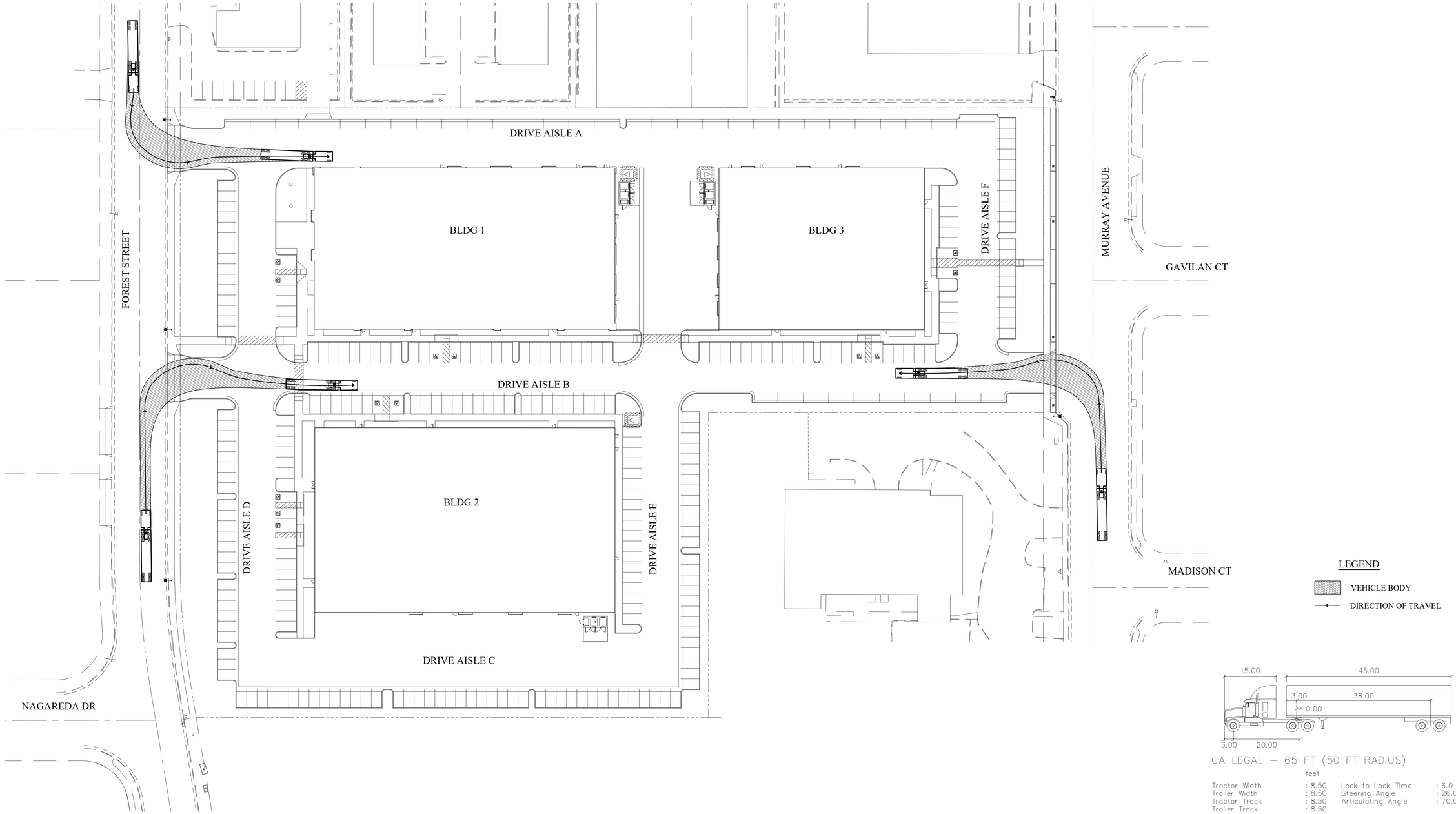
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PHONE (408) 848-3300 FAX (408) 848-3302

ARCHITECTURAL AND SITE REVIEW
CA–65 TRUCK MOVEMENT PLAN
HEAT WAVE
GILROY, CALIFORNIA

FOR: HIGHLY VISUAL, LLC.

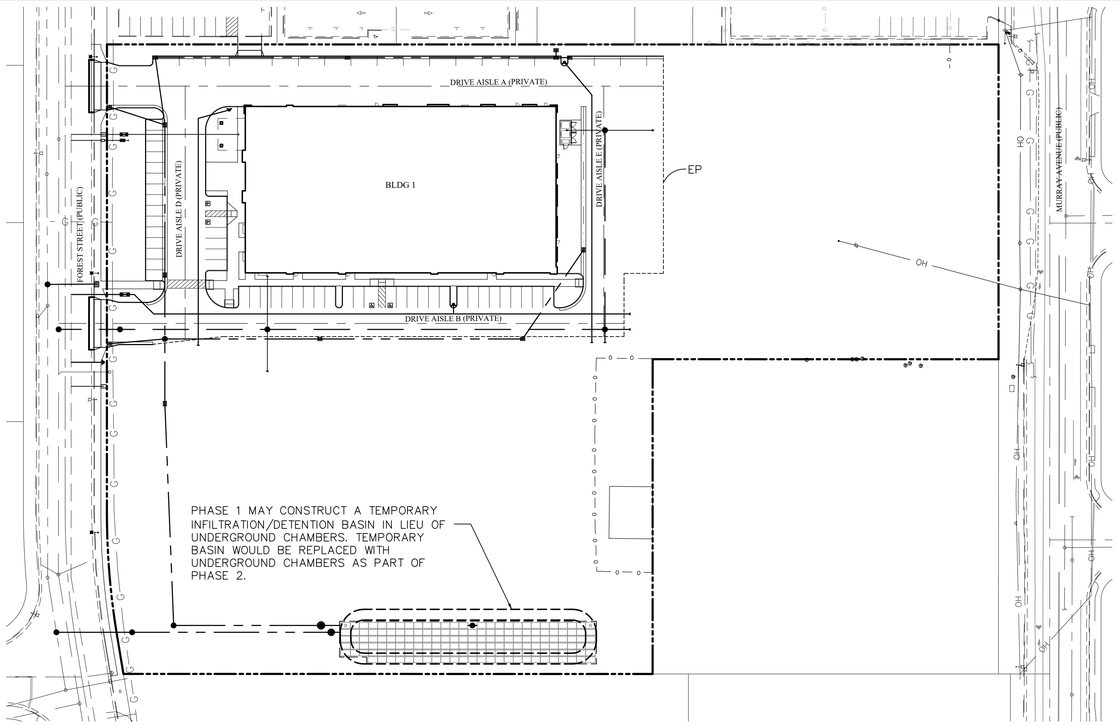
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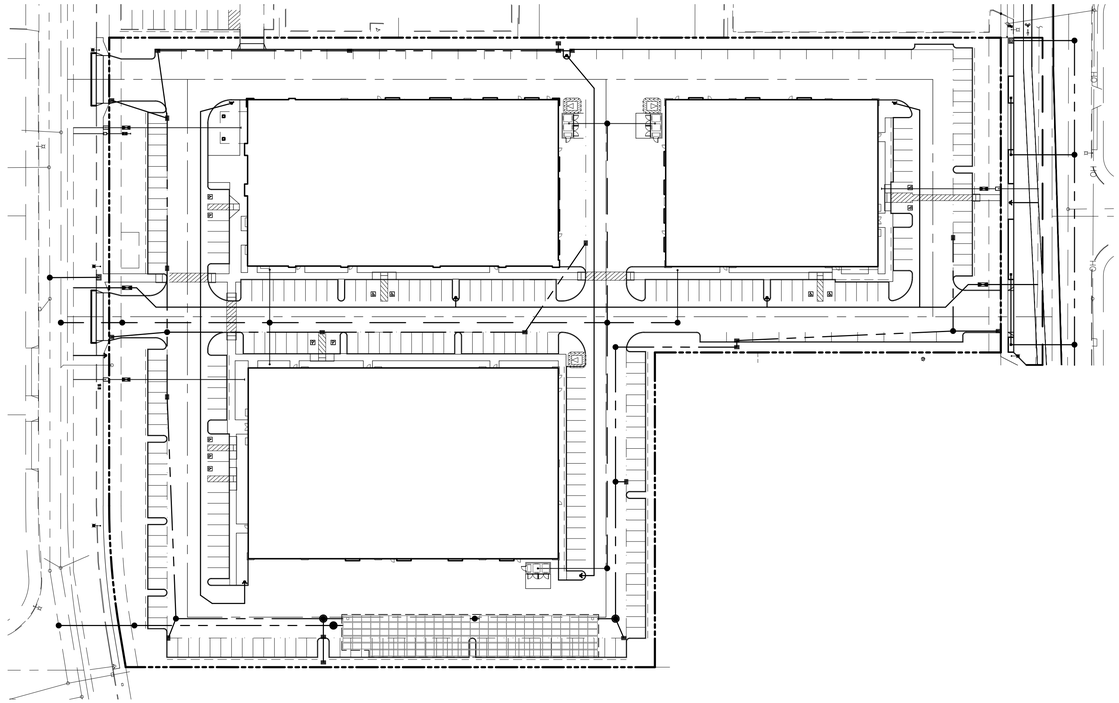
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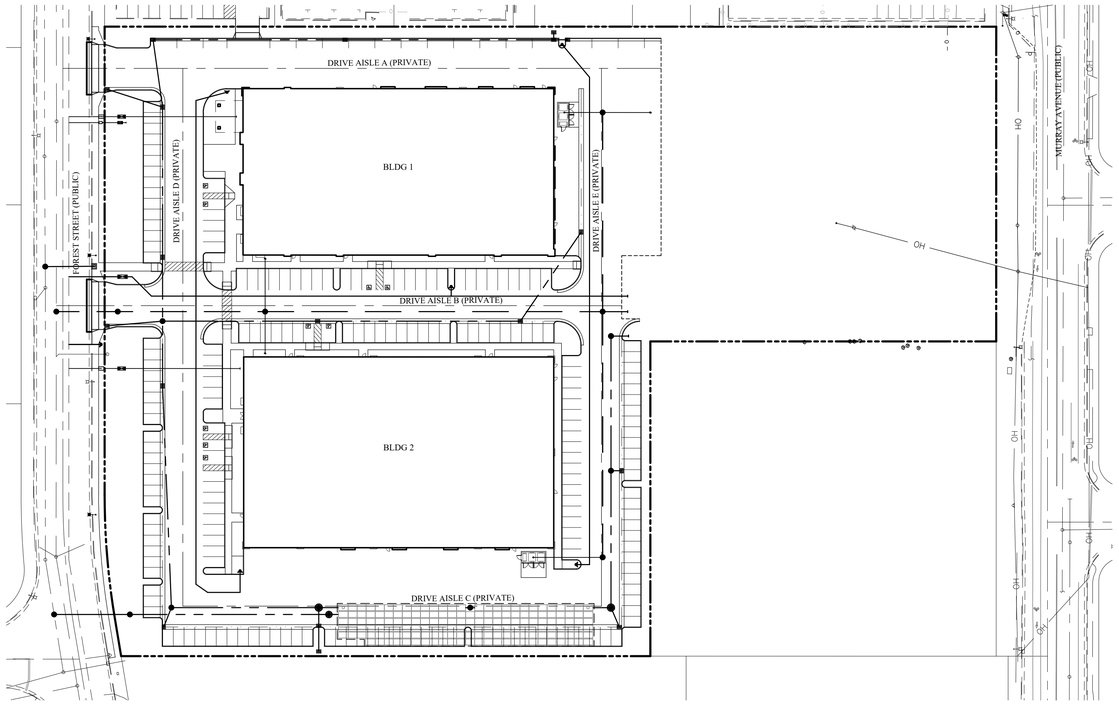
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PHASE 1



PHASE 3



PHASE 2

PHASE 1:

- BUILDING 1 (42,270 ± SF)
- PHASE 1 SATISFIES PARKING REQUIRED BY CITY FOR OFFICE/WAREHOUSE/MANUFACTURING USES.
- FOREST STREET FRONTAGE IMPROVEMENTS (SIDEWALK & UTILITY CONNECTIONS)
- TWO ENTRIES FOR FIRE ACCESS.
- WATER LINE NEEDED TO SERVE BUILDING 1 DOMESTIC AND FIRE.
- ON-SITE STORMWATER TREATMENT/DETENTION.
- DRIVEWAY CONNECTION TO 835-02-047 (EXISTING HEAT WAVE FACILITY) FOR EMERGENCY VEHICLE ACCESS (EVA). TEMPORARY EVA EASEMENT TO BE RECORDED.
- BUILDING 1 WILL BE HEAT WAVE'S EXPANSION. CONSTRUCTION ANTICIPATED 2025.
- ACCESSIBLE PATH OF TRAVEL FROM PUBLIC RIGHT-OF- WAY TO BUILDING 1.
- AREA OF DISTURBANCE IS LIKELY SIMILAR TO THE LIMIT OF IMPROVEMENTS SHOWN FOR PHASES 1 & 2.

PHASE 2:

- BUILDING 2 (48,600 ± SF)
- WATER LINE NEEDED TO SERVE BUILDINGS 1 & 2 DOMESTIC AND FIRE.
- PHASE 2 SATISFIES PARKING REQUIRED BY CITY FOR OFFICE/MANUFACTURING USES.
- NO CURRENT TENTANT(S) FOR BUILDING 2. ANTICIPATED CONSTRUCTION: 2030.
- ACCESSIBLE PATHS OF TRAVEL FROM PUBLIC RIGHT-OF-WAY TO BUILDINGS 1 & 2.

PHASE 3:

- BUILDING 3 (29,920 ± SF)
- PHASE 3 SATISFIES PARKING REQUIRED BY CITY FOR OFFICE/MANUFACTURING USES.
- MURRAY AVENUE FRONTAGE IMPROVEMENTS (SIDEWALK & UTILITY CONNECTIONS). MURRAY STORM DRAIN EXTENSION TO OCCUR IN THIS PHASE.
- WATER LINE EXTENSION TO MURRAY FOR LOOPING PURPOSES.
- DRIVEWAY ACCESS FROM MURRAY AVENUE.
- NO CURRENT TENTANT(S) FOR BUILDING 3. ANTICIPATED CONSTRUCTION: 2035.
- ACCESSIBLE PATHS OF TRAVEL FROM PUBLIC RIGHT-OF-WAY TO BUILDING 3.
- TEMPORARY EVA EASEMENT OVER 835-02-047 TO BE ABANDONED WITH DRIVE AISLE B CONNECTION BETWEEN FOREST STREET AND MURRAY AVENUE.

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	PROJECT BOUNDARY	
	LOT LINE OR R/W	
	CENTERLINE	
	CURB	
	EDGE OF PAVEMENT	

NOTE: PHASING IS PRELIMINARY AND IS SUBJECT TO CHANGE

0 60 120 180
SCALE IN FEET: 1"= 60'

RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
8055 CAMINO ARROYO GILROY, CA 95020
PHONE: (408) 846-0300 FAX: (408) 846-0302

ARCHITECTURAL AND SITE REVIEW
PHASING PLAN
HEAT WAVE
GILROY, CALIFORNIA

FOR: HIGHLY VISUAL, LLC.

DATE	MK	SHEET REVISIONS	BY	CK
18Sep23		Edits to address June 22, 2023 comment letter		
06Nov23		Remove southern entrance and connection to northern property		
13Dec24		Edits to address City of Gilroy comment letter dated October 19, 2023		

SCALE 1"=60'
DATE NOV 2023

SHEET
C14
OF 59 SHEETS

JOB NO. 212030

PLOT DATE: January 10, 2025
FILE PATH: W:\Jobs 2\212030 - Heatwave, Gilroy\Drawings\Prelim\Applications\A&S\C14 PHASING PLAN.dwg

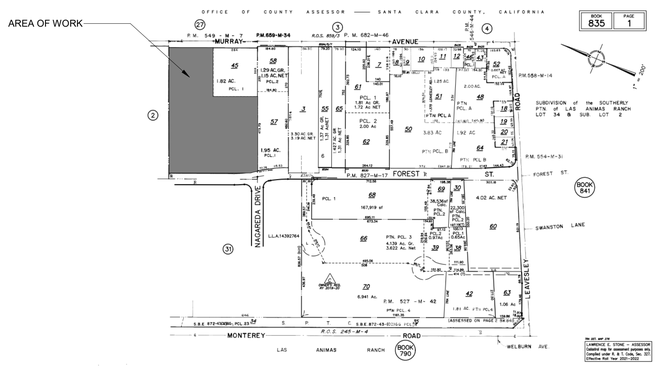
FOREST AVE INDUSTRIAL

8875 Murray Ave
Gilroy, CA 95020

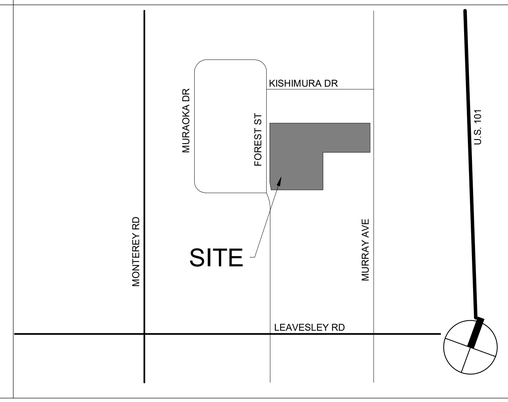
ARCHITECTURAL AND SITE REVIEW RESUBMITTAL 02 - 12.11.24

2 1

PARCEL MAP



VICINITY MAP



PROPOSED VIEW OF HEAT WAVE HEADQUARTERS-PHASE 1



1

GENERAL INFORMATION

ZONING	M-1 (LIMITED INDUSTRIAL) + MURRAY LAS ANIMAS OVERLAY
SETBACKS	**REQUIRED/MAX**
FRONT	41'
REAR	NONE
SIDE	NONE
SIDE/CORNER	31' (FROM FACE OF CURB)
HEIGHT	35'
STORIES	2
OCCUPANCY:	M / S-1/ B
TYPE OF CONSTRUCTION:	V-B
SPRINKLERED:	YES
SITE AREA:	317,470 SF / 7.3 ACRES
BUILDING AREA:	BUILDING 1: 42,266 SF BUILDING 2: 48,600 SF BUILDING 3: 29,920 SF TOTAL: 120,786 SF
ZONING:	M-1 (LIMITED INDUSTRIAL) + MURRAY LAS ANIMAS OVERLAY
APN:	835-01-059

SCOPE OF WORK

CONSTRUCTION OF NEW INDUSTRIAL PARK IN THREE PHASES. FIRST PHASE TO INCLUDE THE CONSTRUCTION OF A NEW OFFICE/WAREHOUSE/LIGHT INDUSTRIAL BUILDING AND ASSOCIATED SITE WORK

STATEMENT OF OPERATION

Heat Wave Visual is a California Corporation headquartered currently in Gilroy at 8840 Forest Street. Heat Wave Visual has been incorporated since 2014 and was previously located in San Carlos, California, until April of 2019.

Heat Wave Visual designs and sells eyewear, namely sunglasses and safety glasses that is manufactured overseas and domestically (offsite) and holds valid FDA and CDH licenses for packaging and relabeling ophthalmic covering (glasses).

Heat Wave Visual is primarily a direct to consumer brand shipping on average 605 small package orders a day through USPS a day in 2021. We also manage a small wholesale segment for retail store distribution, that makes up less than 10% of our annual gross sales. 99% of all revenue generated is shipped off-site both domestic and international.

Heat Wave Visual intends to purchase the vacant lot bordering our current property to build and expand our operation size from 9,450 Sq Ft. to a proposed 42,266 sq. ft. where we would move all offices and warehouse operations to the new building, making it our new official headquarters. This will be constructed as Phase 1 of the project. Future phases will complete a of total of 120,786 sf in total buildout once complete.

Activities would include the following:
- Offices for executives, admin and management
- Warehouse operations such as order assembly and fulfillment
- Storage of product
- Storage of Heat Wave assets, vehicles, trailers and show supplies
- Offices / Headquarters for administrative staff and customers

General Hours of Operation
- Monday through Friday: 7:00AM – 5:00PM
- Shifts: 1
- Employees per shift: 16 – 25
- Daily shipping and receiving of product with light daily pickups from USPS, FedEx and USPS.
- Low frequency LCL truck shipments (less than 1 a week)

PROJECT DIRECTORY

CLIENT:	HIGHLY VISUAL LLC 8840 FOREST ST. GILROY, CA 95020 JUSTIN HERTEL E: justin@heatwavevisual.com
ARCHITECT:	E2 ARCHITECTURE 1501 THE ALAMEDA, STE. 105 SAN JOSE, CA 95126 JEFFREY EATON, AIA P: (408) 691-8998 E: jeffrey@e2astudio.com
CIVIL ENGINEER:	RJA 8055 CAMINO ARROYO GILROY, CA 95020 ROSS DOYLE P: (408) 848-0300 E: RDoyle@rja-gps.com

SHEET INDEX

A&S	
AP0	COVER SHEET
AP1	EXISTING PHOTOS- EAST
AP2	EXISTING PHOTOS -WEST
AP3	PHASING SITE PLAN - PHASE 1
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AP6	PROPOSED SITE PLAN
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AP9	BLDG 1 - PROPOSED ROOF PLAN
AP10	BLDG 1 - PROPOSED EXTERIOR ELEVATIONS
AP11	BLDG 2 - PROPOSED FLOOR PLAN
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AP15	BLDG 3 - PROPOSED FLOOR PLAN
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AP17	BLDG 3 - PROPOSED ROOF PLAN
AP18	BLDG 3 - PROPOSED EXTERIOR ELEVATIONS
AP19	COLOR AND MATERIALS SAMPLE BOARD
AP20	PROPOSED TRASH ENCLOSURES
AP21	PARKING DETAILS
AP22	BLDG 1- CROSS SECTION OF FULL RIGHT OF WAY
AP23	BLDG 2 & 3- CROSS SECTION OF FULL RIGHT OF WAY

ARCHITECTURE
307 Orchard City Dr., Ste 350
Campbell, CA 95008
408.265.5255

JEFFREY EATON ARCHITECT, INC
A CALIFORNIA CORPORATION

FOREST AVE INDUSTRIAL
8875 Murray Ave
Gilroy, CA 95020
Client: HEAT WAVE VISUAL

Rev. #	Description	Date
1	PLANNING ISSUE FOR RESUBMITTAL 01	08/18/23
2	PLANNING ISSUE FOR RESUBMITTAL 02	12/11/24

Project Number: 21048
Date: JUNE 7, 2023
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Sheet Title:
COVER SHEET

AP0

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1



NORTH SURROUNDING L
TAKEN 9/2023 3" = 1'-0"



MURRAY AVE STREET VIEW K
TAKEN 9/2023 3" = 1'-0"



EAST SURROUNDING 3 J
TAKEN 9/2023 3" = 1'-0"



EAST SURROUNDING 2 I
TAKEN 9/2023 NS



EAST SURROUNDING 1 H
TAKEN 9/2023 NS



EAST SITE VIEW 1 G
TAKEN 9/2023 NS



NORTHEAST SURROUNDING 5 F
TAKEN 9/2023 NS



NORTHEAST SITE VIEW E
TAKEN 9/2023 NS



NORTHEAST SURROUNDING 4 D
TAKEN 9/2023 NS



NORTHEAST SURROUNDING 3 C
TAKEN 9/2023 NS



NORTHEAST SURROUNDING 2 B
TAKEN 9/2023 NS



NORTHEAST SURROUNDING 1 A
TAKEN 9/2023 NS



SITE KEY PLAN 1
NS

ARCHITECTURE
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JEFFREY EATON ARCHITECT, INC
A CALIFORNIA CORPORATION

FOREST AVE INDUSTRIAL

8875 Murray Ave
Gilroy, CA 95020
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Rev. #	Description	Date
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EXISTING PHOTOS- EAST

AP1

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NORTH WEST SURROUNDING 6 K
TAKEN 9/2023 3" = 1'-0"



FOREST ST STREET VIEW J
TAKEN 9/2023 3" = 1'-0"



WEST SURROUNDING 3 I
TAKEN 9/2023 3" = 1'-0"



WEST SITE VIEW 2 H
TAKEN 9/2023 3" = 1'-0"



WEST SURROUNDING 2 G
TAKEN 9/2023 3" = 1'-0"



WEST SITE VIEW 1 F
TAKEN 9/2023 3" = 1'-0"



NORTH WEST SURROUNDING 5 E
TAKEN 9/2023 3" = 1'-0"



NORTH WEST SURROUNDING 4 D
TAKEN 9/2023 3" = 1'-0"



NORTH WEST SURROUNDING 3 C
TAKEN 9/2023 3" = 1'-0"



NORTH WEST SURROUNDING 2 B
TAKEN 9/2023 3" = 1'-0"



NORTH WEST SURROUNDING 1 A
TAKEN 9/2023 3" = 1'-0"



SITE KEY PLAN 1
12" = 1'-0"

ARCHITECTURE
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JEFFREY EATON ARCHITECT, INC
A CALIFORNIA CORPORATION

FOREST AVE INDUSTRIAL

8875 Murray Ave
Gilroy, CA 95020
Client: HEAT WAVE VISUAL

Rev. #	Description	Date
1	PLANNING ISSUE FOR RESUBMITTAL 01	09/18/23

Project Number: 21048
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EXISTING PHOTOS -WEST

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PROPOSED PHASING SITE PLAN - PHASE 1
1" = 40'-0"

LEGEND

℄ XXX.XX'	LENGTH OF PROPERTY LINE
(#)	PARKING TOTAL
	PROPERTY LINE
1	SIDEWALK
	LANDSCAPE; REFER TO LANDSCAPE PLANS
1	DRIVEWAY AND DRIVE AISLE
	NEW UNDERGROUND STORMWATER CONTROL SYSTEM

PHASE DESCRIPTION

PHASE 1 CONCERNS 2 -STORY, 42,266 SF, BUILDING 1. BUILDING 1 WILL HOUSE OFFICE, WAREHOUSE, AND LIGHT INDISTRIAL OPERATIONS. DRIVEWAYS AND PARKING WILL ALSO BE BUILT TO ACCOMODATE SITE. FOR INFRASTRUCTURE-RELATED PHASING INFORMATION, PLEASE SEE SHEET C12.

PARKING TABULATIONS (PHASE 1)

USE	SQUARE FOOTAGE	PARKING RATIO	REQUIRED PARKING
OFFICE	8,330 SF	1:300	28
WAREHOUSE	23,086 SF	1:5000	5
LIGHT INDUSTRIAL	10,850 SF	1:350	31
TOTAL PARKING SPACES REQUIRED			64
TOTAL PARKING SPACES PROVIDED			65
PARKING BREAKDOWN			
TOTAL EV CAPABLE SPACES (PER TABLE A5.106.5.3.3.1)			14
TOTAL EVCS WITH EVSE (PER TABLE A5.106.5.3.3.1)			7
TOTAL TEMPORARY BIKE PARKING			3
TOTAL LONG TERM BIKE PARKING			3

SITE TABULATION (PHASE 1)

SITE AREA: 317,470 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
BUILDING COVERAGE	0 SF	36,466 SF	0 %	11 %
LANDSCAPE COVERAGE	317,470 SF	215,540 SF	100 %	68 %
HARDSCAPE COVERAGE	0 SF	65,464 SF	0 %	21%
BUILDING AREA	0 SF	42,266 SF		

F.A.R: $\frac{42,266}{317,470} = 0.13$

KEYNOTES

21.01	PROPOSED LONG TERM BIKE PARKING
21.02	PROPOSED SHORT TERM BIKE PARKING

ARCHITECTURE
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JEFFREY EATON ARCHITECT, INC
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FOREST AVE INDUSTRIAL

8875 Murray Ave
Gilroy, CA 95020

Client:
HEAT WAVE VISUAL

Rev. #	Description	Date
1	PLANNING ISSUE FOR RESUBMITTAL 01	09/19/23
2	PLANNING ISSUE FOR RESUBMITTAL 02	12/11/24

Project Number: 21048
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Sheet Title:
PHASING SITE PLAN - PHASE 1

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LEGEND

℄ XXX.XX'	LENGTH OF PROPERTY LINE
(#)	PARKING TOTAL
	PROPERTY LINE
1	SIDEWALK
	LANDSCAPE; REFER TO LANDSCAPE PLANS
1	DRIVEWAY AND DRIVE AISLE
	NEW UNDERGROUND STORMWATER CONTROL SYSTEM

PHASE DESCRIPTION

PHASE 2 CONCERNS 2-STORY, 48,600 SF, BUILDING 2. BUILDING 2 WILL HOUSE OFFICE AND LIGHT INDUSTRIAL OPERATIONS FOR FUTURE TENANT. DRIVEWAYS AND PARKING WILL ALSO BE BUILT TO ACCOMODATE THOROUGHFARE. FOR INFRASTRUCTURE-RELATED PHASING INFORMATION, PLEASE SEE SHEET C12.

PARKING TABULATIONS (PHASE 1)

USE	SQUARE FOOTAGE	PARKING RATIO	REQUIRED PARKING
OFFICE	8,330 SF	1:300	28
WAREHOUSE	23,086 SF	1:5000	5
LIGHT INDUSTRIAL	10,850 SF	1:350	31
TOTAL PARKING SPACES REQUIRED			64
TOTAL PARKING SPACES PROVIDED			65

PARKING TABULATIONS (PHASE 1+2)

USE	SQUARE FOOTAGE	PARKING RATIO	REQUIRED PARKING
OFFICE	15,330 SF	1:300	51
WAREHOUSE	23,086 SF	1:5000	5
LIGHT INDUSTRIAL	52,450 SF	1:350	150
TOTAL PARKING SPACES REQUIRED			206
TOTAL PARKING SPACES PROVIDED			220
PARKING BREAKDOWN			
TOTAL EV CAPABLE SPACES (PER TABLE A5.106.5.3.3.1)			35
TOTAL CHARGING SPACES (WITHIN EVCS) (PER TABLE A5.106.5.3.3.1)			22
TOTAL TEMPORARY BIKE PARKING			9
TOTAL LONG TERM BIKE PARKING			6

SITE TABULATION (PHASE 1)

SITE AREA: 317,470 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
BUILDING COVERAGE	0 SF	36,466 SF	0 %	11 %
LANDSCAPE COVERAGE	317,470 SF	215,540 SF	100 %	68 %
1 HARDSCAPE COVERAGE	0 SF	65,464 SF	0 %	21%
BUILDING AREA	0 SF	42,266 SF		

F.A.R: 42,266 / 317,470 = 0.13

SITE TABULATION (PHASE 1+2)

SITE AREA: 317,470 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
BUILDING COVERAGE	36,466 SF	78,066 SF	11 %	25 %
LANDSCAPE COVERAGE	215,540 SF	105,316 SF	68 %	33 %
1 HARDSCAPE COVERAGE	65,464 SF	134,088 SF	21 %	42 %
BUILDING AREA	42,266 SF	90,866 SF		

F.A.R: 90,866 / 317,470 = 0.29

KEYNOTES

21.01	PROPOSED LONG TERM BIKE PARKING
21.02	PROPOSED SHORT TERM BIKE PARKING

PROPOSED PHASING SITE PLAN - PHASE 2 1

2 1" = 40'-0"

PLAN NORTH

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408.265.5255

JEFFREY EATON ARCHITECT, INC
A CALIFORNIA CORPORATION

FOREST AVE INDUSTRIAL

8875 Murray Ave
Gilroy, CA 95020
Client:
HEAT WAVE VISUAL

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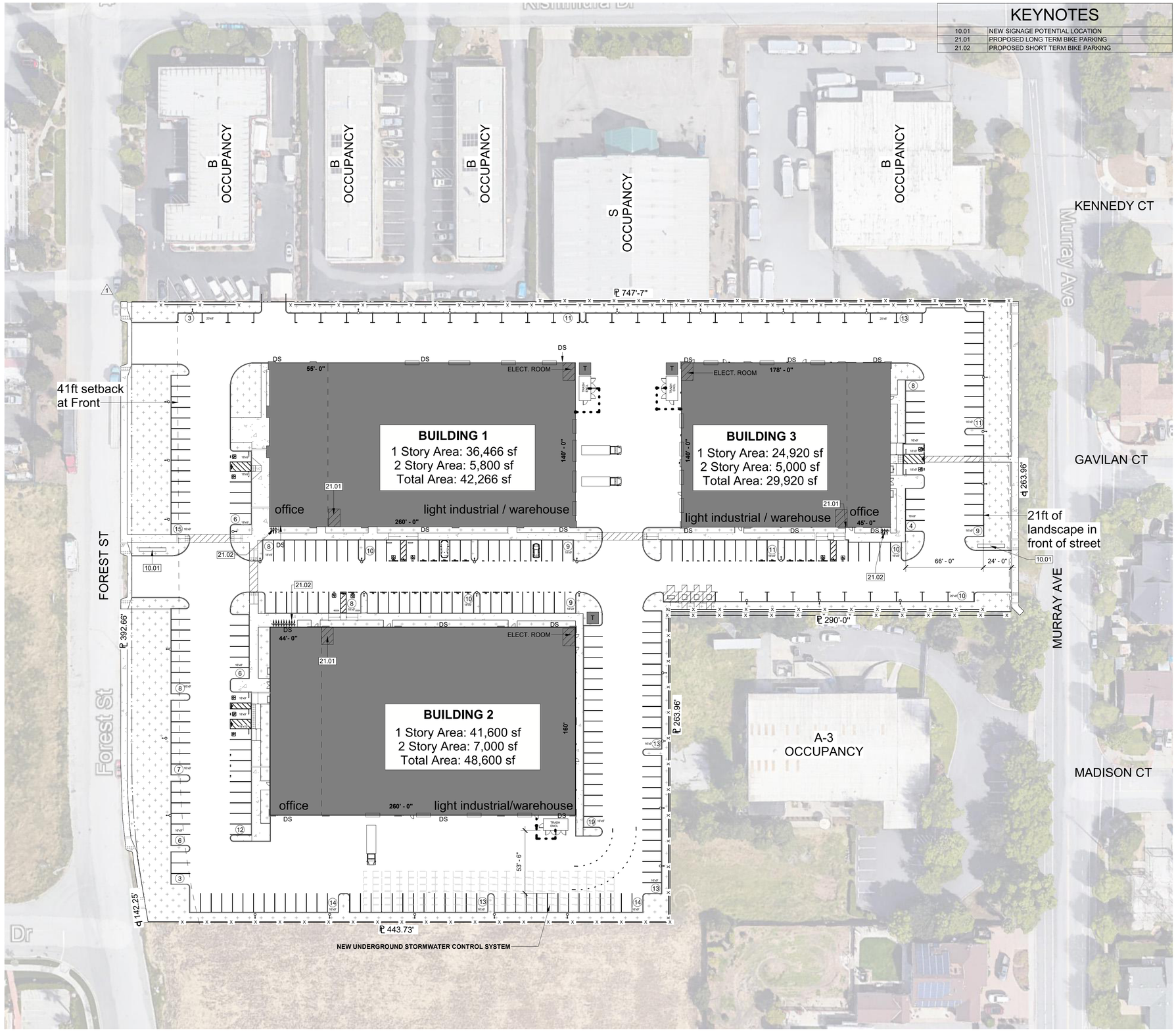
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PHASING SITE PLAN - PHASE 2

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LEGEND

- ℄ XXX.XX' — LENGTH OF PROPERTY LINE
- (#) — PARKING TOTAL
- PROPERTY LINE
- 1 SIDEWALK
- LANDSCAPE; REFER TO LANDSCAPE PLANS
- 1 DRIVEWAY AND DRIVE AISLE
- NEW UNDERGROUND STORMWATER CONTROL SYSTEM

PHASE DESCRIPTION

PHASE 3 CONCERNS 2-STORY, 29,920 SF, BUILDING 3. BUILDING 3 WILL HOUSE OFFICE, LIGHT INDUSTRIAL, AND WAREHOUSE OPERATIONS FOR FUTURE TENANT. DRIVEWAYS AND PARKING WILL ALSO BE BUILT TO ACCOMODATE THOROUGHFARE. FOR INFRASTRUCTURE-RELATED PHASING INFORMATION, PLEASE SEE SHEET C12.

PARKING TABULATIONS (PHASE 1)

USE	SQUARE FOOTAGE	PARKING RATIO	REQUIRED PARKING
OFFICE	8,330 SF	1:300	28
WAREHOUSE	23,086 SF	1:5000	5
LIGHT INDUSTRIAL	10,850 SF	1:350	31
TOTAL PARKING SPACES REQUIRED			64
TOTAL PARKING SPACES PROVIDED			65

PARKING TABULATIONS (PHASE 1+2)

USE	SQUARE FOOTAGE	PARKING RATIO	REQUIRED PARKING
OFFICE	15,330 SF	1:300	51
WAREHOUSE	23,086 SF	1:5000	5
LIGHT INDUSTRIAL	52,450 SF	1:350	150
TOTAL PARKING SPACES REQUIRED			206
TOTAL PARKING SPACES PROVIDED			220

PARKING TABULATIONS (PHASE 1+2+3)

USE	SQUARE FOOTAGE	PARKING RATIO	REQUIRED PARKING
OFFICE	20,330 SF	1:300	68
WAREHOUSE	25,266 SF	1:5000	10
LIGHT INDUSTRIAL	75,190 SF	1:350	215
TOTAL PARKING SPACES REQUIRED			293
TOTAL PARKING SPACES PROVIDED			293
PARKING BREAKDOWN			
TOTAL EV CAPABLE SPACES (PER TABLE A5.106.5.3.3.1)			58
TOTAL CHARGING SPACES (WITHIN EVCS) (PER TABLE A5.106.5.3.3.1)			29
TOTAL TEMPORARY BIKE PARKING			15
TOTAL LONG TERM BIKE PARKING			9

SITE TABULATION (PHASE 1)

SITE AREA: 317,470 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
BUILDING COVERAGE	0 SF	36,466 SF	0 %	11 %
LANDSCAPE COVERAGE	317,470 SF	215,540 SF	100 %	68 %
1 HARDSCAPE COVERAGE	0 SF	65,464 SF	0 %	21%
BUILDING AREA	0 SF	42,266 SF		

F.A.R: $\frac{42,266}{317,470} = 0.13$

SITE TABULATION (PHASE 1+2)

SITE AREA: 317,470 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
BUILDING COVERAGE	36,466 SF	78,066 SF	11 %	25 %
LANDSCAPE COVERAGE	215,540 SF	105,316 SF	68 %	33 %
1 HARDSCAPE COVERAGE	65,464 SF	134,088 SF	21 %	42 %
BUILDING AREA	42,266 SF	90,866 SF		

F.A.R: $\frac{90,866}{317,470} = 0.29$

SITE TABULATION (PHASE 1+2+3)

SITE AREA: 317,470 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
BUILDING COVERAGE	78,066 SF	102,986 SF	25 %	32 %
LANDSCAPE COVERAGE	105,316 SF	39,592 SF	33 %	13 %
1 HARDSCAPE COVERAGE	134,088 SF	174,892 SF	42 %	55%
BUILDING AREA	90, 866 SF	120,786 SF		

F.A.R: $\frac{120,786}{317,470} = 0.38$

PROPOSED SITE PLAN - PHASE 3 1

2 1" = 40'-0"

PLAN NORTH / SCALE: 1" = 40'-0"

E2 ARCHITECTURE
307 Orchard City Dr., Ste 350
Campbell, CA 95008
408.265.5255

JEFFREY EATON ARCHITECT, INC
A CALIFORNIA CORPORATION

FOREST AVE INDUSTRIAL

8875 Murray Ave
Gilroy, CA 95020

Client: HEAT WAVE VISUAL

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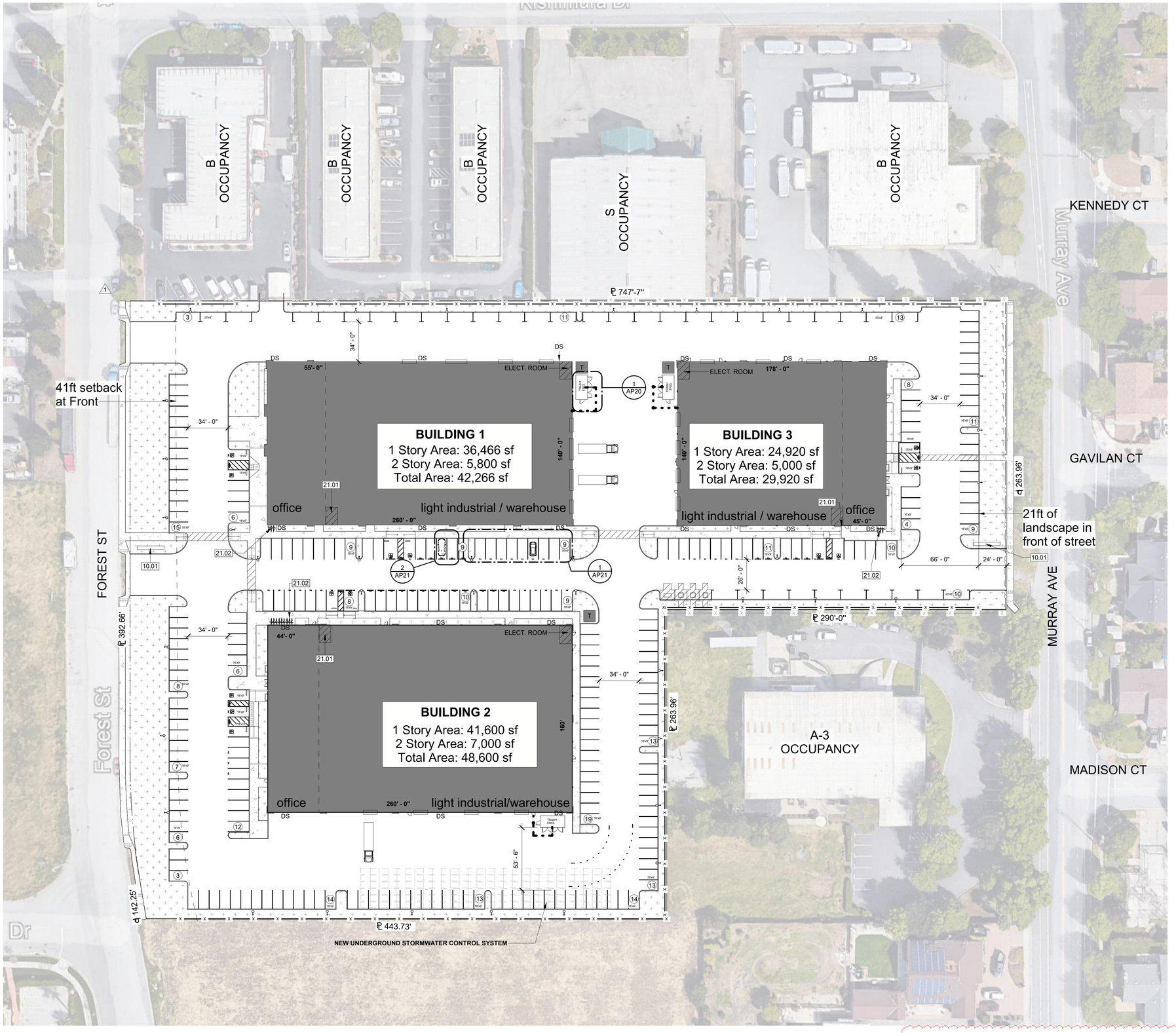
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Sheet Title:
PHASING SITE PLAN - PHASE 3

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LEGEND

℄ XXX.XX'	LENGTH OF PROPERTY LINE
(#)	PARKING TOTAL
	PROPERTY LINE
1	SIDEWALK
	LANDSCAPE; REFER TO LANDSCAPE PLANS
1	DRIVEWAY AND DRIVE AISLE
DS	DOWNSPOUT
	ACCESSIBLE PATH OF TRAVEL
1 x x	NEW TUBE STEEL FENCE, TYP
x x	EXISTING FENCE

PARKING TABULATIONS

USE	SQUARE FOOTAGE	PARKING RATIO	REQUIRED PARKING
OFFICE	20,330 SF	1:300	68
WAREHOUSE	25,266 SF	1:5000	10
LIGHT INDUSTRIAL	75,190 SF	1:350	215
TOTAL PARKING SPACES REQUIRED			293
TOTAL PARKING SPACES PROVIDED			293
PARKING BREAKDOWN			
TOTAL EV CAPABLE SPACES (PER TABLE A5.106.5.3.3.1)			58
TOTAL CHARGING SPACES (WITHIN EVCS) (PER TABLE A5.106.5.3.3.1)			29
1 TOTAL ACCESSIBLE SPACES (PER CBC TABLE 11B-208.2)			7
TOTAL EV ACCESSIBLE SPACES (PER CBC TABLE 11B-208.2)			6
TOTAL TEMPORARY BIKE PARKING			15
2 TOTAL LONG TERM BIKE PARKING			9

SITE TABULATIONS

SITE AREA: 317,470 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
BUILDING COVERAGE	0 SF	102,986 SF	0 %	32 %
LANDSCAPE COVERAGE	317,470 SF	39,592 SF	100 %	13 %
HARDSCAPE COVERAGE	0 SF	174,892 SF	0 %	55 %
BUILDING AREA	0 SF	120,320 SF		

F.A.R: 120,786 / 317,470 = 0.38

BUILDING TABULATIONS

APN: 835-01-059
PARCEL SIZE: 317,470 SF, 7.3 ACRES

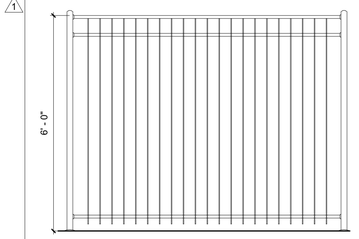
PROPOSED GROSS

(LEVEL 1) BLG 1	36,466 SF
(LEVEL 2) BLG 1	5,800 SF
(LEVEL 1) BLG 2	41,600 SF
(LEVEL 2) BLG 2	7,000 SF
(LEVEL 1) BLG 3	24,920 SF
(LEVEL 2) BLG 3	5,000 SF

TOTAL PROPOSED AREA: 120,786 SF 38.0%

KEYNOTES

1	10.01	NEW SIGNAGE POTENTIAL LOCATION
2	21.01	PROPOSED LONG TERM BIKE PARKING
	21.02	PROPOSED SHORT TERM BIKE PARKING



PROPOSED SITE PLAN - FINAL PHASE 1
1" = 40'-0"

TUBE STEEL FENCE ELEVATION 2
1/2" = 1'-0"

ARCHITECTURE
307 Orchard City Dr., Ste 350
Campbell, CA 95008
408.265.5255

JEFFREY EATON ARCHITECT, INC
A CALIFORNIA CORPORATION

FOREST AVE INDUSTRIAL

8875 Murray Ave
Gilroy, CA 95020

Client: HEAT WAVE VISUAL

Rev. #	Description	Date
1	PLANNING ISSUE FOR RESUBMITTAL 01	09/18/23
2	PLANNING ISSUE FOR RESUBMITTAL 02	12/11/24

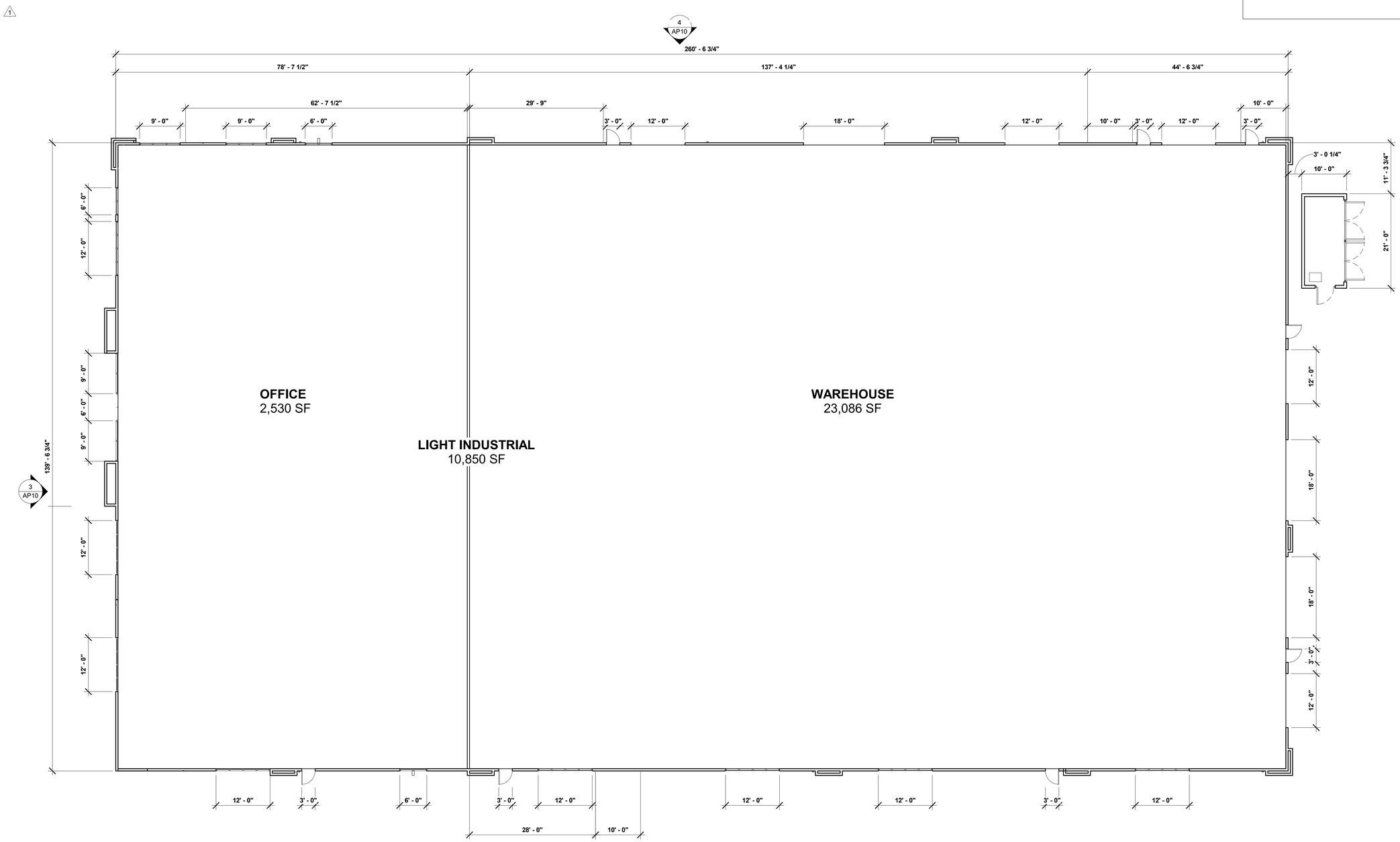
Project Number: 21048
Date: JUNE 7, 2023
Drawn by: DC
Checked by: JE

Sheet Title:
PROPOSED SITE PLAN

AP6

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PROPOSED FLOOR PLAN - LEVEL 1

3/32" = 1'-0"

1

LEGEND

(N) WALL

(N) DOOR

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BLDG 1 - PROPOSED FLOOR PLAN

AP7

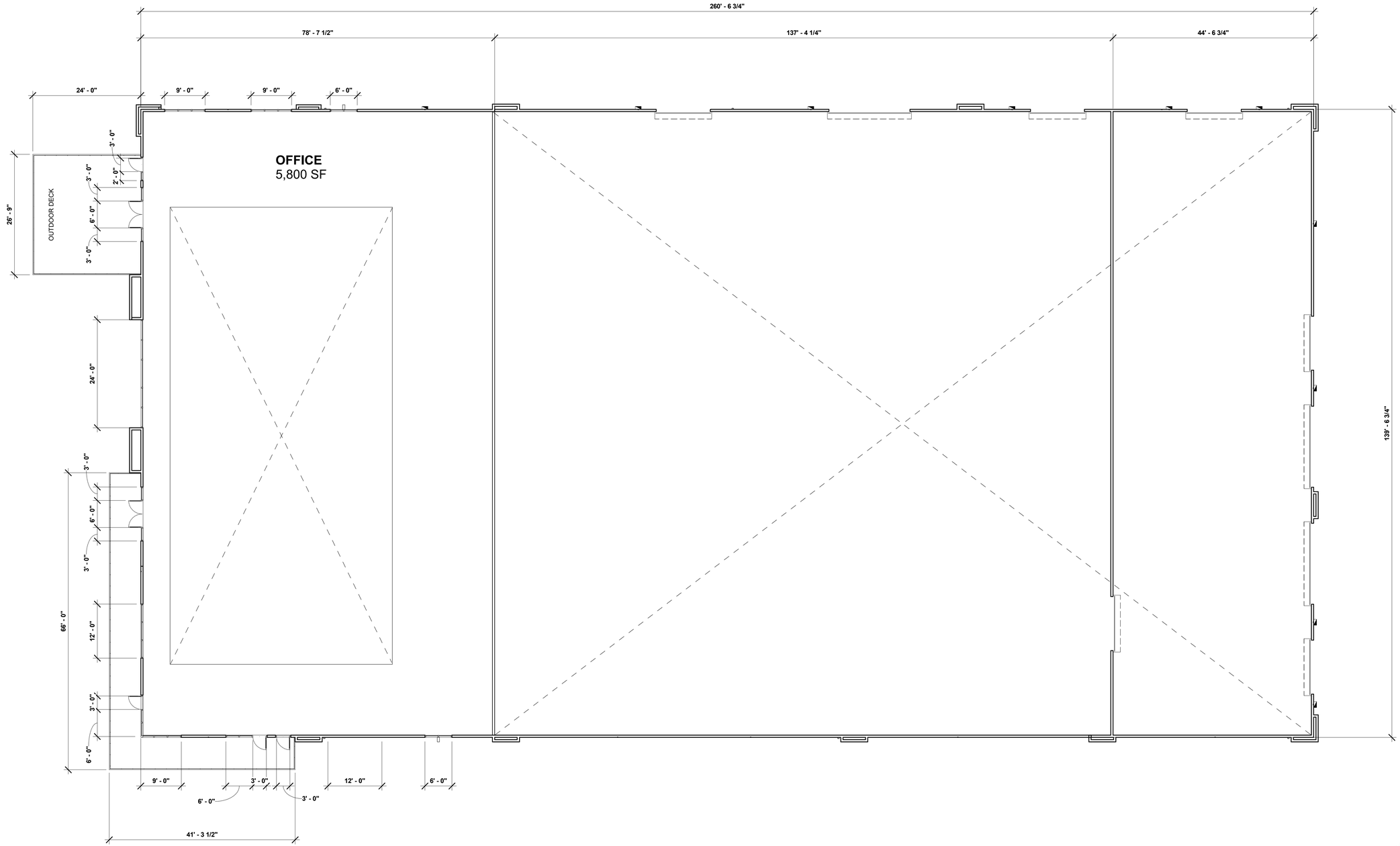
9/18/2023 2:37:53 PM

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LEGEND

(N) WALL

(N) DOOR



PROPOSED FLOOR PLAN - LEVEL 2

3/32" = 1'-0"

1

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BLDG 1 - PROPOSED FLOOR PLAN - LEVEL 2

AP8

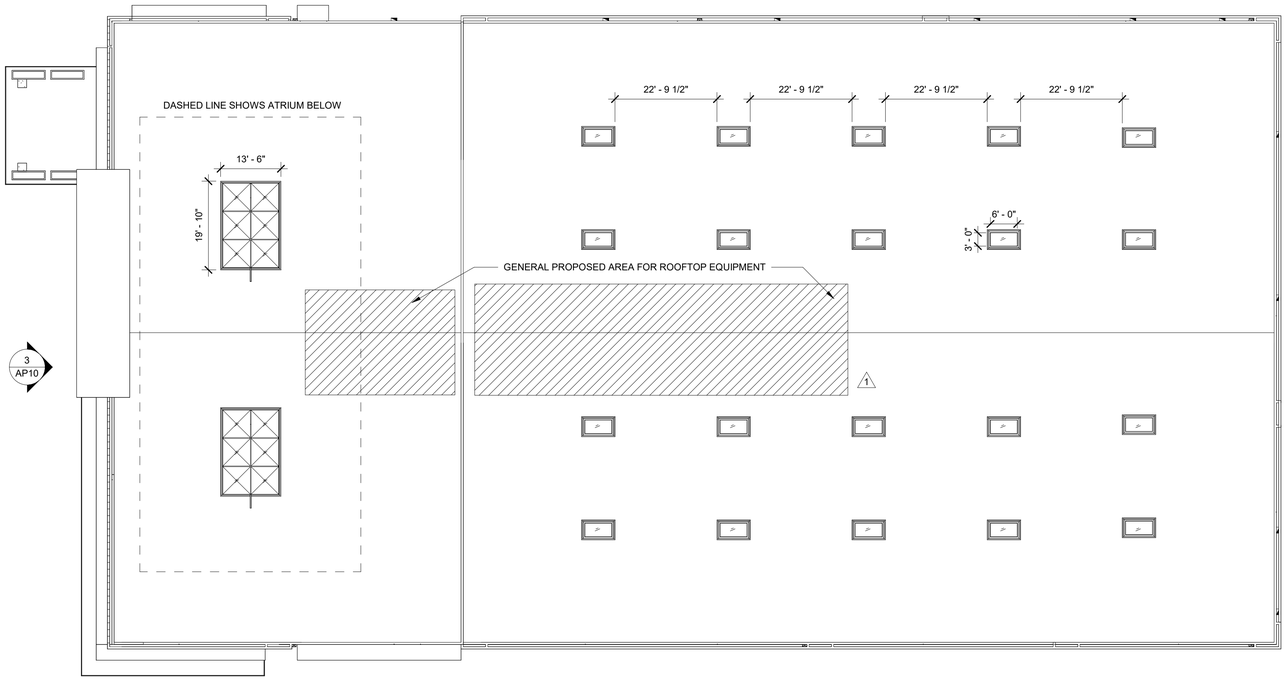
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LEGEND

(N) SKYLIGHT

KEYNOTES



PROPOSED ROOF PLAN 1

1/16" = 1'-0"

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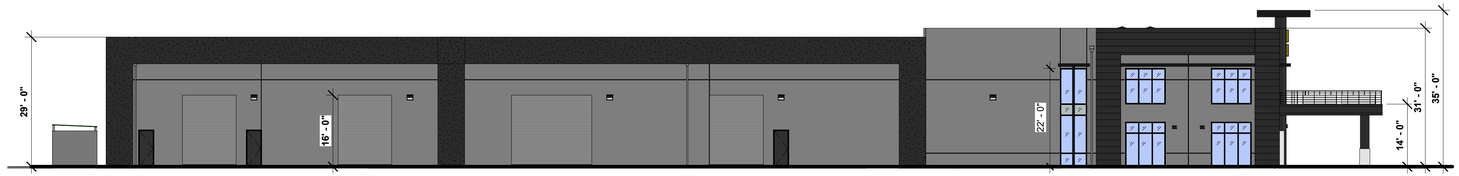
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BLDG 1 - PROPOSED ROOF PLAN

AP9

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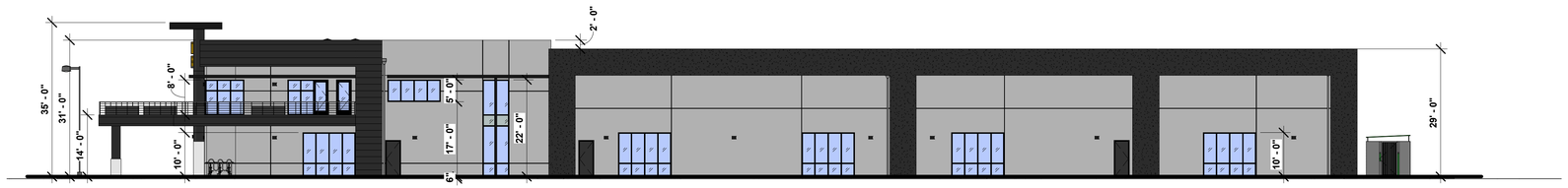
PROPOSED ELEVATION - NORTH 4

1/16" = 1'-0"



PROPOSED ELEVATION - WEST 3

1/16" = 1'-0"



PROPOSED ELEVATION - SOUTH 2

1/16" = 1'-0"



PROPOSED ELEVATION - EAST 1

1/16" = 1'-0"

LEGEND

XY-# FINISH TAG, REFER TO FINISH LEGEND

FINISH LEGEND

KEY NAME	MATERIAL	COLOR/FINISH
M-1	WET SEAL PLATE	HOT ROLLED ULTRA GLOSS
M-2	CONCRETE	
M-3	FLAT METAL	BLACK
M-4	CORRUGATED METAL	TWILIGHT BRONZE
M-5	EIFS SYSTEM	BLACK

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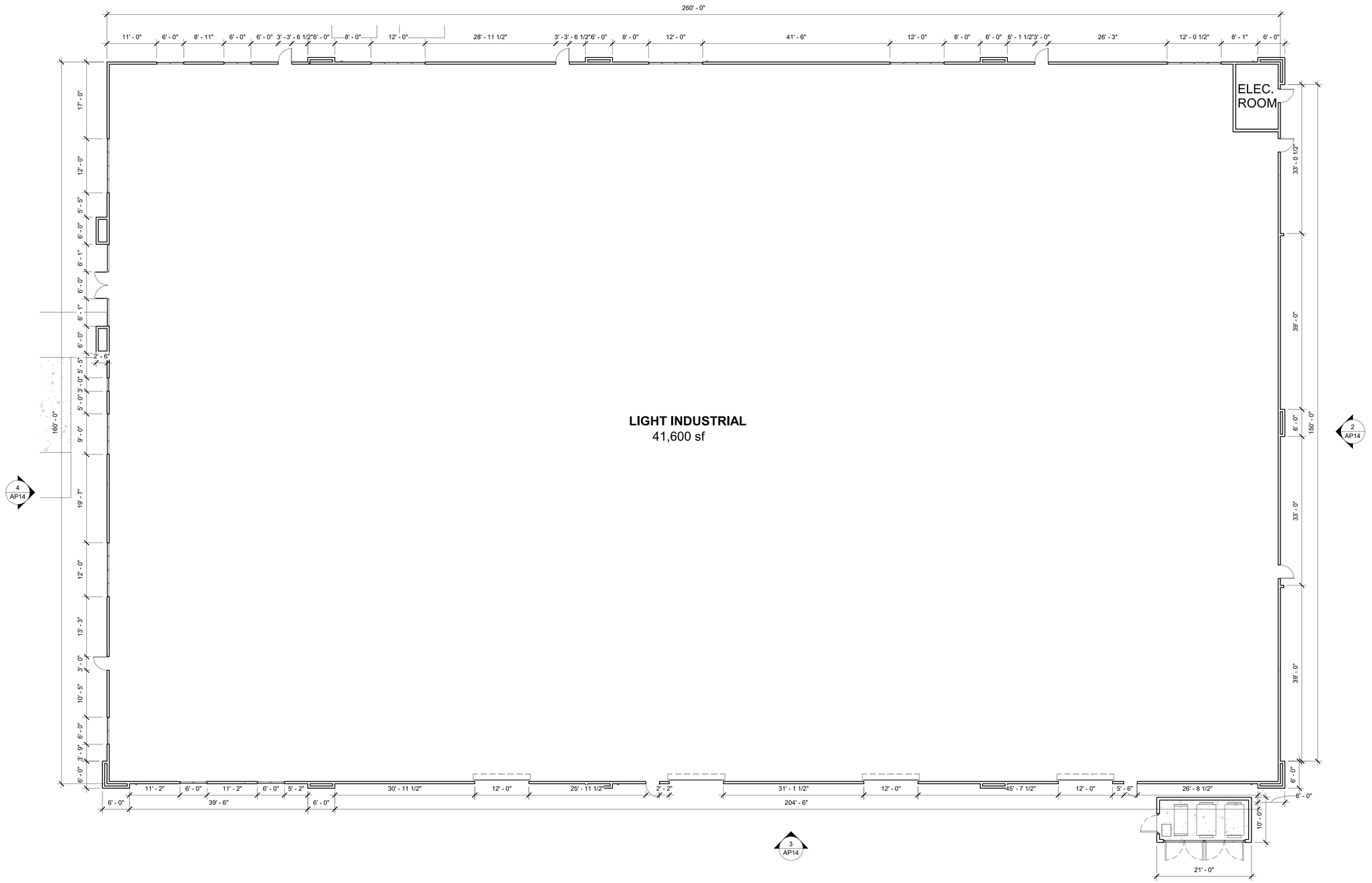
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BLDG 1 - PROPOSED EXTERIOR ELEVATIONS

AP10

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BLDG 2 -PROPOSED FLOOR PLAN
3/32" = 1'-0"

1

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BLDG 2 - PROPOSED FLOOR PLAN

AP11

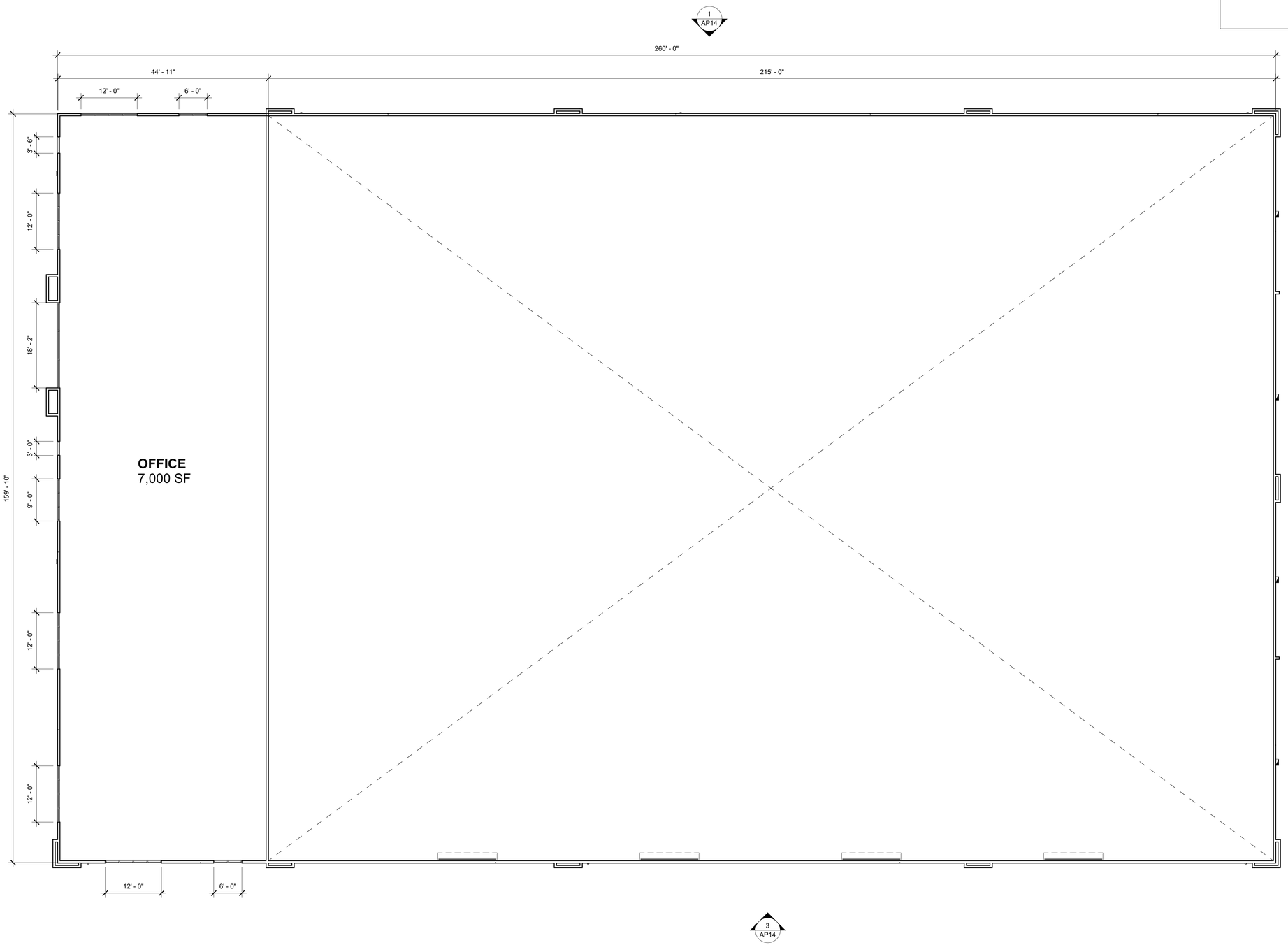
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LEGEND

(N) WALL

(N) DOOR



BLDG 2 - Proposed Floor Plan - Level 2 1

3/32" = 1'-0"

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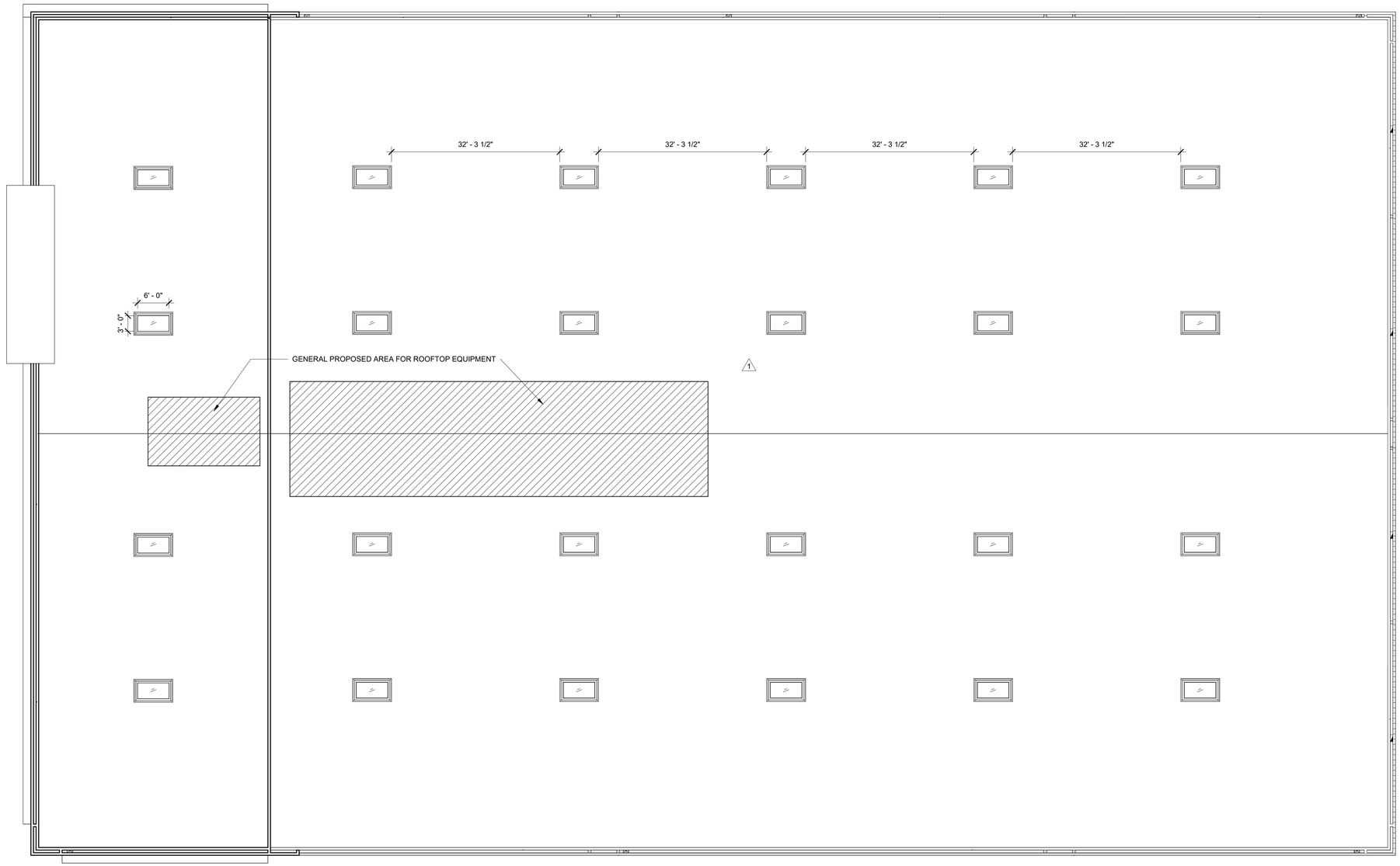
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BLDG 2 - PROPOSED FLOOR PLAN - LEVEL 2

AP12

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BLDG 2 - PROPOSED ROOF PLAN 1

3/32" = 1'-0"

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BLDG 2 - PROPOSED ROOF PLAN

AP13

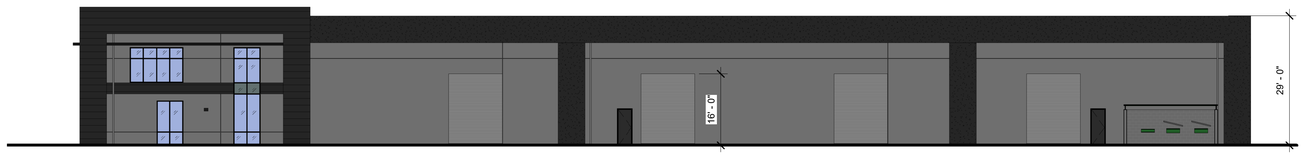
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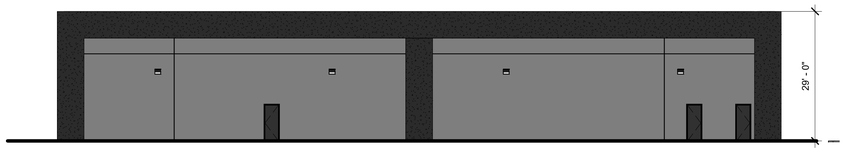
BLDG 2 - PROPOSED ELEVATION - WEST 4

1/16" = 1'-0"



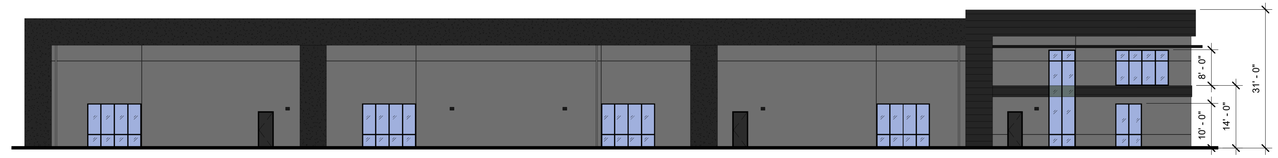
BLDG 2 - PROPOSED ELEVATION - SOUTH 3

1/16" = 1'-0"



BLDG 2 - PROPOSED ELEVATION - EAST 2

1/16" = 1'-0"



BLDG 2 - PROPOSED ELEVATION - NORTH 1

1/16" = 1'-0"

LEGEND

XY-# FINISH TAG, REFER TO FINISH LEGEND

FINISH LEGEND

KEY NAME	MATERIAL	COLOR/FINISH
M-1	WET SEAL PLATE	HOT ROLLED ULTRA GLOSS
M-2	CONCRETE	
M-3	FLAT METAL	BLACK
M-4	CORRUGATED METAL	TWILIGHT BRONZE
M-5	EIFS SYSTEM	BLACK

ARCHITECTURE
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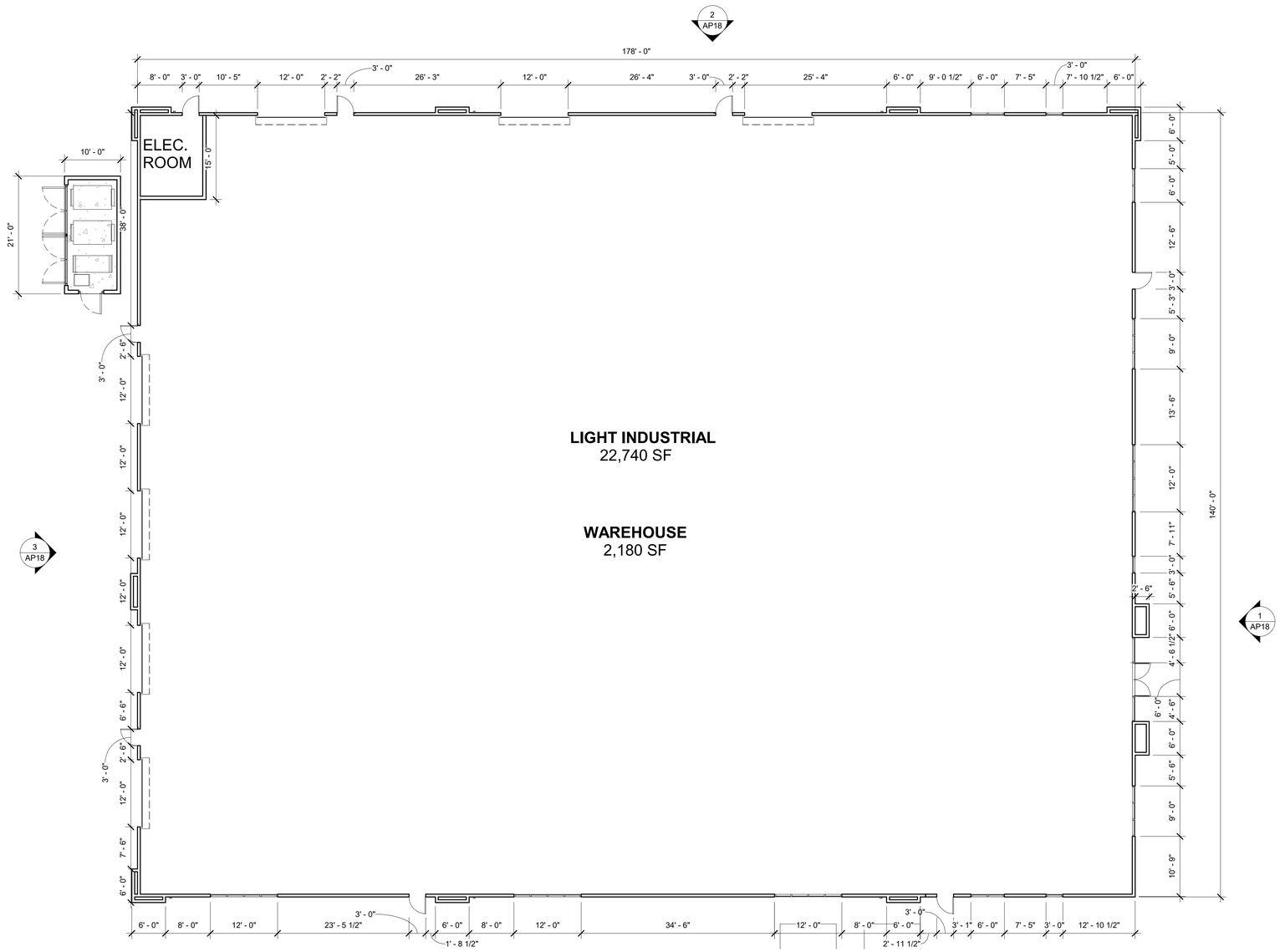
Sheet Title:

BLDG 2 - PROPOSED EXTERIOR ELEVATIONS

AP14

12/10/2024 5:01:43 PM

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BLDG 3 - PROPOSED FLOOR PLAN 1

3/32" = 1'-0"

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BLDG 3 - PROPOSED FLOOR PLAN

AP15

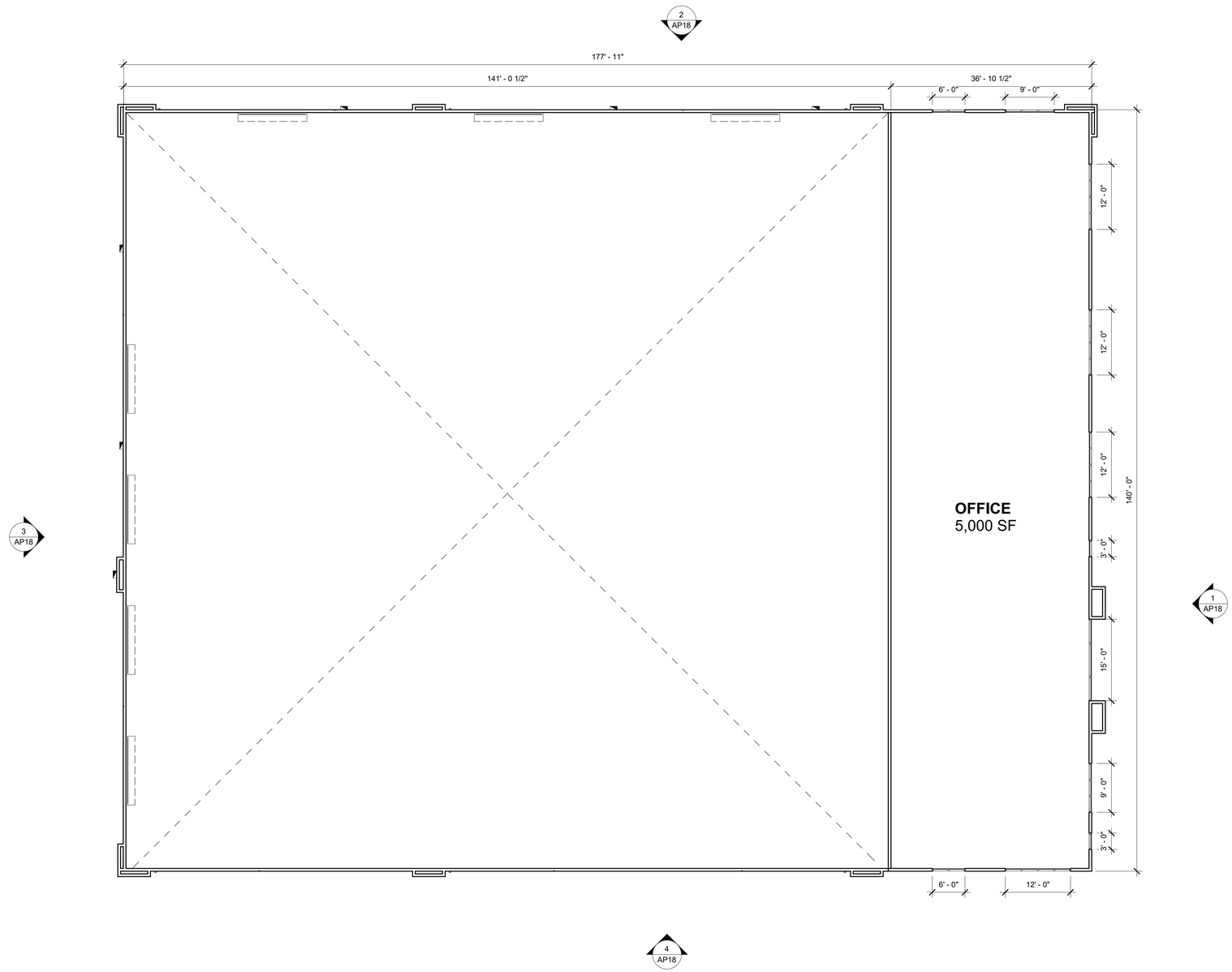
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LEGEND

(N) WALL

(N) DOOR



BLDG 3- Proposed Floor Plan 3 - Level 2 1

3/32" = 1'-0"

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408.265.5255

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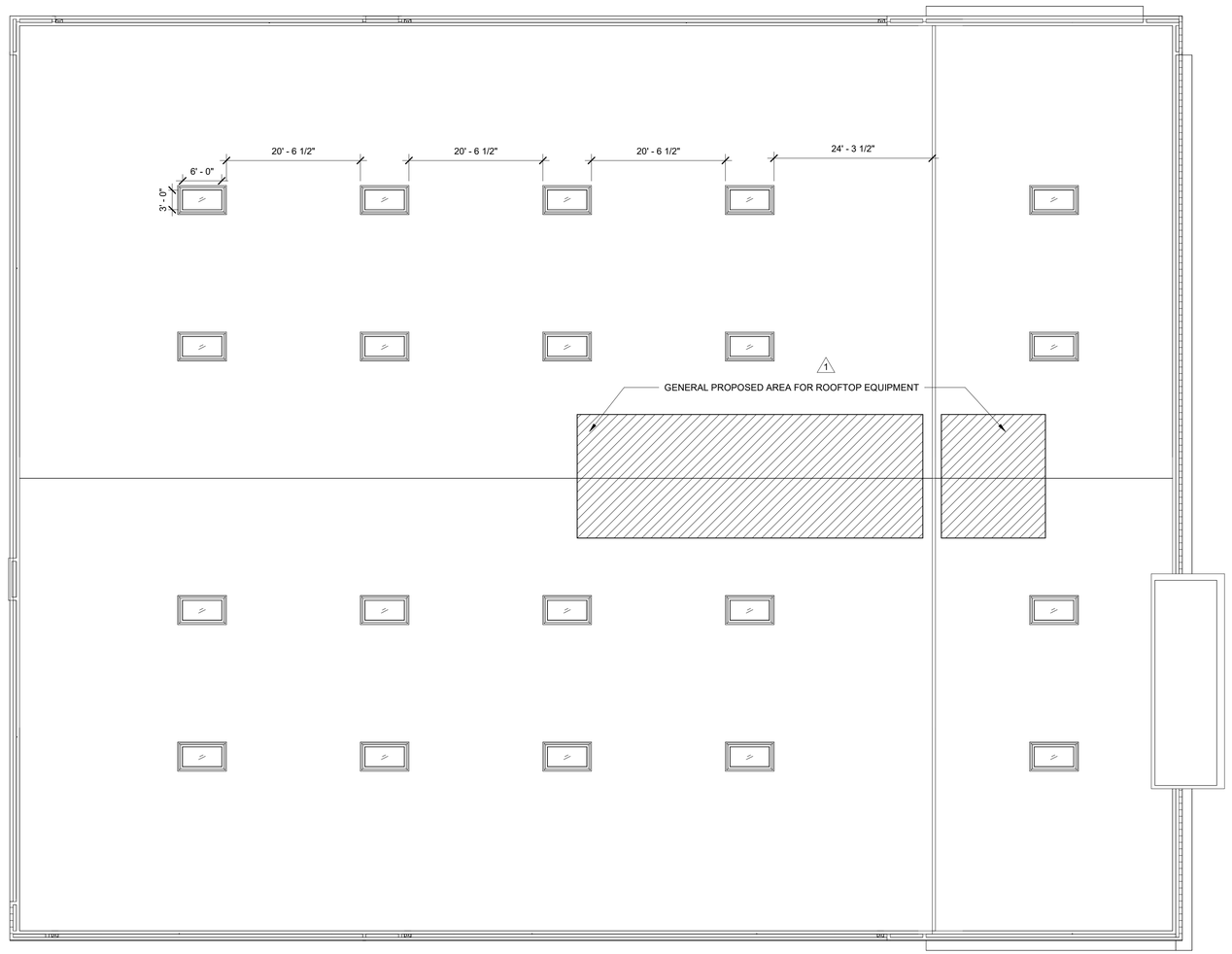
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BLDG 3 - PROPOSED FLOOR PLAN - LEVEL 2

AP16

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BLDG 3 - PROPOSED ROOF PLAN 1

3/32" = 1'-0"

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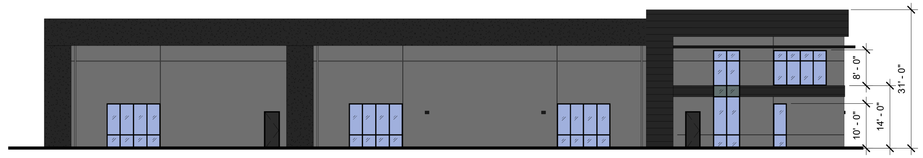
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BLDG 3 - PROPOSED ROOF PLAN

AP17

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BLDG 3 - PROPOSED ELEVATION - SOUTH 4

1/16" = 1'-0"



BLDG 3 - PROPOSED ELEVATION - WEST 3

1/16" = 1'-0"



BLDG 3 - PROPOSED ELEVATION - NORTH 2

1/16" = 1'-0"



BLDG 3 - PROPOSED ELEVATION - EAST 1

1/16" = 1'-0"

LEGEND

XY-# FINISH TAG, REFER TO FINISH LEGEND

FINISH LEGEND

KEY NAME	MATERIAL	COLOR/FINISH
M-1	WET SEAL PLATE	HOT ROLLED ULTRA GLOSS
M-2	CONCRETE	
M-3	FLAT METAL	BLACK
M-4	CORRUGATED METAL	TWILIGHT BRONZE
M-5	EIFS SYSTEM	BLACK

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BLDG 3 - PROPOSED EXTERIOR ELEVATIONS

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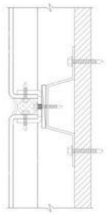
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• WET SEAL PLATE

- Munufacturer: Pure + Freeform
- PROFILE: Flat

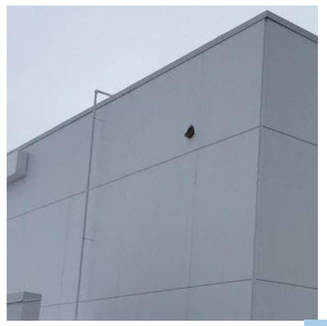




- FINISH:
  Hot Rolled Ultra Gloss



• CONCRETE FACADE



• CABLE GUARDRAILS: BRAIDED STAINLESS STEEL WIRE



• FLAT METAL AWNING

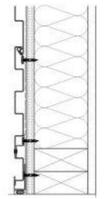
- Munufacturer: Taylor Metal
- Color: Black



• CORRUGATED METAL PANEL

- Munufacturer: Pure + Freeform
- PROFILE: Box- Rib Corrugation- Horizontal





- COLOR:
  Twilight Bronze

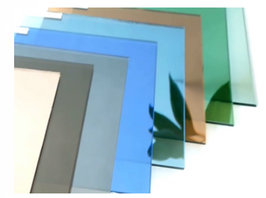




• CLEAR GLAZING
• TINTED GLAZING

- Windows





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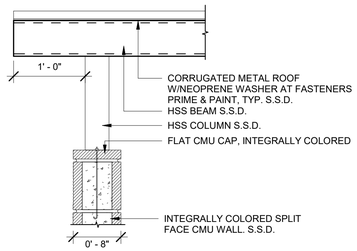
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Sheet Title:
COLOR AND MATERIALS SAMPLE BOARD

AP19

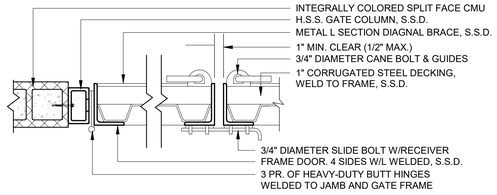
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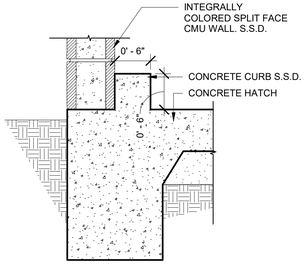
Trash Encl. Wall Section at Top, Typ. 9

1" = 1'-0"



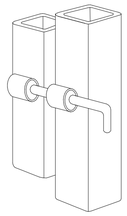
Trash Encl. Gate Jamb, Typ. 7

1" = 1'-0"



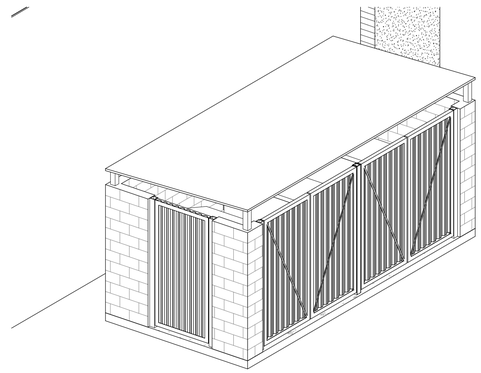
Trash Encl. Wall Section at Base, Typ. 8

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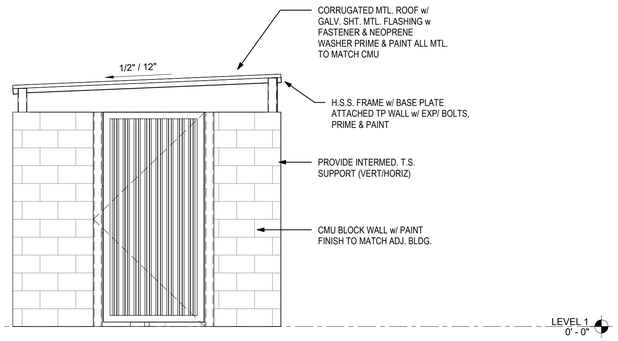


Horiz Latch Detail, Typ. 6

1/4" = 1'-0"

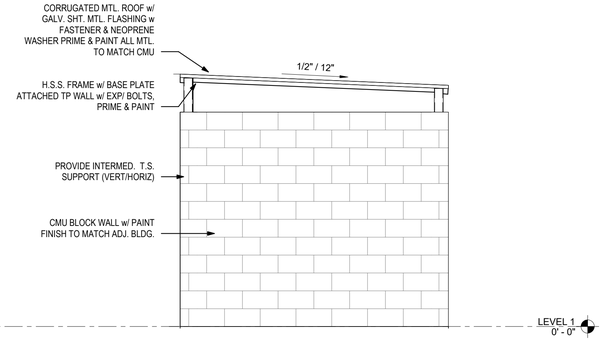


Trash Enclosure 3D, Typ. 5



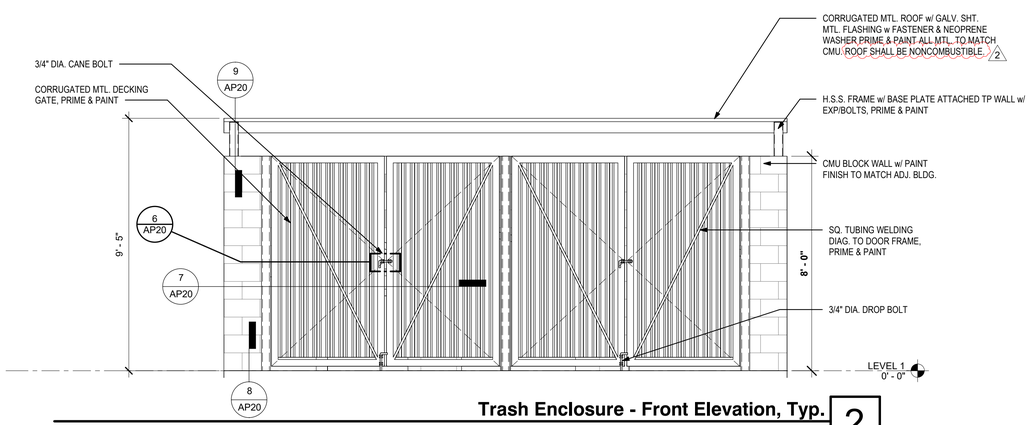
Trash Enclosure - Left Side, Typ. 3

3/8" = 1'-0"



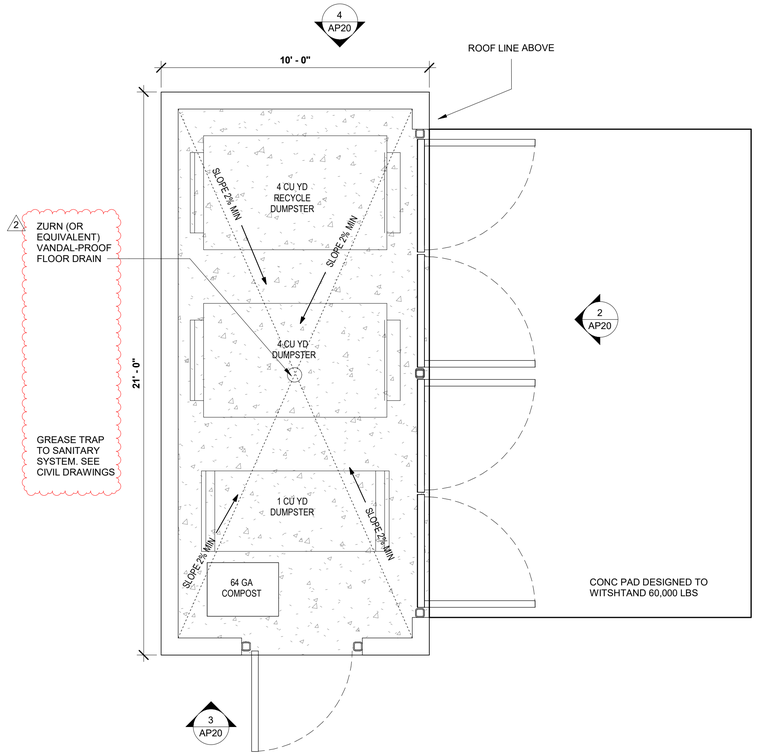
Trash Enclosure - Right Side, Typ. 4

3/8" = 1'-0"



Trash Enclosure - Front Elevation, Typ. 2

3/8" = 1'-0"



Enlarged Trash Enclosure Plan (Typ.) 1

3/8" = 1'-0"

ARCHITECTURE
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Campbell, CA 95008
408.265.5255

JEFFREY EATON ARCHITECT, INC
A CALIFORNIA CORPORATION

FOREST AVE INDUSTRIAL

8875 Murray Ave
Gilroy, CA 95020
Client:
HEAT WAVE VISUAL

Rev. #	Description	Date
1	PLANNING ISSUE FOR RESUBMITTAL 01	09/18/23
2	PLANNING ISSUE FOR RESUBMITTAL 02	12/11/24

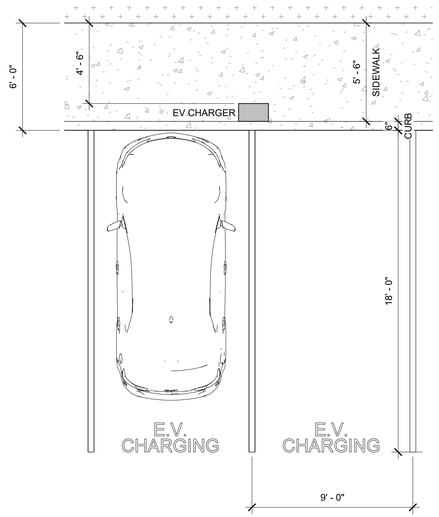
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Date: JUNE 7, 2023
Drawn by: DC
Checked by: JD

Sheet Title:
PROPOSED
TRASH
ENCLOSURES

AP20

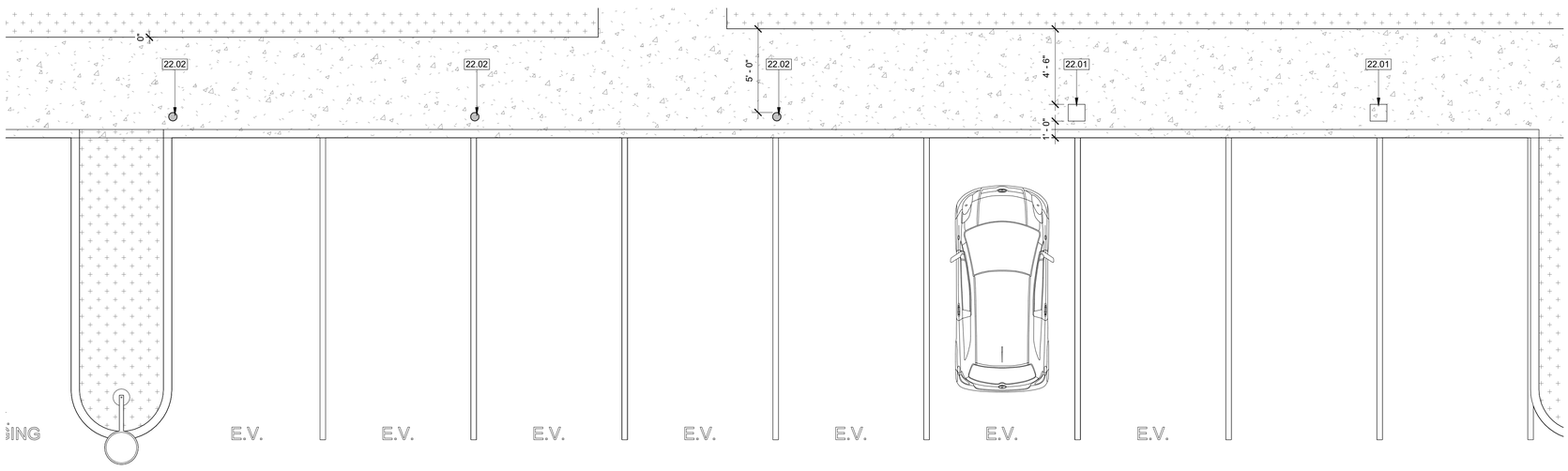
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Proposed Site Plan- 18' Parking Space Detail - Typ. 2

1/4" = 1'-0"



Proposed Site Plan EV parking Detail - Typ. 1

1/4" = 1'-0"

PLAN NORTH

LEGEND

HARDSCAPE

LANDSCAPE; REFER TO LANDSCAPE PLANS

PAVING

ARCHITECTURE

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JEFFREY EATON ARCHITECT, INC
A CALIFORNIA CORPORATION

FOREST AVE INDUSTRIAL

8875 Murray Ave
Gilroy, CA 95020
Client:
HEAT WAVE VISUAL

Rev. #	Description	Date
1	PLANNING ISSUE FOR RESUBMITTAL 01	09/18/23

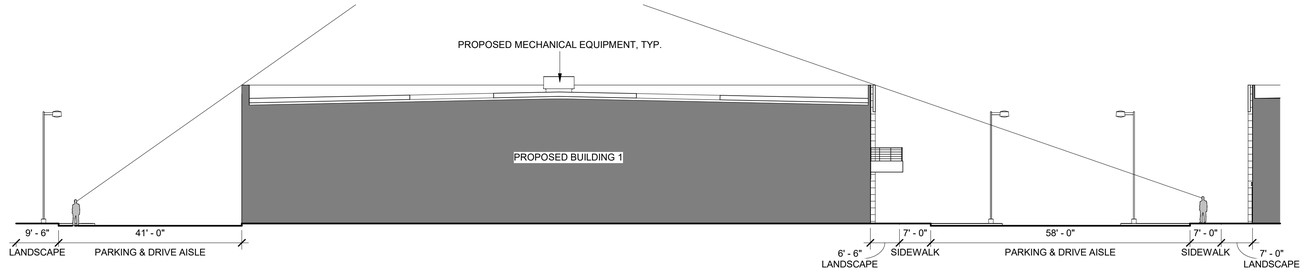
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Date: JUNE 7, 2023
Drawn by: Author
Checked by: Checker

Sheet Title:
PARKING DETAILS

AP21

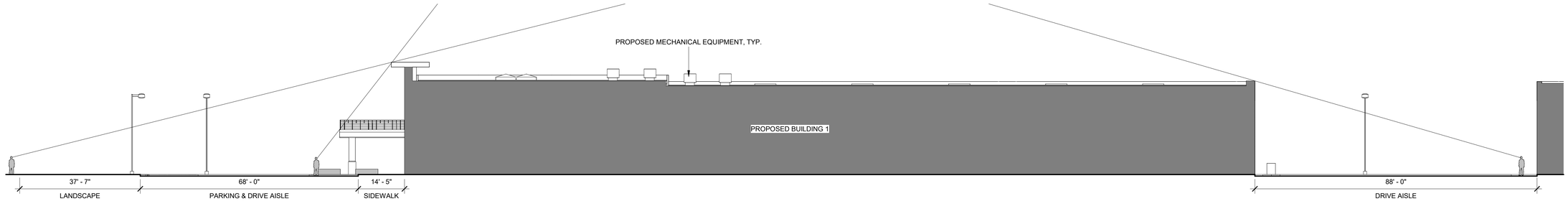
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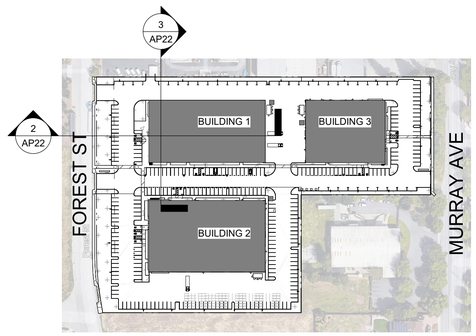
CROSS SECTION OF FULL RIGHT OF WAY- BUILDING 1-2 3

1/16" = 1'-0"



CROSS SECTION OF FULL RIGHT OF WAY- BUILDING 1-1 2

1/16" = 1'-0"



KEY PLAN 1

1" = 160'-0"

E2 ARCHITECTURE
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Campbell, CA 95008
408.265.5255

JEFFREY EATON ARCHITECT, INC
A CALIFORNIA CORPORATION

FOREST ST AVE INDUSTRIAL

8875 Murray Ave
Gilroy, CA 95020
Client:
HEAT WAVE VISUAL

Rev. #	Description	Date
1	PLANNING ISSUE FOR RESUBMITTAL-01	09/18/23

Project Number: 21048
Date: JUNE 7, 2023
Drawn by: Author
Checked by: Checker

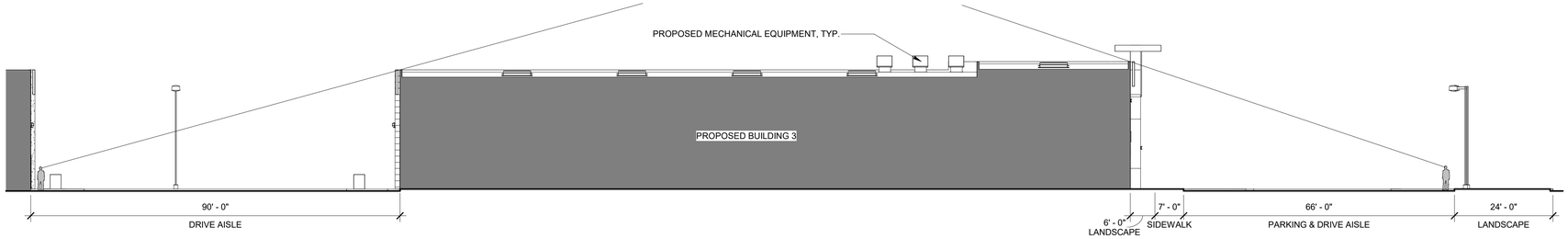
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BLDG 1- CROSS SECTION OF FULL RIGHT OF WAY

AP22

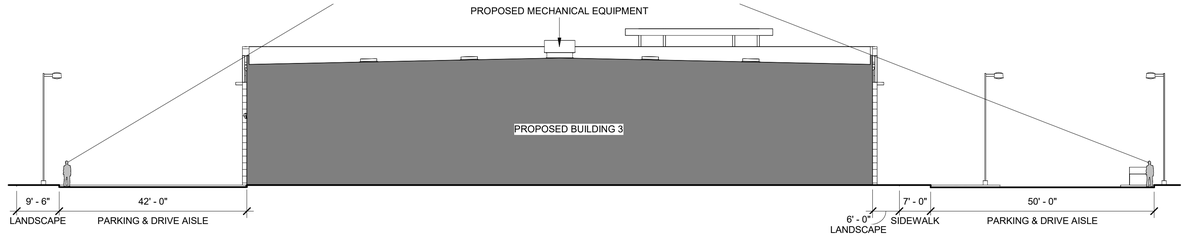
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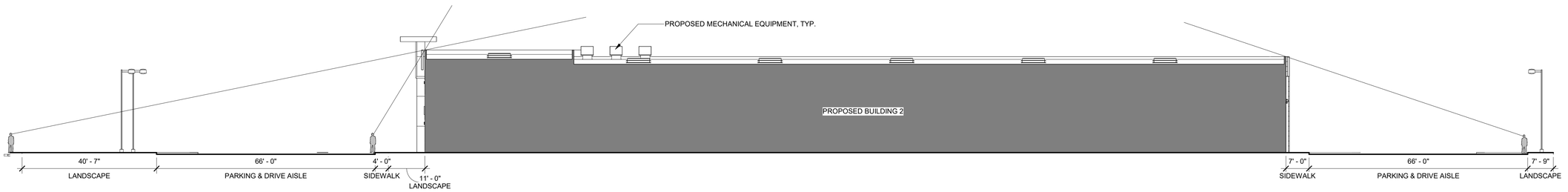
CROSS SECTION OF FULL RIGHT OF WAY- BUILDING 3-1 5

1/16" = 1'-0"



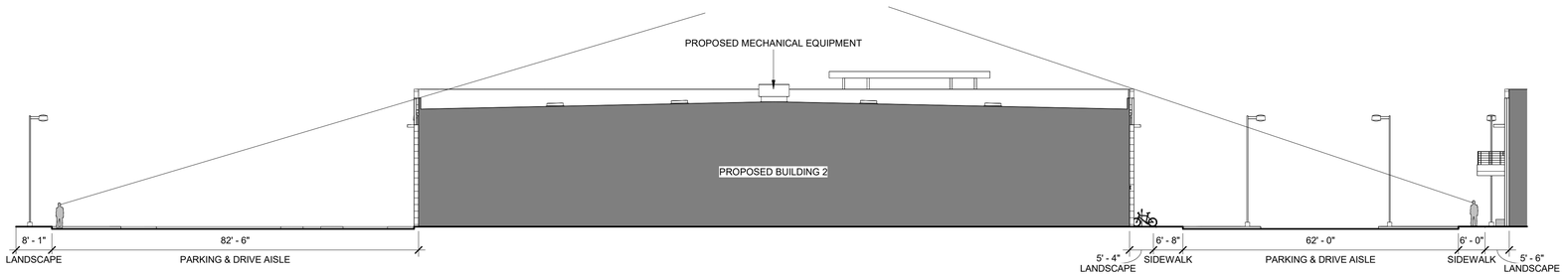
CROSS SECTION OF FULL RIGHT OF WAY- BUILDING 3 4

1/16" = 1'-0"



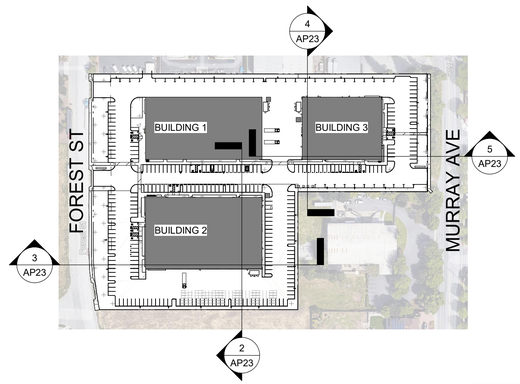
CROSS SECTION OF FULL RIGHT OF WAY- BUILDING 2-1 3

1/16" = 1'-0"



CROSS SECTION OF FULL RIGHT OF WAY- BUILDING 2 2

1/16" = 1'-0"



KEY PLAN 1

1" = 160'-0"

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JEFFREY EATON ARCHITECT, INC
A CALIFORNIA CORPORATION

FOREST AVE INDUSTRIAL

8875 Murray Ave
Gilroy, CA 95020
Client:
HEAT WAVE VISUAL

Rev. #	Description	Date
1	PLANNING ISSUE FOR RESUBMITTAL 01	09/18/23

Project Number: 21048
Date: JUNE 7, 2023
Drawn by: Author
Checked by: Checker

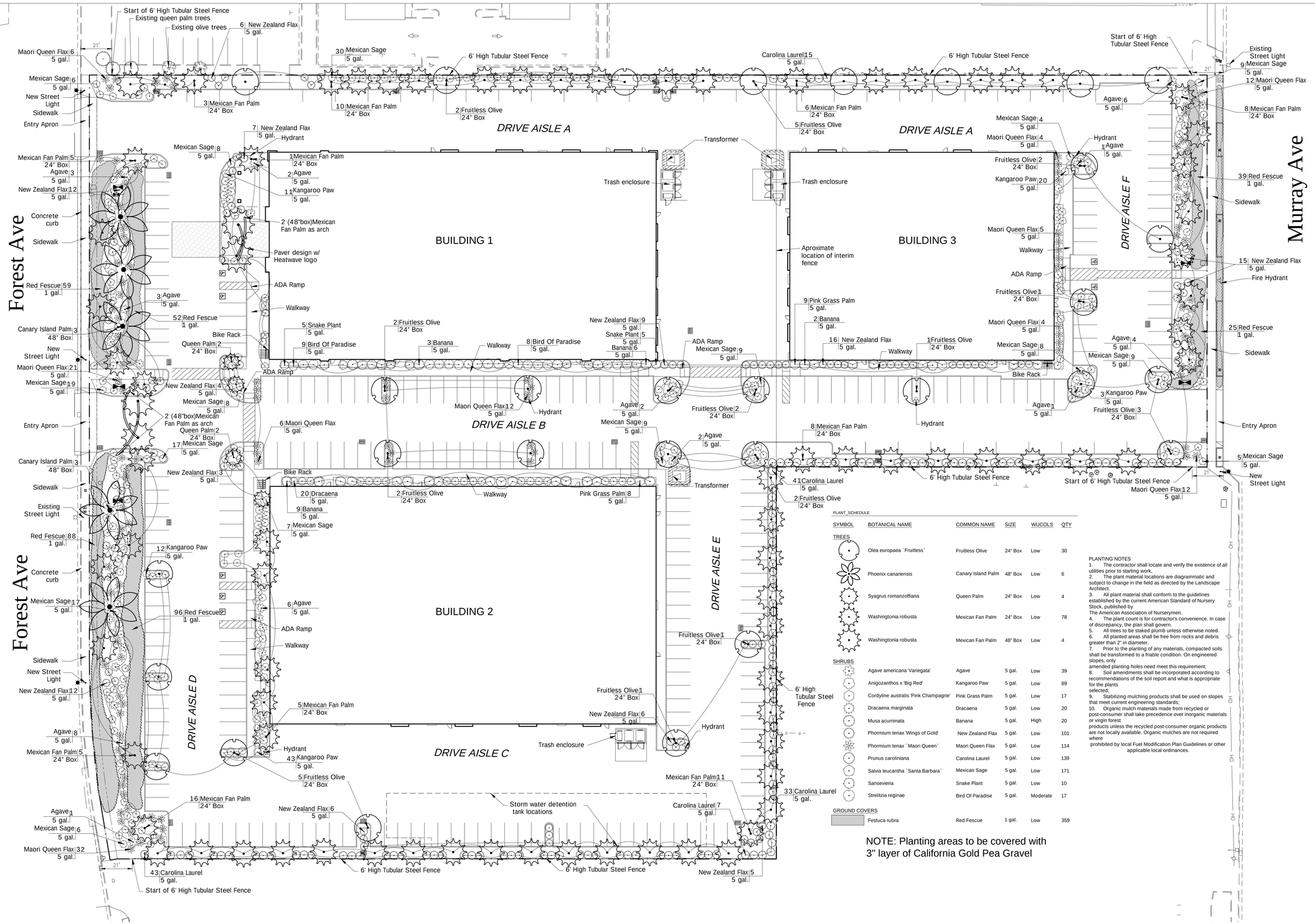
Sheet Title:

BLDG 2 & 3- CROSS SECTION OF FULL RIGHT OF WAY

AP23

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PLANT_SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	QTY
TREES					
	Olea europaea `Fruitless`	Fruitless Olive	24" Box	Low	30
	Phoenix canariensis	Canary Island Palm	48" Box	Low	6
	Syagrus romanzoffiana	Queen Palm	24" Box	Low	4
	Washingtonia robusta	Mexican Fan Palm	24" Box	Low	78
	Washingtonia robusta	Mexican Fan Palm	48" Box	Low	4
SHRUBS					
	Agave americana 'Variegata'	Agave	5 gal.	Low	39
	Anigozanthos x 'Big Red'	Kangaroo Paw	5 gal.	Low	89
	Cordyline australis 'Pink Champagne'	Pink Grass Palm	5 gal.	Low	17
	Dracaena marginata	Dracaena	5 gal.	Low	20
	Musa acuminata	Banana	5 gal.	High	20
	Phormium tenax 'Wings of Gold'	New Zealand Flax	5 gal.	Low	101
	Phormium tenax `Maori Queen`	Maori Queen Flax	5 gal.	Low	114
	Prunus caroliniana	Carolina Laurel	5 gal.	Low	139
	Salvia leucantha `Santa Barbara`	Mexican Sage	5 gal.	Low	171
	Sansevieria	Snake Plant	5 gal.	Low	10
	Strelitzia reginae	Bird Of Paradise	5 gal.	Moderate	17
GROUND COVERS					
	Festuca rubra	Red Fescue	1 gal.	Low	359

NOTE: Planting areas to be covered with 3" layer of California Gold Pea Gravel

PLANTING NOTES
1. The contractor shall locate and verify the existence of all utilities prior to starting work.
2. The plant material locations are diagrammatic and subject to change in the field as directed by the Landscape Architect.
3. All plant material shall conform to the guidelines established by the current American Standard of Nursery Stock, published by The American Association of Nurserymen.
4. The plant count is for contractor's convenience. In case of discrepancy, the plan shall govern.
5. All trees to be staked plumb unless otherwise noted.
6. All planted areas shall be free from rocks and debris greater than 2" in diameter.
7. 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;
8. Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected;
9. Stabilizing mulching products shall be used on slopes that meet current engineering standards;
10. 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 not required where prohibited by local Fuel Modification Plan Guidelines or other applicable local ordinances.

NORTH

SCALE 1"=30'-0"
0 30 60

*NOTES (E)= Existing

REVISIONS	BY

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HEATWAVE INDUSTRIAL
8875 Murray Ave., Gilroy, CA
MASTER PLANTING PLAN

LICENSED LANDSCAPE ARCHITECT
KAREN JONES AITKEN
No. 2239
Exp. 8-31-25
STATE OF CALIFORNIA

DATE	11-12-24
SCALE	1"=30'-0"
DRAWN	IN
JOB	HEATWAVE

L-1

Start of 6' High Tubular Steel Fence
Existing queen palm trees
Existing olive trees
6 New Zealand Flax 5 gal.
21'
Maori Queen Flax 6 5 gal.
30 Mexican Sage 5 gal.
6' High Tubular Steel Fence
Mexican Sage 6 5 gal.
New Street Light
Sidewalk
Entry Apron
3 Mexican Fan Palm 24" Box
10 Mexican Fan Palm 24" Box
2 Fruitless Olive 24" Box

DRIVE AISLE A

7 New Zealand Flax 5 gal.
Hydrant
Mexican Sage 8 5 gal.
Transformer
Mexican Fan Palm 5 24" Box
1 Mexican Fan Palm 24" Box
Agave 3 5 gal.
2 Agave 5 gal.
New Zealand Flax 12 5 gal.
11 Kangaroo Paw 5 gal.
Trash enclosure
Concrete curb
2 (48"box)Mexican Fan Palm as arch
Sidewalk
Paver design w/ Heatwave logo

BUILDING 1

Forest Ave

Red Fescue 59 1 gal.
ADA Ramp
3 Agave 5 gal.
Walkway
52 Red Fescue 1 gal.
Canary Island Palm 3 48" Box
5 Snake Plant 5 gal.
2 Fruitless Olive 24" Box
New Zealand Flax 9 5 gal.
Bike Rack
Queen Palm 2 24" Box
9 Bird Of Paradise 5 gal.
3 Banana 5 gal.
Walkway
8 Bird Of Paradise 5 gal.
Snake Plant 5 5 gal.
New Street Light
Banana 6 5 gal.
ADA Ramp
Mexican Sage 9 5 gal.
Maori Queen Flax 21 5 gal.
Mexican Sage 19 5 gal.
ADA Ramp
New Zealand Flax 4 5 gal.
Mexican Sage 8 5 gal.
Maori Queen Flax 12 5 gal.
Hydrant
Agave 2 5 gal.
Fruitless Olive 2 24" Box
2 (48"box)Mexican Fan Palm as arch
Entry Apron
6 Maori Queen Flax 5 gal.
DRIVE AISLE B
Queen Palm 2 24" Box
17 Mexican Sage 5 gal.
Mexican Sage 9 5 gal.
2 Agave 5 gal.
Canary Island Palm 3 48" Box
New Zealand Flax 3 5 gal.
Bike Rack
Transformer
Sidewalk
20 Dracaena 5 gal.
2 Fruitless Olive 24" Box
Walkway
Pink Grass Palm 8 5 gal.
Existing

SEE SHEET L-2 FOR BUILDING 2 LANDSCAPE PLAN

North

SCALE 1"=16'-0"
0 16 32

*NOTES (E)= Existing

SEE SHEET L-3 FOR BUILDING 3 LANDSCAPE PLAN

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FOREST AVE INDUSTRIAL

8875 Murray Ave., Gilroy, CA

BUILDING 1 LANDSCAPE PLAN

LICENSED LANDSCAPE ARCHITECT
KAREN JONES AITKEN
No. 2239
Exp. 8-31-25
STATE OF CALIFORNIA

DATE	11-12-24
SCALE	1"=16'-0"
DRAWN	IN
JOB	HEATWAVE

L-2

SEE SHEET L-1 FOR BUILDING 1 LANDSCAPE PLAN

Forest Ave

Entry Apron

Canary Island Palm 3
48" Box

Sidewalk

Existing
Street Light

Red Fescue 88
1 gal.

Concrete
curb

Mexican Sage 17
5 gal.

Sidewalk

New Street
Light

New Zealand Flax 12
5 gal.

Agave 8
5 gal.

Mexican Fan Palm 5
24" Box

Agave 1
5 gal.

Mexican Sage 6
5 gal.

Maori Queen Flax 32
5 gal.

21'

Start of 6' High Tubular Steel Fence

Mexican Sage 8
5 gal.

2 (48"box)Mexican
Fan Palm as arch
Queen Palm 2
24" Box

17 Mexican Sage
5 gal.

New Zealand Flax 3
5 gal.

12 Kangaroo Paw
5 gal.

96 Red Fescue
1 gal.

DRIVE AISLE D

6 Maori Queen Flax
5 gal.

Bike Rack

20 Dracaena
5 gal.

9 Banana
5 gal.

7 Mexican Sage
5 gal.

6 Agave
5 gal.

ADA Ramp

Walkway

5 Mexican Fan Palm
24" Box

Hydrant

43 Kangaroo Paw
5 gal.

5 Fruitless Olive
24" Box

16 Mexican Fan Palm
24" Box

New Zealand Flax 6
5 gal.

43 Carolina Laurel
5 gal.

6' High Tubular Steel Fence

Maori Queen Flax 12
5 gal.

Hydrant

DRIVE AISLE B

2 Fruitless Olive
24" Box

Walkway

Pink Grass Palm 8
5 gal.

Agave 2
5 gal.

Mexican Sage 9
5 gal.

Fruitless Olive 2
24" Box

2 Agave
5 gal.

Transformer

DRIVE AISLE E

Fruitless Olive 1
24" Box

Fruitless Olive 1
24" Box

New Zealand Flax 6
5 gal.

Hydrant

Trash enclosure

DRIVE AISLE C

Storm water detention
tank locations

Mexican Fan Palm 11
24" Box

Carolina Laurel 7
5 gal.

6' High Tubular Steel Fence

New Zealand Flax 5
5 gal.

BUILDING 2

NORTH

SCALE 1"=16'-0"
0 16 32

*NOTES (E)= Existing

REVISIONS	BY

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FOREST AVE INDUSTRIAL
8875 Murray Ave., Gilroy, CA
BUILDING 2 LANDSCAPE PLAN

LICENSED LANDSCAPE ARCHITECT
KAREN JONES AITKEN
No. 2239
Exp. 8-31-25
STATE OF CALIFORNIA

DATE	11-12-24
SCALE	1"=16'-0"
DRAWN	IN
JOB	HEATWAVE

L-3

SEE SHEET L-1 FOR BUILDING 1 LANDSCAPE PLAN

Carolina Laurel 15 5 gal.

6' High Tubular Steel Fence

Start of 6' High Tubular Steel Fence

Existing Street Light

9 Mexican Sage 5 gal.

12 Maori Queen Flax 5 gal.

21'

Agave 6 5 gal.

8 Mexican Fan Palm 24" Box

6 Mexican Fan Palm 24" Box

5 Fruitless Olive 24" Box

DRIVE AISLE A

Mexican Sage 4 5 gal.

Maori Queen Flax 4 5 gal.

Hydrant

1 Agave 5 gal.

Transformer

Fruitless Olive 2 24" Box

Kangaroo Paw 20 5 gal.

Trash enclosure

Trash enclosure

DRIVE AISLE F

39 Red Fescue 1 gal.

Sidewalk

Maori Queen Flax 5 5 gal.

Walkway

BUILDING 3

Aproximate location of interim fence

ADA Ramp

Fruitless Olive 1 24" Box

15 New Zealand Flax 5 gal.

Fire Hydrant

9 Pink Grass Palm 5 gal.

2 Banana 5 gal.

Maori Queen Flax 4 5 gal.

25 Red Fescue 1 gal.

New Zealand Flax 9 5 gal.

Snake Plant 5 5 gal.

Banana 6 5 gal.

ADA Ramp

Mexican Sage 9 5 gal.

16 New Zealand Flax 5 gal.

1 Fruitless Olive 24" Box

Walkway

Mexican Sage 8 5 gal.

Agave 4 5 gal.

Mexican Sage 9 5 gal.

Sidewalk

Bike Rack

3 Kangaroo Paw 5 gal.

Agave 2 5 gal.

Fruitless Olive 2 24" Box

Agave 1 5 gal.

Fruitless Olive 3 24" Box

Hydrant

Entry Apron

Mexican Sage 9 5 gal.

2 Agave 5 gal.

8 Mexican Fan Palm 24" Box

5 Mexican Sage 5 gal.

New Street Light

41 Carolina Laurel 5 gal.

6' High Tubular Steel Fence

Start of 6' High Tubular Steel Fence

Maori Queen Flax 12 5 gal.

Transformer

Pink Grass Palm 8 5 gal.

2 Fruitless Olive 24" Box

21'

Murray Ave

North

SCALE 1"=16'-0"
0 16 32

*NOTES (E)= Existing

REVISIONS	BY

AITKEN ASSOCIATES
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FOREST AVE INDUSTRIAL

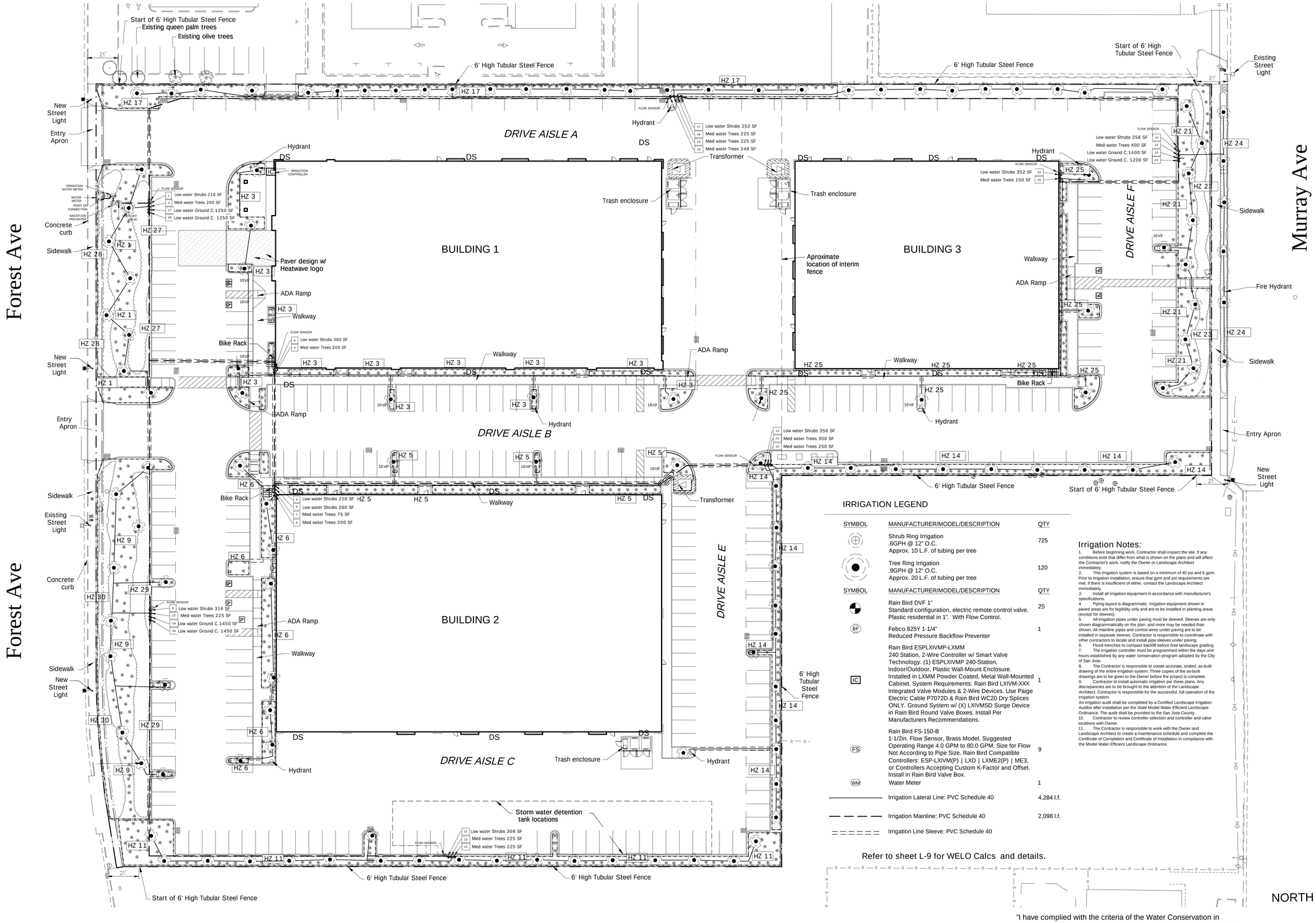
8875 Murray Ave., Gilroy, CA

BUILDING 3 LANDSCAPE PLAN

LICENSED LANDSCAPE ARCHITECT
KAREN JONES AITKEN
No. 2239
Exp. 8-31-25
STATE OF CALIFORNIA

DATE	11-12-24
SCALE	1"=16'-0"
DRAWN	IN
JOB	HEATWAVE

L-4



IRRIGATION LEGEND

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Shrub Ring Irrigation .6GPH @ 12" O.C. Approx. 10 L.F. of tubing per tree	725
	Tree Ring Irrigation .9GPH @ 12" O.C. Approx. 20 L.F. of tubing per tree	120
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird DVF 1" Standard configuration, electric remote control valve. Plastic residential in 1". With Flow Control.	25
BF	Febco 825Y 1-1/4" Reduced Pressure Backflow Preventer	1
IC	Rain Bird ESPLXIVMP-LXMM 240 Station, 2-Wire Controller w/ Smart Valve Technology. (1) ESPLXIVMP 240-Station, Indoor/Outdoor, Plastic Wall-Mount Enclosure. Installed in LXMM Powder Coated, Metal Wall-Mounted Cabinet. System Requirements: Rain Bird LXIVM-XXX Integrated Valve Modules & 2-Wire Devices. Use Paige Electric Cable P7072D & Rain Bird WC20 Dry Splices ONLY. Ground System w/ (X) LXIVMSD Surge Device in Rain Bird Round Valve Boxes. Install Per Manufacturers Recommendations.	1
FS	Rain Bird FS-150-B 1-1/2in. Flow Sensor, Brass Model. Suggested Operating Range 4.0 GPM to 80.0 GPM. Size for Flow Not According to Pipe Size. Rain Bird Compatible Controllers: ESP-LXIVM(P) | LXD | LXME2(P) | ME3, or Controllers Accepting Custom K-Factor and Offset. Install in Rain Bird Valve Box.	9
WM	Water Meter	1
	Irrigation Lateral Line: PVC Schedule 40	4,284 l.f.
	Irrigation Mainline: PVC Schedule 40	2,098 l.f.
	Irrigation Line Sleeve: PVC Schedule 40	

Refer to sheet L-9 for WELO Calcs and details.

Irrigation Notes:

1. Before beginning work, Contractor shall inspect the site. If any conditions exist that differ from what is shown on the plans and will affect the Contractor's work, notify the Owner or Landscape Architect immediately.
2. This irrigation system is based on a minimum of 40 psi and 6 gpm. Prior to irrigation installation, ensure that gpm and psi requirements are met. If there is insufficient of either, contact the Landscape Architect immediately.
3. Install all irrigation equipment in accordance with manufacturer's specifications.
4. Piping layout is diagrammatic. Irrigation equipment shown in paved areas are for legibility only and are to be installed in planting areas (except for sleeves).
5. All irrigation pipes under paving must be sleeved. Sleeves are only shown diagrammatically on the plan, and more may be needed than shown. All mainline pipes and control wires under paving are to be installed in separate sleeves. Contractor is responsible to coordinate with other contractors to locate and install pipe sleeves under paving.
6. Flood trenches to compact backfill before final landscape grading.
7. The irrigation controller must be programmed within the days and hours established by any water conservation program adopted by the City of San Jose.
8. The Contractor is responsible to create accurate, scaled, as-built drawing of the entire irrigation system. Three copies of the as-built drawings are to be given to the Owner before the project is complete.
9. Contractor to install automatic irrigation per these plans. Any discrepancies are to be brought to the attention of the Landscape Architect. Contractor is responsible for the successful, full operation of the irrigation system.

An irrigation audit shall be completed by a Certified Landscape Irrigation Auditor after installation per the State Model Water Efficient Landscape Ordinance. The audit shall be provided to the San Jose County.

10. Contractor to review controller selection and controller and valve locations with Owner.
11. The Contractor is responsible to work with the Owner and Landscape Architect to create a maintenance schedule and complete the Certificate of Completion and Certificate of Installation in compliance with the Model Water Efficient Landscape Ordinance.

"I have complied with the criteria of the Water Conservation in Landscaping Ordinance and applied them accordingly for the efficient use of water in the irrigation design plan."

NORTH

SCALE 1"=30'-0"

0 30 60

*NOTES (E)= Existing

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HEATWAVE INDUSTRIAL

8875 Murray Ave., Gilroy, CA

IRRIGATION MASTER PLAN

LICENSED LANDSCAPE ARCHITECT
KAREN JONES AITKEN
No. 2239
Exp. 8-31-25
STATE OF CALIFORNIA

DATE	11-12-24
SCALE	1"=30'-0"
DRAWN	IN
JOB	HEATWAVE

L-5

Start of 6' High Tubular Steel Fence
Existing queen palm trees
Existing olive trees
21'
6' High Tubular Steel Fence
HZ 17
HZ 17
HZ 17
FLOW SENSOR
Hydrant
17 Low water Shrubs 252 SF
18 Med water Trees 225 SF
19 Med water Trees 225 SF
20 Med water Trees 248 SF
Transformer
New Street Light
Entry Apron
DRIVE AISLE A
DS
DS
Hydrant
IC
IRRIGATION CONTROLLER
IRRIGATION WATER METER
WATER METER
POINT OF CONNECTION
BACKFLOW PREVENTER
P.O.C.W.M.
SV
SHUT-OFF VALVE
FLOW SENSOR
1 Low water Shrubs 216 SF
2 Med water Trees 200 SF
27 Low water Ground C.1250 SF
28 Low water Ground C. 1250 SF
HZ 3
Trash enclosure
Concrete curb
HZ 27
HZ 1
Sidewalk
HZ 28
BUILDING 1
Paver design w/ Heatwave logo
HZ 3
18'x9'
ADA Ramp
18'x9'
HZ 3
Walkway
HZ 1
HZ 27
FLOW SENSOR
3 Low water Shrubs 380 SF
4 Med water Trees 200 SF
HZ 28
Bike Rack
18'x9'
Walkway
ADA Ramp
New Street Light
HZ 3
HZ 3
HZ 3
HZ 3
HZ 3
HZ 3
DS
DS
DS
HZ 1
HZ 3
HZ 3
16'x9'
HZ 3
18'x9'
ADA Ramp
Hydrant
Entry Apron
DRIVE AISLE B
HZ 5
HZ 5
HZ 5
16'x9'
16'x9'
18'x9'
FLOW SENSOR
Sidewalk
HZ 6
Flow Sensor
DS
DS
Bike Rack
HZ 5
HZ 5
DS
NORTH
SCALE 1"=16'-0"
0 16 32
*NOTES (E)= Existing

REVISIONS	BY

AITKEN ASSOCIATES
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karen@kaa.design

FOREST AVE INDUSTRIAL

8875 Murray Ave., Gilroy, CA

BUILDING 1 IRRIGATION PLAN

LICENSED LANDSCAPE ARCHITECT
KAREN JONES AITKEN
No. 2239
EXP. 8-31-25
STATE OF CALIFORNIA

DATE	11-12-24
SCALE	1"=16'-0"
DRAWN	IN
JOB	HEATWAVE

L-6

Entry Apron
Sidewalk
Existing Street Light
Concrete curb
Sidewalk
New Street Light
Bike Rack
Flow Sensor
Hydrant
DRIVE AISLE B
HZ 5
16'x9'
18'x9'
DS
Walkway
Transformer
FLOW SENSOR
HZ 14
HZ 6
HZ 9
HZ 29
HZ 30
HZ 11
5 Low water Shrubs 210 SF
6 Low water Shrubs 260 SF
7 Med water Trees 75 SF
8 Med water Trees 200 SF
9 Low water Shrubs 316 SF
10 Med water Trees 225 SF
29 Low water Ground C.1450 SF
30 Low water Ground C. 1450 SF
ADA Ramp
BUILDING 2
DRIVE AISLE E
DRIVE AISLE C
Trash enclosure
Storm water detention tank locations
11 Low water Shrubs 308 SF
12 Med water Trees 225 SF
13 Med water Trees 225 SF
14 Low wat
15 Med wa
16 Med wa
21'
6' High Tubular Steel Fence
NORTH
SCALE 1"=16'-0"
0 16 32
*NOTES (E)= Existing

REVISIONS | BY

AITKEN ASSOCIATES
LANDSCAPE ARCHITECTS
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FOREST AVE INDUSTRIAL
8875 Murray Ave., Gilroy, CA
BUILDING 2 IRRIGATION PLAN

LICENSED LANDSCAPE ARCHITECT
KAREN JONES AITKEN
No. 2239
EXP. 8-31-25
STATE OF CALIFORNIA

DATE	11-12-24
SCALE	1"=16'-0"
DRAWN	IN
JOB	HEATWAVE

L-7

Start of 6' High Tubular Steel Fence

6' High Tubular Steel Fence

Existing Street Light

21'

HZ 17

FLOW SENSOR

Hydrant

17 Low water Shrubs 252 SF
18 Med water Trees 225 SF
19 Med water Trees 225 SF
20 Med water Trees 248 SF

DS

Transformer

Trash enclosure

DS

DS

Trash enclosure

BUILDING 3

Aproximate location of interim fence

Hydrant

DS

FLOW SENSOR

Low water Shrubs 352 SF 25
Med water Trees 150 SF 26

HZ 25

Low water Shrubs 256 SF 21
Med water Trees 400 SF 22
Low water Ground C.1400 SF 23
Low water Ground C. 1200 SF 24

FLOW SENSOR

HZ 21

HZ 24

HZ 23

HZ 21

Sidewalk

16'x9'

DRIVE AISLE F

Walkway

ADA Ramp

HZ 25

HZ 21

HZ 23

HZ 24

Fire Hydrant

Sidewalk

ADA Ramp

HZ 3

DS

HZ 3

18'x9'

HZ 25

DS

Walkway

HZ 25

DS

HZ 25

DS

HZ 25

16'x9'

Bike Rack

HZ 21

HZ 25

Hydrant

Entry Apron

14 Low water Shrubs 356 SF
15 Med water Trees 300 SF
16 Med water Trees 250 SF

HZ 5

18'x9'

FLOW SENSOR

HZ 14

HZ 14

HZ 14

HZ 14

HZ 14

6' High Tubular Steel Fence

Start of 6' High Tubular Steel Fence

21'

New Street Light

NORTH

SCALE 1"=16'-0"

0 16 32

*NOTES (E)= Existing

Murray Ave

REVISIONS	BY

AITKEN ASSOCIATES
LANDSCAPE ARCHITECTS
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FOREST AVE INDUSTRIAL

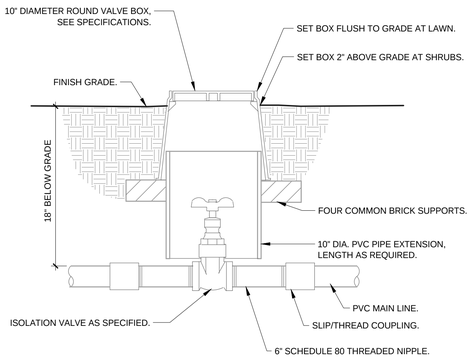
8875 Murray Ave., Gilroy, CA

BUILDING 3 IRRIGATION PLAN

LICENSED LANDSCAPE ARCHITECT
KAREN JONES AITKEN
No. 2239
Exp. 8-31-25
STATE OF CALIFORNIA

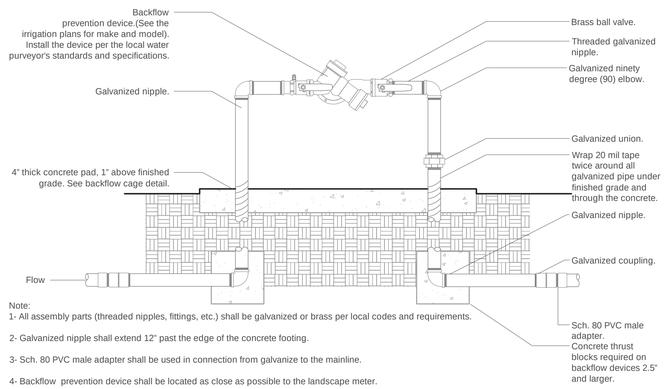
DATE	11-12-24
SCALE	1"=16'-0"
DRAWN	IN
JOB	HEATWAVE

L-8



1 BRASS ISOLATION VALVE

1 1/2" = 1'-0" FX-IR-FX-ISOV-01



Note:
1- All assembly parts (threaded nipples, fittings, etc.) shall be galvanized or brass per local codes and requirements.

2- Galvanized nipple shall extend 12" past the edge of the concrete footing.

3- Sch. 80 PVC male adapter shall be used in connection from galvanize to the mainline.

4- Backflow prevention device shall be located as close as possible to the landscape meter.

5- Backflow prevention device shall be located in planting area unless approved by Owner's Representative.

6- See detail for backflow cage installation.

7- All backflow prevention devices shall have freeze blanket included upon installation.

8- All galvanized connections shall to be made using pipe thread sealant. All Sch. 80 PVC to galvanized connections to be made using teflon tape.

2 BACKFLOW PREVENTION DEVICE

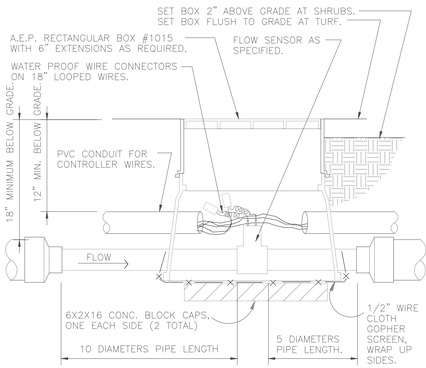
1" = 1'-0" DETAIL-FILE

Water Efficient Landscape Worksheet:

Reference Evapotranspiration (Eto)	43.6	Gilroy, CA	Project Name	Heatwave Industrial	Address	8875 Murray Ave, Gilroy, CA

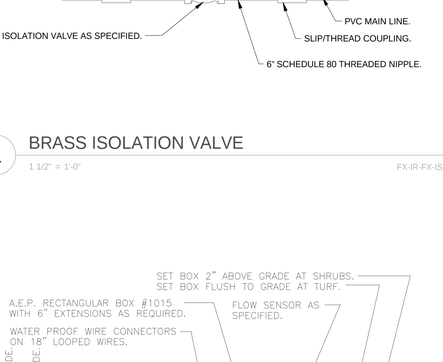
Hydrozone # / Plant Description	Irrigation Method	Plant Factor (PF)	Irrigation Efficiency (IE)	ETAF (PF/IE)	Landscape Area (sq. ft)	ETAF x Area	ETWU
REGULAR LANDSCAPE AREAS							
1.) Low Water Use/ Shrubs	Drip	0.3	0.81	0.37	216.0	80.0	2,162.6
2.) Med Water Use/ Trees	Drip	0.5	0.81	0.62	200.0	123.5	3,337.3
3.) Low Water Use/ Shrubs	Drip	0.3	0.81	0.37	380.0	140.7	3,804.5
4.) Med Water Use/ Trees	Drip	0.5	0.81	0.62	200.0	123.5	3,337.3
5.) Low Water Use/ Shrubs	Drip	0.3	0.81	0.37	210.0	77.8	2,102.5
6.) Low Water Use/ Shrubs	Drip	0.3	0.81	0.37	260.0	96.3	2,603.1
7.) Med Water Use/ Trees	Drip	0.5	0.81	0.62	75.0	46.3	1,251.5
8.) Med Water Use/ Trees	Drip	0.5	0.81	0.62	200.0	123.5	3,337.3
9.) Low Water Use/ Shrubs	Drip	0.3	0.81	0.37	332.0	123.0	3,323.9
10.) Med Water Use/ Trees	Drip	0.5	0.81	0.62	225.0	138.9	3,754.4
11.) Low Water Use/ Shrubs	Drip	0.3	0.81	0.37	308.0	114.1	3,083.7
12.) Med Water Use/ Trees	Drip	0.5	0.81	0.62	225.0	138.9	3,754.4
13.) Med Water Use/ Trees	Drip	0.5	0.81	0.62	225.0	138.9	3,754.4
14.) Low Water Use/ Shrubs	Drip	0.3	0.81	0.37	356.0	131.9	3,564.2
15.) Med Water Use/ Trees	Drip	0.5	0.81	0.62	300.0	185.2	5,005.9
16.) Med Water Use/ Trees	Drip	0.5	0.81	0.62	250.0	154.3	4,171.6
17.) Low Water Use/ Shrubs	Drip	0.3	0.81	0.37	252.0	93.3	2,523.0
18.) Med Water Use/ Trees	Drip	0.5	0.81	0.62	225.0	138.9	3,754.4
19.) Med Water Use/ Trees	Drip	0.5	0.81	0.62	225.0	138.9	3,754.4
20.) Med Water Use/ Trees	Drip	0.5	0.81	0.62	248.0	153.1	4,138.2
21.) Low Water Use/ Shrubs	Drip	0.3	0.81	0.37	256.0	94.8	2,563.0
22.) Med Water Use/ Trees	Drip	0.5	0.81	0.62	400.0	246.9	6,674.6
23.) Low Water Use/Ground C.	Drip	0.3	0.81	0.37	1,400.0	518.5	14,016.6
24.) Low Water Use/Ground C.	Drip	0.3	0.81	0.37	1,200.0	444.4	12,014.2
25.) Low Water Use/ Shrubs	Drip	0.3	0.81	0.37	352.0	130.4	3,524.2
26.) Med Water Use/ Trees	Drip	0.5	0.81	0.62	150.0	92.6	2,503.0
27.) Low Water Use/Ground C.	Drip	0.3	0.81	0.37	1,250.0	463.0	12,514.8
28.) Low Water Use/Ground C.	Drip	0.3	0.81	0.37	1,250.0	463.0	12,514.8
29.) Low Water Use/Ground C.	Drip	0.3	0.81	0.37	1,450.0	537.0	14,517.2
30.) Low Water Use/Ground C.	Drip	0.3	0.81	0.37	1,450.0	537.0	14,517.2
				Totals	14,070.0	5,988.4	161,878.3
SPECIAL LANDSCAPE AREAS							
None	None	None		None	None	Nonce	None
				Totals	0	0	0.0
ETAF CALCULATIONS							
						ETWU TOTAL	161,878.3
Regular Landscape Areas						**MAWA**	217,343.5
Total ETAF x Area	5,988.4						
Total Area	14,070.0						
Average ETAF	0.43						

Average ETAF for Regular Landscape Areas must be .55 or below for residential areas, and .45 or below for non residential areas.



3 FLOW SENSOR ASSEMBLY

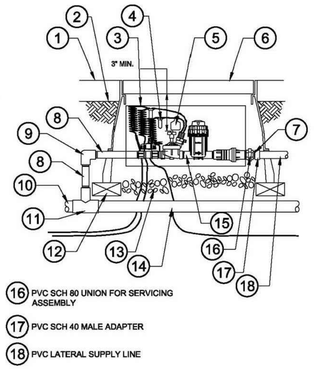
1 1/2" = 1'-0" FX-IR-FX-FLOW-01



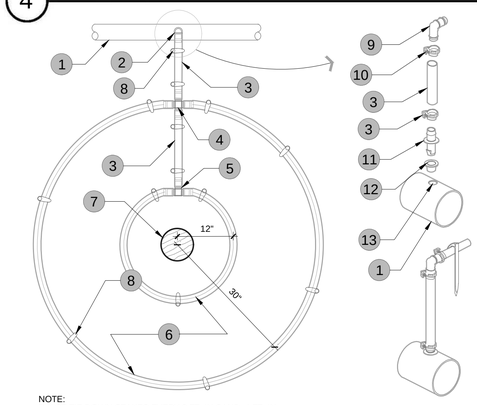
5 WALL MOUNT CONTROLLER

1" = 1'-0" FX-IR-FX-CONT-07

1. TOP OF MULCH
2. FINISH GRADE
3. 30-INCH LINEAR LENGTH OF WIRE, COILED
4. WATERPROOF CONNECTION (1 OF 2)
5. ID TAG
6. JUMBO VALVE BOX WITH COVER (TAN IN COLOR)
7. PVC SCH 80 NIPPLE, CLOSE (1 OF 3)
8. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
9. PVC SCH 40 ELL
10. PVC SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL
11. PVC SCH 40 TEE OR ELL
12. BRICK (1 OF 4)
13. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
14. PVC MAINLINE
15. DRIP CONTROL ZONE KIT (SEE IRRIGATION SCHEDULE)
16. PVC SCH 80 UNION FOR SERVICING ASSEMBLY
17. PVC SCH 40 MALE ADAPTER
18. PVC LATERAL SUPPLY LINE



4 DRIP CONTROL ZONE



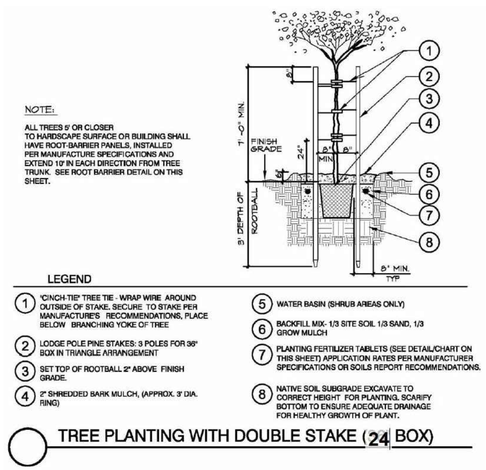
NOTE:
PLACE TIE DOWN STAKES EVERY 3 FT. IN SAND, 4 FT. IN LOAM, AND 5 FT. IN CLAY, AS WELL AS AT ALL CHANGE OF DIRECTION SUCH AS AT TEES OR ELLS.

DRIPLINE TO LATERAL "XPANDO" ADAPTER CONNECTION DETAIL

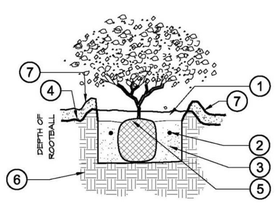
1. PVC LATERAL SUPPLY PIPE, SIZE AS PER PLAN WITH MINIMUM SIZE 1 1/2" DIAMETER.
2. DRIPLINE CONNECTION TO BELOW GRADE LATERAL PIPE, SEE DRIPLINE TO LATERAL "XPANDO" ADAPTER CONNECTION DETAIL.
3. 1/2" PLOYETHYLENE BLANK TUBING, AS REQUIRED.
4. BARB CROSS INSERT FITTING.
5. BARB TEE INSERT FITTING.
6. AT-GRADE DRIPLINE, INNER RING 12" FROM PLANT, OUTTER RING 30" FROM PLANT. DRIPLINE TO BE 0.9GPH EMITTERS AT 12" O.C.
7. PLANT TRUNK.
8. TYPICAL ANTELCO ASTA TIE-DOWN STAKE, SEE NOTES.
9. DRIPLINE BARBED INSERT ELL.
10. RATCHET CLAMP AT ALL BARBED CONNECTIONS, ANTELCO PART NO. 44345.
11. INSERT ADAPTER, ANTELCO "XPANDO" 13MM X 14MM, PART NO. 45595.
12. 13MM ANTELCO "CAPO: RUBBER GROMMET, NO. 45735.
13. DRILL 5/8" HOLE IN PVC LATERAL PIPE WHERE REQUIRED. YOU MUST USE A "FORSTNER" DRILL BIT FOR DRILLING INTO PVC. REMOVE ANY EXCESS BURRS OR ROUGH EDGES.

6 20 GPH DRIPLINE RING-0.9 GPH @ 12" O.C.

1" = 1" FX-IR-FX-EMIT-01



TREE PLANTING WITH DOUBLE STAKE (24" BOX)



1. WATER BASIN WITH 2" X 2" SHREDDED BARK MULCH.
2. TRI-C MYCO PAKS (SEE DETAIL "E" ON THIS SHEET). APPLICATION RATES PER MANUFACTURER SPECIFICATIONS.
3. BACKFILL MIX- 1/3 SITE SOIL, 1/3 SAND, 1/3 GROW MULCH.
4. FINISH GRADE
5. ROOTBALL 1"-2" ABOVE FINISH GRADE
6. NATIVE SOIL SUBGRADE EXCAVATE TO CORRECT HEIGHT FOR PLANTING. SCARIFY BOTTOM TO ENSURE ADEQUATE DRAINAGE FOR HEALTHY GROWTH OF PLANT.
7. 3" MULCH LAYER

TYPICAL SHRUB PLANTING

REVISIONS	BY

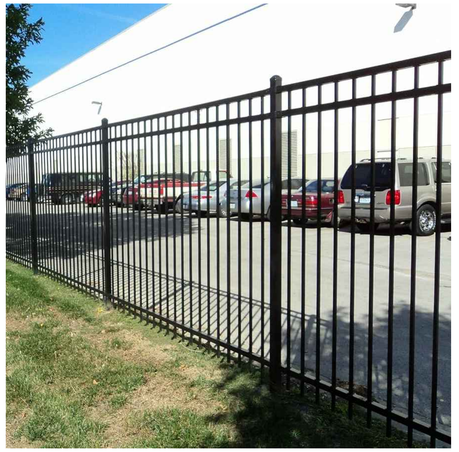
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8262 Rancho Real Gilroy, CA 95020
Calif. Reg. #2239 (408) 842-0245
karen@kaa.design

FOREST AVE INDUSTRIAL
8875 Murray Ave., Gilroy, CA
DETAIL SHEET

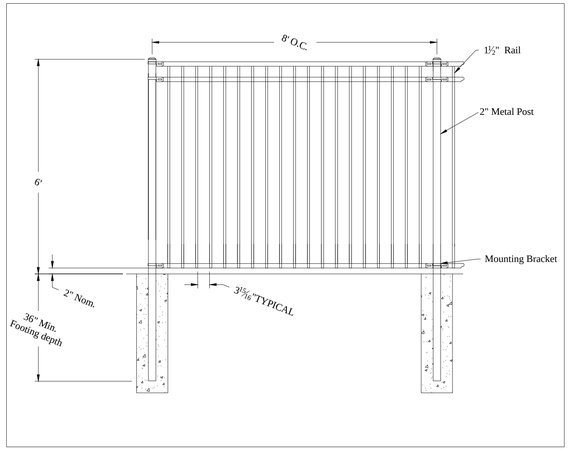
LICENSED LANDSCAPE ARCHITECT
KAREN JONES AITKEN
No. 2239
EXP. 8-31-25
CAL NATIVE

DATE	11-12-24
SCALE	
DRAWN	IN
JOB	HEATWAVE

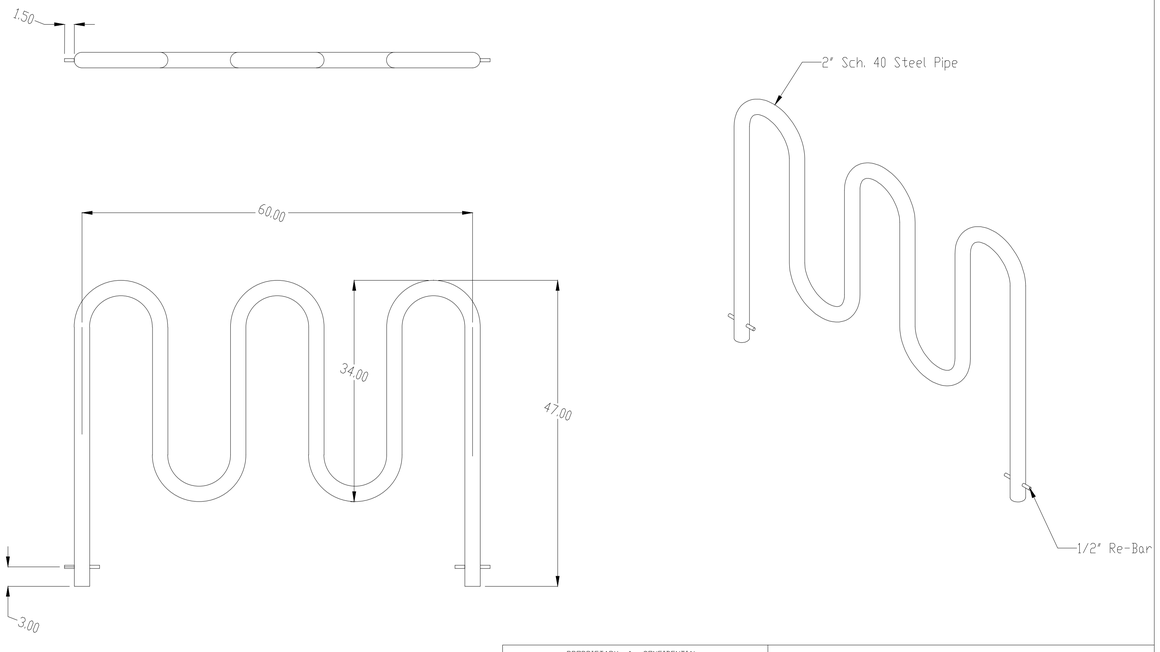
L-9



Fence Example



6 Ft Tubular Steel fence Detail



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HUNTCO

BIKE RACK NAME

RAMBLER-7-IG

BIKE RACK DETAIL EXAMPLE

REVISIONS	BY

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karen@kaa.design

FOREST AVE INDUSTRIAL
8875 Murray Ave., Gilroy, CA
CONSTRUCTION DETAILS

LICENSED LANDSCAPE ARCHITECT
KAREN JONES AITKEN
No. 2239
Exp. 8-31-25
STATE OF CALIFORNIA

DATE	11-12-24
SCALE	
DRAWN	IN
JOB	HEATWAVE

L-10

8875 MURRAY AVE

GILROY, CALIFORNIA

PHASE 1 - NEW BUSINESS

DEVELOPER:
HIGHLY VISUAL
8840 FOREST ST.
GILROY, CA 95020
JUSTIN MARC HERTEL
T: 408-309-9004
E: JUSTIN@HEATWAVEVISUAL.COM

PG&E PM#S:
ELECTRIC:
GAS:

DESIGN CHANGE COMPONENT
ANY CHANGES TO THIS DESIGN MUST BE APPROVED BY

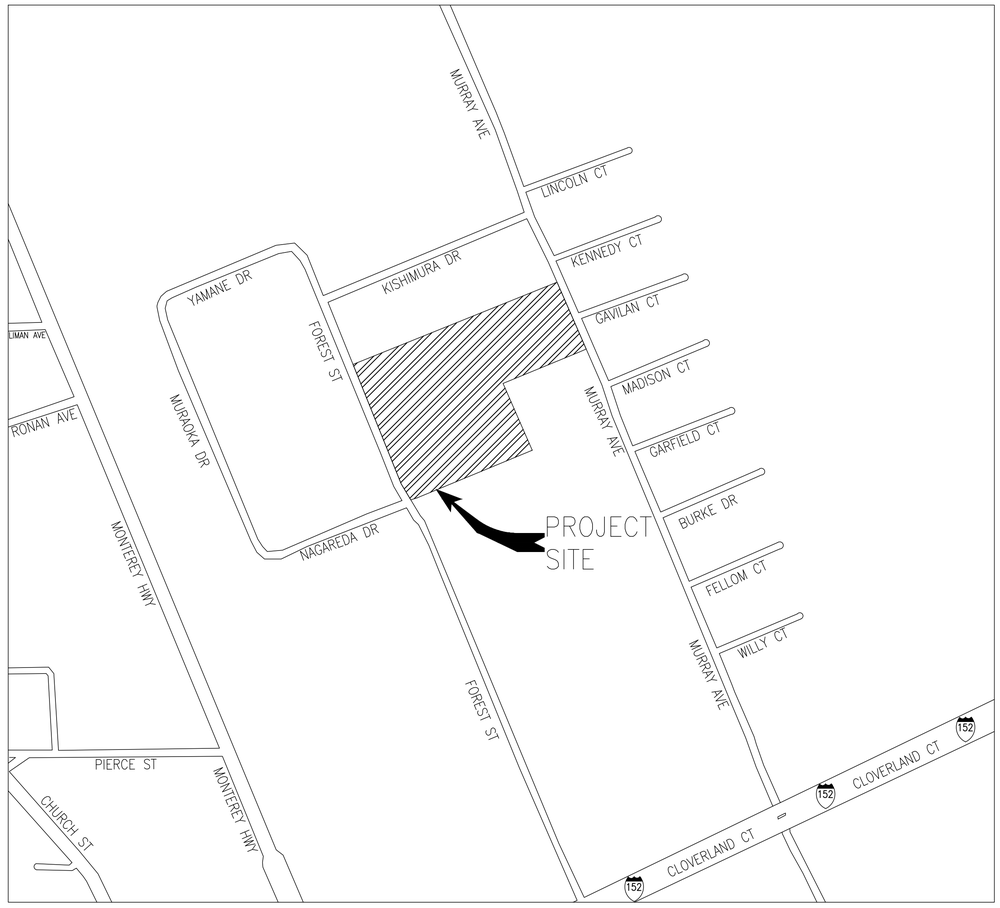
PG&E GAS ADE | PHONE NUMBER

WORK RESPONSIBILITY
JOINT TRENCH

	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
TRENCHING					
EXCAVATE & BACKFILL	○	○	○	○	●
GAS MATERIAL					
SUPPLY & INSTALL	○	●	○	○	○
*ELECTRIC CABLE					
SUPPLY & INSTALL	○	○	○	○	●
ELECTRIC CONDUIT					
SUPPLY & INSTALL	○	○	○	○	●
ELECTRIC BOXES					
SUPPLY & INSTALL	○	○	○	○	●
EXCAVATION	○	○	○	○	●
ELECTRIC TRANSFORMER PADS					
SUPPLY & INSTALL	○	○	○	○	●
EXCAVATION	○	○	○	○	●
ELECTRIC TRANSFORMER					
SUPPLY & INSTALL	○	○	○	○	●
TELEPHONE CONDUIT					
SUPPLY & INSTALL	○	○	○	○	○
TELEPHONE CABLE					
SUPPLY & INSTALL	○	○	○	○	○
TELEPHONE SPLICE BOXES					
SUPPLY & INSTALL	○	○	○	○	○
EXCAVATION	○	○	○	○	○
TELEPHONE S.A.I. PAD					
SUPPLY & INSTALL	○	○	○	○	○
EXCAVATION	○	○	○	○	○
C.A.T.V. CONDUIT					
SUPPLY & INSTALL	○	○	○	○	○
C.A.T.V. SPLICE BOXES					
SUPPLY & INSTALL	○	○	○	○	○
EXCAVATION	○	○	○	○	○
C.L.E.C. FIBER CONDUIT					
SUPPLY & INSTALL	○	○	○	○	○
C.L.E.C. FIBER SPLICE BOXES					
SUPPLY & INSTALL	○	○	○	○	○
EXCAVATION	○	○	○	○	○
(OPTIONAL) DIRECTIONAL DRILL / JACK AND BORE					
SUPPLY & INSTALL CONDUIT	○	○	○	○	○
EXCAVATION	○	○	○	○	○

● SYMBOL DESIGNATES THE WORK TO BE PERFORMED BY THE RESPECTIVE CONTRACTOR & UTILITY COMPANIES.
○ NOT APPLICABLE UNLESS OTHERWISE SPECIFIED
* PG&E TO PULL CABLE INTO ENERGIZED ENCLOSURES

NOTE:
PRIOR TO ENERGIZING THIS PROJECT
A PSE/PUE WILL NEED TO BE RECORDED FOR ALL UTILITIES WITHIN THIS PROJECT. INCLUDING THE "WORKING SPACE" REQUIRED AROUND ALL EQUIPMENT.



VICINITY MAP
N. T. S.

N

SUBSTRUCTURE VERIFICATION STAMP

DEVELOPER NOTE AND SIGN

ALL PG&E ENCLOSURES AND BOXES HAVE BEEN SET TO GRADE ACCORDING TO GRADE STAKES PROVIDED BY DEVELOPERS ENGINEER. ALL COSTS TO RELOCATE OR RE-ADJUST BOXES AT A LATER DATE WILL BE BILLED TO THE DEVELOPER. PLEASE HAVE YOUR SUPT. VERIFY THE CORRECT GRADE OF ALL ENCLOSURES OR BOXES, AND SIGN AND DATE DRAWING.

THANK YOU

SIGNED _____

DATE _____

THESE PLANS WERE PREPARED IN CONJUNCTION WITH THE FOLLOWING PLANS:

	RECEIVED	APPROVED
CIVIL IMPROVEMENT PLANS/GRADING PLANS	10-21-2024	PRELIMINARY
ARCHITECTURAL ELECTRONIC FILE	12-22-2022	PRELIMINARY
APPLICANT DESIGN (GAS)		
APPLICANT DESIGN (ELECTRIC)		
TELEPHONE		
C.A.T.V.		
LANDSCAPE	01-19-2023	PRELIMINARY
LIGHT LOCATIONS		
TRAFFIC SIGNAL LOCATIONS		

VIZION UTILITY PARTNERS IS NOT RESPONSIBLE FOR ANY SUBSEQUENT CHANGES OR REVISIONS.
OTHER UTILITIES SHOWN ARE APPROXIMATE AND BASED ON FIELD SURVEY AND AVAILABLE UTILITY INFORMATION. IT IS THE CONTRACTORS' RESPONSIBILITY TO VERIFY THE ACTUAL LOCATION AND EXTENT OF UTILITIES PRIOR TO THE COMMENCEMENT OF WORK. PHYSICAL VERIFICATION OF UTILITY LOCATIONS SHALL BE PERFORMED BY CAREFUL PROBING OR HAND DIGGING IN ACCORDANCE WITH ARTICLE 6 OF THE CAL/OSHA CONSTRUCTION SAFETY ORDERS.

UTILITY APPROVALS

UTILITY	APPROVED BY	DATE
AT&T (PHONE)		
COMCAST (CATV)		
CITY ENGINEER		

SHEET INDEX

JT-1	JOINT TRENCH TITLE SHEET
JT-2	JOINT TRENCH NOTES
JT-3	JOINT TRENCH DETAILS
JT-4	JOINT TRENCH INTENT

DATE:
REVISION
DELTA NO:

CALL 811 BEFORE YOU DIG
811 UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER
DAVID B. VOORHIS
No. 26429
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA
DATE OF SIGNATURE

JOINT TRENCH TITLE SHEET
8875 MURRAY AVE
RULE 15/16 PHASE 1
HIGHLY VISUAL
GILROY
CALIFORNIA

Vizion Utility PARTNERS
UTILITY ENGINEERS, CONSULTANTS & STREET LIGHT DESIGN
7901 STONERIDGE DRIVE, SUITE 270 PLEASANTON, CA 94588
PH: (925) 682-1114

PROJ. NO: 22-289
SCALE: N.T.S.
PM: K. ARATA
DRAWN BY: R. FALCÓN
PG&E QUALIFIED DESIGNER: M. WEBB
LAST UPDATED: 10-28-2024
DRAWING NO: JT PH1-1
SHEET: 1 OF: 4

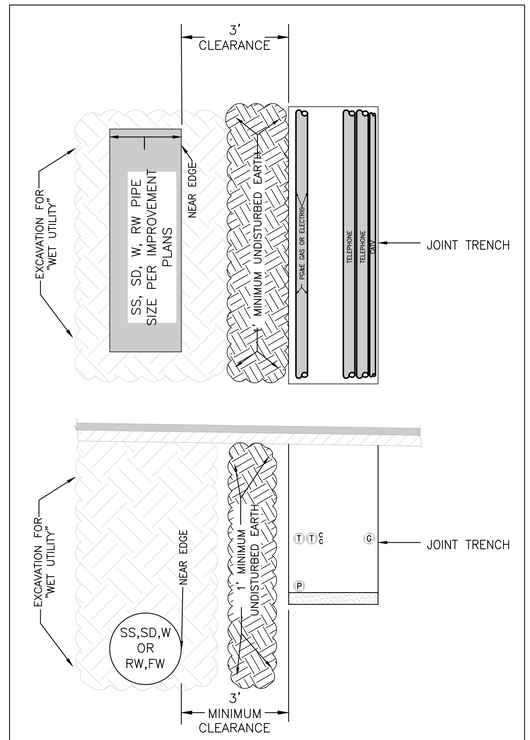
\\192.168.213.10\company_shared\Dropbox\projects\2022\22-289 8875 Murray Avenue, Gilroy\Vizion Work\MS 22-289-JT.dwg, 11/5/2024 8:22:24 AM,
AutoCAD PDF (General Documentation).pc3

GENERAL NOTES:

1. THE PREFERRED TRENCH LOCATION IS IN A PUBLIC UTILITY EASEMENT (P.U.E.).
2. ALL DEPTHS AND RESULTING COVER REQUIREMENTS ARE MEASURED FROM FINAL GRADE.
3. COVER, CLEARANCES, AND SEPARATION SHALL BE AS GREAT AS PRACTICABLE UNDER THE CIRCUMSTANCES, BUT UNDER NO CIRCUMSTANCES SHALL BE LESS THAN THE MINIMUM COVER, CLEARANCE, AND SEPARATION REQUIREMENTS SET FORTH IN GENERAL ORDER 128 AND 49CFR 192.321 , 49CFR 192.325, AND 49CFR 192.327. ALL FACILITIES SHALL BE ANCHORED IN PLACE PRIOR TO COMPACTION, OR OTHER MEANS SHALL BE TAKEN TO ENSURE NO MOTION OF THE FACILITIES. DIMENSIONAL REQUIREMENTS FOR SHADING, LEVELING, AND BACKFILLING SHALL BE DETERMINED SUBSEQUENT TO COMPACTION.
4. TRENCH DIMENSIONS SHOWN ARE TYPICAL. TRENCH SIZES AND CONFIGURATIONS MAY VARY DEPENDING UPON OCCUPANCY AND/OR FIELD CONDITIONS. TRENCH SIZE AND CONFIGURATION MUST AT ALL TIMES BE CONSTRUCTED IN A MANNER THAT ENSURES PROPER CLEARANCES AND COVER REQUIREMENTS ARE MET. ANY "CHANGE" TO THE TRENCH WIDTH AND CONFIGURATIONS AS SHOWN IN THIS EXHIBIT MUST BE DESIGNED TO ENSURE THIS REQUIREMENT.
5. IT IS PREFERRED TO HAVE NON-PG&E OWNED STREETLIGHTS AT A LEVEL OTHER THAN THE GAS OR ELECTRIC LEVEL. NON-PG&E OWNED STREETLIGHTS MAY BE AT THE ELECTRIC LEVEL OF THE TRENCH AS LONG AS MINIMUM CLEARANCES ARE PROVIDED AND COMPLY WITH ALL SPECIAL NOTES FOR A JOINT TRENCH WITH A SECOND ELECTRIC UTILITY.
6. NON-UTILITY FACILITIES ARE NOT ALLOWED IN ANY JOINT UTILITY TRENCH, E.G., IRRIGATION CONTROL LINES, BUILDING FIRE ALARM SYSTEMS, PRIVATE TELEPHONE SYSTEMS, OUTDOOR ELECTRICAL CABLE, ETC.
7. WHEN COMMUNICATION DUCTS ARE INSTALLED, A MINIMUM OF 12" RADIAL SEPARATION SHALL BE MAINTAINED FROM GAS FACILITIES. EXCEPTION: WITH MUTUAL AGREEMENT, WHEN 4-INCH DIAMETER OR SMALLER GAS PIPE IS INSTALLED, THE SEPARATION MAY BE REDUCED TO NOT LESS THAN 6 INCHES.
8. PROVIDE SEPARATION FROM TRENCH WALL AND OTHER FACILITIES SUFFICIENT TO ENSURE PROPER COMPACTION.
9. MAINTAIN PROPER SEPARATION BETWEEN PG&E FACILITIES AND "WET" UTILITY LINES AS DESCRIBED IN UO STANDARD S5453. THE MINIMUM ALLOWABLE HORIZONTAL SEPARATION BETWEEN COMPANY FACILITIES AND "WET" FACILITIES IS 3" WITH A MINIMUM 1" OF UNDISTURBED EARTH OR THE INSTALLATION OF A SUITABLE BARRIER BETWEEN THE FACILITIES. IF A 3" HORIZONTAL SEPARATION CANNOT BE ATTAINED BETWEEN "WET" UTILITIES AND COMPANY DRY FACILITIES, A VARIANCE MAY BE APPROVED BY THE LOCAL INSPECTION SUPERVISOR AND SUBMITTED TO THE SERVICE PLANNING SUPPORT PROGRAM MANAGER FOR APPROVAL. SEPARATIONS OF 1" OR LESS ARE NOT PERMISSIBLE AND WILL NOT BE ALLOWED. THE COMPANY MAY AGREE TO WAIVE THE MINIMUM 3" SEPARATION REQUIREMENT AT THE REQUEST OF AN APPLICANT IF WARRANTED AND THE NEED IS JUSTIFIED. THE REQUEST FOR A WAIVER MUST:
   - BE MADE IN WRITING AND SUBMITTED TO THE COMPANY ADE DURING THE PLANNING AND DESIGN PHASE OF THE PROJECT,
   - CLEARLY DESCRIBE THE CONDITIONS NECESSITATING THE WAIVER,
   - INCLUDE A PROPOSED DESIGN, AND INCLUDE A DESIGN FOR A BARRIER BETWEEN THE "WET" UTILITIES AND COMPANY DRY FACILITIES IN THE EVENT 1" OF UNDISTURBED EARTH CANNOT BE MAINTAINED. NOTE: DRAIN LINES CONNECTED TO DOWNSPOUTS ON BUILDINGS ARE CONSIDERED A "WET" UTILITY FOR THE PURPOSES OF THIS STANDARD.
10. SEPARATIONS SHALL BE MAINTAINED AT ABOVE GROUND TERMINATION POINTS.
11. PROCEDURES FOR APPROVING NATIVE BACKFILL FOR SHADING OF PG&E GAS FACILITIES:
    - RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF 3 LOCATIONS PER 1,000' OF TRENCH. 100% OF THE SAMPLE MUST PASS THROUGH A 1/2" SIEVE AND 75% MUST PASS THROUGH A #4 SCREEN. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND ARE TO BE TAKEN AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE.
    - THE SOILS MUST NOT CONTAIN ANY ROCKS THAT HAVE SHARP EDGES OR THAT MAY OTHERWISE BE ABRASIVE.
    - THE SOILS MUST NOT CONTAIN CLODS LARGER THAN 1/2" IF TO BE USED AS SHADING, BEDDING, OR LEVELING MATERIALS.
    - COMPACTION REQUIREMENTS MUST MEET ANY APPLICABLE PG&E, FEDERAL, STATE, COUNTY, OR LOCAL REQUIREMENTS.
    - AT NO TIME SHALL THE OVER SATURATION OF NATIVE SOILS BE USED TO ACHIEVE THESE REQUIREMENTS.
    - THE SIEVES AND SCREENS SHALL BE:
      1/2" SIEVE: 8" DIAMETER BY 2" DEEP, STAINLESS STEEL MESH SCREEN.
      #4 SCREEN: 8" DIAMETER BY 2" DEEP, STAINLESS STEEL MESH SCREEN.
12. PROCEDURES FOR APPROVING NATIVE BACKFILL FOR SHADING AT PG&E ELECTRIC FACILITIES:
    - RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF 3 LOCATIONS PER 1,000' OF TRENCH. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND ARE TO BE TAKEN AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE.
    - SHADING MATERIAL CONTAINING LARGE ROCK, PAVING MATERIAL, CINDERS, SHARPLY ANGULAR SUBSTANCES, OR CORROSIVE MATERIAL SHALL NOT BE PLACED IN THE TRENCH WHERE SUCH MATERIAL MAY DAMAGE THE CONDUITS AND/OR PREVENT PROPER COMPACTION OVER OR AROUND THE CONDUITS.
    - NATIVE SOILS CONTAINING CLODS NOT TO EXCEED 6" IN DIAMETER MAY BE INCLUDED IN THE SHADING MATERIAL PROVIDED THE CLODS ARE READILY BREAKABLE BY HAND. NOTE: SOILS CONSISTING PRIMARILY OF ADOBE, HARD COMPACT (DENSE) CLAY, AND BAY MUDS SHALL NOT BE USED AS SHADING MATERIAL.
    - AT NO TIME SHALL THE OVER SATURATION OF NATIVE SOILS BE USED TO ACHIEVE THESE REQUIREMENTS.
    - REFER TO ENGINEERING DOCUMENT 062288, ITEM 13 ON PAGE 2.
13. COMPETENT NATIVE SOILS ARE PREFERRED TO BE USED FOR SHADING, BEDDING, AND BACKFILLING THROUGHOUT THE TRENCH.
    - WHERE NATIVE SOILS EXCEED 1/2" MINUS AND/OR WHERE GAS IS TO BE PLACED AT THE BOTTOM OF A TRENCH IN AREAS THAT EXCEED 1/2" MINUS SOIL CONDITIONS, OR WHERE THE BOTTOM OF A TRENCH IS CONSIDERED TO CONSIST OF HARD PAN, PG&E APPROVED 1/2" MINUS IMPORT MATERIAL SHALL BE USED FOR SHADING AND/OR BEDDING OF GAS FACILITIES.
    - PG&E APPROVED IMPORT MATERIAL IS PER CGT ENGINEERING GUIDELINE 4123.
    - IF A LEVELING COURSE IS REQUIRED FOR GAS FACILITIES, THE USE OF NATIVE SOILS IS PREFERRED, BUT IF 1/2" MINUS CONDITIONS ARE NOT ATTAINABLE WITH THE NATIVE SOILS, THEN THE USE OF PG&E APPROVED IMPORT MATERIALS IS REQUIRED. BEDDING UNDER GAS FACILITIES WILL BE A MINIMUM OF 2" OF COMPACTED 1/2" MINUS NATIVE SOILS OR PG&E APPROVED IMPORT MATERIAL.
    - FOR ELECTRIC FACILITIES, REFER TO NOTE 12. THIS APPLIES TO LEVELING COURSES AS WELL AS SHADING.
    - THE MINIMUM PG&E APPROVED BEDDING MATERIAL MAY BE INCREASED AT THE DISCRETION OF PG&E WHEN WARRANTED BY EXISTING FIELD CONDITIONS (E.G., ROCKY SOILS, HARD PAN, ETC.).
    - THE USE OF ANY IMPORTED MATERIAL FOR BACKFILLING PURPOSES SHALL BE LIMITED TO THOSE SITUATIONS WHEN NATIVE SOILS DO NOT ALLOW FOR REQUIRED COMPACTION.
14. THE APPLICANT IS RESPONSIBLE FOR THE REMOVAL OF EXCESS SPOIL AND ASSOCIATED COSTS.
15. SEPARATION BETWEEN GAS FACILITIES AND ELECTRIC FACILITIES MAY BE REDUCED TO 6" WHEN CROSSING.
16. SERVICE SADDLES ARE THE PREFERRED SERVICE FITTINGS FOR USE THROUGHOUT THE JOINT TRENCH PROJECT. ALL PROJECTS WILL BE DESIGNED AND ESTIMATED USING SERVICE SADDLES. HOWEVER, SERVICE TEES MAY BE USED IF ALL CLEARANCES, SEPARATION, AND COVERAGE REQUIREMENTS ARE MAINTAINED.
17. CONTRACTOR TO INCREASE METER SPACING AS NECESSARY WHEN EARTHQUAKE VALVES OR OTHER ADDITIONAL SAFETY EQUIPMENT ARE REQUIRED. EARTHQUAKE VALVES ARE REQUIRED IN SOME AREAS AND ARE NOT PART OF PG&E/VIZION UTILITY PARTNERS SCOPE. THIS INFORMATION CAN BE FOUND ON BUILDING MECHANICAL ENGINEER'S PLANS. PG&E STANDARD METER SPACING REQUIREMENTS DO NOT INCLUDE CLEARANCE FOR EARTHQUAKE VALVES.

CONSTRUCTION NOTES:

1. ALL TRENCHING, BACKFILLING AND INSTALLATION BY CONTRACTOR MUST COMPLY WITH PG&E UO STANDARD S5453 (EFFECTIVE DATE 7-5-2006).
2. ALL WORK MUST COMPLY WITH P.G. & E., TELEPHONE, C.A.T.V., STANDARDS AND PRACTICES. ALL WORK MUST BE INSPECTED AND APPROVED BY RESPECTIVE INSPECTORS. RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF THREE LOCATIONS PER 1,000' OF TRENCH. 100% OF THE SAMPLE MUST PASS THROUGH A ½" SIEVE AND 75% MUST PASS THROUGH A #4 SCREEN. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND IS TO BE AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE. THE SOILS MUST NOT CONTAIN ANY ROCKS THAT HAVE SHARP EDGES OR THAT MAY OTHERWISE BE ABRASIVE. THE SOILS MUST NOT CONTAIN CLODS LARGER THAN ½" IF TO BE USED AS SHADING, BEDDING OR LEVELING MATERIALS. COMPACTION REQUIREMENTS MUST MEET ANY APPLICABLE P.G.& E. FEDERAL, STATE, COUNTY OR LOCAL REQUIREMENTS. ANY NATIVE SOILS OR IMPORT MATERIALS USED MUST NOT HINDER THOSE EFFORTS.
3. BACKFILL SHALL BE APPROVED BY THE UTILITY COMPANIES AND THE CITY. COMPACTION WILL BE TESTED AND PASSED BY THE SOILS ENGINEER.
4. IF SOIL IS NOT ROCK FREE, ADD 4" DEPTH OF TRENCH FOR SAND BEDDING.
5. VERIFY SPLICE BOX EXCAVATION SIZES WITH SUPPLIER(S).
6. THE TRENCHING CONTRACTOR SHALL COORDINATE THE UTILITY COMPANIES' INSTALLATION. THE TRENCHING CONTRACTOR TO PLACE CONNECTING CONDUIT WITHIN 5' OF BUILDING EXTERIOR WALL.
7. CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE PROJECT IMPROVEMENT PLANS AND CONDUCT HIS WORK ACCORDINGLY.
8. IT IS THE TRENCHING CONTRACTOR'S RESPONSIBILITY TO PROTECT IN PLACE ALL EXISTING FACILITIES. NO EXTRA PAYMENT WILL BE CONSIDERED FOR CROSSING OTHER SYSTEMS.
9. VIZION UTILITY PARTNERS ASSUMES NO RESPONSIBILITY FOR THE PROJECT CONDITIONS. THESE DRAWINGS WERE PREPARED USING DATA SUPPLIED BY PG&E, TELEPHONE, C.A.T.V., IMPROVEMENT PLANS AND THE CITY'S VARIOUS "AS BUILT" INFORMATION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PHYSICALLY REVIEW THE PROJECT PRIOR TO SUBMITTING HIS BID.
10. CONTRACTOR WILL COMPLY WITH ALL LAWS, ORDINANCES AND REGULATIONS. CONTRACTOR SHALL BE FAMILIAR WITH O.S.H.A., INDUSTRIAL SAFETY ORDERS AND SHALL CONDUCT HIS WORK ACCORDINGLY. WHEN WORKING NEAR ENERGIZED OR "HOT" EQUIPMENT, THE UTILITY OWNER SHALL BE NOTIFIED TO SUPPLY THE APPROPRIATE MAN POWER. PUBLIC SAFETY AND TRAFFIC CONTROL MEASURES ARE THE CONTRACTOR'S RESPONSIBILITY.
11. THE CONTRACTOR SHALL PROTECT CONSTRUCTION STAKING. HE SHALL COORDINATE STAKING WITH THE PROJECT'S CIVIL ENGINEER.
12. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) TWO WORKING DAYS PRIOR TO START OF WORK.
13. CONTRACTOR SHALL NOTIFY INSPECTORS OF ANY POTENTIAL CONFLICTS PRIOR TO START OF WORK.
14. THIS PLAN IS TO BE USED FOR SOLE PURPOSE OF DIGGING THE JOINT TRENCH. SEE PG&E, AT&T, AND COMCAST PLANS FOR EXACT SIZE AND NUMBER OF CONDUITS INSTALLED IN THE JOINT TRENCH. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE CORRECT NUMBER, SIZE AND TYPES OF CONDUITS ARE INSTALLED PER THE ENGINEERED PLANS BY EACH UTILITY COMPANY.
15. NOTE PLANS ISSUED AT THE PRE-CONSTRUCTION MEETING MAY BE SUBJECT TO REVISIONS, IF FINAL PLANS FROM EACH UTILITY COMPANY WERE NOT AVAILABLE AT THE START OF CONSTRUCTION.
16. WATER, SEWER, DRAINS, SANITARY WASTE, FUELS (INCLUDING DIESEL AND GASOLINE), OIL, PROPANE AND OTHER VOLATILE HEAVIER THAN AIR GASES, SPRINKLER, IRRIGATION, STEAM AND OTHER "WET" FACILITIES SHALL MAINTAIN A MINIMUM OF THREE FEET FROM THE NEAREST OUTER SURFACE OF PG&E FACILITIES WITH NO LESS THAN ONE FOOT OF EARTH (SOIL BARRIER) BETWEEN THE ADJACENT SIDES OF THE INDIVIDUAL TRENCHES.
17. IN THE EXTRAORDINARY CASE THAT THE MINIMUM THREE FOOT HORIZONTAL SEPARATION CANNOT BE ATTAINED BETWEEN "WET" UTILITIES AND COMPANY DRY FACILITIES, A VARIANCE MAY APPROVED BY THE LOCAL INSPECTION SUPERVISOR AND SUBMITTED TO SERVICE PLANNING SUPPORT PROGRAM MANAGER FOR APPROVAL.
18. ALL METER PANELS: INDIVIDUAL, RESIDENTIAL, OR NONRESIDENTIAL APPLICANTS WITH A METER PANEL RATING OF ANY SIZE, INSTALLED INSIDE A METER ROOM OR OTHER STRUCTURE, MUST FOLLOW ALL OF THE REQUIREMENTS DESCRIBED BELOW.
    A. INSTALL, OWN, AND MAINTAIN A SEPARATE, NOMINAL, 2-INCH DIAMETER CONDUIT WITH PULL TAPE INSIDE. THE CONDUIT AND PULL TAPE MUST EXTEND FROM THE OUTSIDE SURFACE OF THE BUILDING AND TERMINATE OUTSIDE THE METER PANEL OR SWITCHBOARD AT THE TOP OF THE METER SECTION.
    B. ENSURE THE 2-INCH DIAMETER CONDUIT AND PULL TAPE EXIT THE OUTSIDE OF THE BUILDING A MINIMUM OF 8 FEET AND A MAXIMUM OF 10 FEET ABOVE GROUND. THE OPEN END OF THE CONDUIT THAT IS EXPOSED TO THE OUTSIDE MUST HAVE A REMOVABLE, TEMPORARY CAP OR PLUG.
    C. DO NOT USE THE CONDUIT. THE CONDUIT IS FOR PG&E'S METERING EQUIPMENT ONLY.
19. THIS JOINT TRENCH PLAN WAS PREPARED BASED ON TOPOGRAPHICAL SURVEY AS PROVIDED BY A CIVIL ENGINEER. THE CONTRACTOR IS CAUTIONED THAT EXPLORATORY WORK IS NECESSARY TO DETERMINE THE ACTUAL LOCATION OF ANY EXISTING UTILITY. V.U.P. STRONGLY RECOMMENDS THAT ALL UTILITIES BE PHYSICALLY LOCATED ON THE SITE BEFORE THE ONSET OF SITE WORK. SUBSTRUCTURE LOCATIONS MAY REQUIRE FIELD ADJUSTMENT TO COMPENSATE FOR ACTUAL EXISTING UTILITY LOCATIONS.
20. SUBSTRUCTURE LOCATIONS MUST BE STAKED BY A LICENSED SURVEYOR PRIOR TO CONSTRUCTION. SEE CONSTRUCTION NOTES ON JOINT TRENCH TITLE SHEET (JT-1) REGARDING EXISTING CONDITIONS.



HORIZONTAL CLEARANCE FROM WET UTILITY
NOT TO SCALE

LEGEND

TYPICAL

- JOINT TRENCH
- JOINT TRENCH SERVICE
- SD — STORM DRAIN
- G — GAS
- SS — SANITARY SEWER
- E — ELECTRICAL
- W — DOMESTIC WATER
- FW — WATER (FIRE)
- JT — JOINT TRENCH
- OH — OVERHEAD
- SI — SIGNAL INTERCONNECT
- T — TELEPHONE
- C — C.A.T.V.
- FO — FIBER OPTIC
- COM — COMMUNICATIONS
- SL — STREETLIGHT
- ATT — AT&T
- MCI — MCI
- FACE OF CURB, BACK OF CURB
- PROPERTY LINE
- CENTER LINE
- EASEMENT LINE
- x — FENCELINE
- BIOSWALE
- TIE-IN TO CONDUITS
- METER PEDESTAL
- AREA DRAIN
- CATCH BASIN
- DS — DOWNSPOUT
- FIRE HYDRANT
- SS MANHOLE
- cv — COMMUNICATIONS VAULT
- ev — ELECTRIC VAULT
- x 20.25 — SPOT ELEVATION

NEW

- PROPOSED JOINT TRENCH SERVICE
- 106" x 90" TRANSFORMER PAD (PG&E) WORKING SPACE SHOWN MAINTAIN 30" UNOBSTRUCTED OVERHEAD CLEARANCE OVER TRANSFORMER PAD
- 4' x 6'-6" x 5' SPLICE BOX (PG&E) WORKING SPACE SHOWN MAINTAIN 20' UNOBSTRUCTED OVERHEAD CLEARANCE OVER BOX
- 3' x 5' x 3'-6" SPLICE BOX (PG&E) WORKING SPACE SHOWN
- 48" x 48" INTERRUPTER SWITCH (PG&E) WORKING SPACE SHOWN
- 72" x 36" PAD MOUNT JUNCTION (PG&E) WORKING SPACE SHOWN
- PROPOSED SPARE CONDUIT SERVICE FOR PHASE 2 & 3
- 106" x 90" TRANSFORMER PAD (PG&E) WORKING SPACE SHOWN INSTALLED DURING PHASE 2&3
- 48" x 48" INTERRUPTER SWITCH (PG&E) WORKING SPACE SHOWN INSTALLED DURING PHASE 2 & 3

EXISTING

- JT — (E) JOINT TRENCH
- OH — (E) OVERHEAD LINE
- E — (E) ELECTRIC LINE
- G — (E) GAS LINE
- T — (E) PHONE LINE
- (E) PHONE VAULT
- (E) CATV VAULT
- (E) UTILITY VAULT
- (E) STREET LIGHT
- (E) STREET LIGHT BOX
- (E) ELECTRIC VAULT
- (E) JOINT POLE

ABBREVIATIONS

AD	AREA DRAIN	FOC	FACE OF CURB	(N)	NORTH	STD	STANDARD
APPROX	APPROXIMATE	FUT	FUTURE	NTS	NOT TO SCALE	STLT	STREET LIGHT
AVE	AVENUE	G	GAS	OH	OVERHEAD	SVC	SERVICES
BNDY	BOUNDARY	GND	GROUND	P	PAD	SW, S/W	SIDEWALK
C	CURB	I.D.	INNER DIAMETER	PKWY	PARKWAY	TC	TOP OF CURB
C/G	CURB & GUTTER	IRR	IRRIGATION	PL	PROPERTY LINE	TEL	TELEPHONE
CL, C/L	CENTER LINE	J.P.	JOINT POLE	PR	PROPOSED	TERM	TERMINATION
DR	DRIVE	LT	LEFT	PUE	PUBLIC UTILITY EASEMENT	THRU	THROUGH
DW/DWY	DRIVEWAY	M	MONUMENT	PVMT	PAVEMENT	TYP	TYPICAL
(E)	EAST	MCI	MCI, INC. COMPANY	RT	RIGHT	U.G.	UNDERGROUND
EL	ELEVATION	MH	MAINTENANCE HOLE	R/W	RIGHT OF WAY	VER	VERIZON
ELB	ELBOW	MIN	MINIMUM	S	SANITARY SEWER LATERAL	(W)	WEST
ELEC	ELECTRIC	MID PT	MID POINT	S.I.	SIGNAL INTERCONNECT	W	WATER
ELECT	ELECTROLIER	MPOE	MAIN POINT OF ENTRY	SS	SANITARY SEWERS	WM	WATER METER
EP	EDGE OF PAVEMENT	MSB	MAIN SWITCH BOARD	SSCO	SANITARY SEWER CLEAN OUT		
EX	EXISTING	MSS	MAIN SWITCH SIZE	SSMH	SANITARY SEWER MANHOLE		
FC	FACE OF CURB	MTR	METER				
FH	FIRE HYDRANT						

DATE: | DELTA NO: | REVISION

CALL 811 BEFORE YOU DIG
USA UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER
DAVID B. VOORHIS
No. 26429
Exp. 03-31-24
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STATE OF CALIFORNIA
DATE OF SIGNATURE

CALIFORNIA

JOINT TRENCH NOTES
8875 MURRAY AVE
RULE 15/16 PHASE 1
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GILROY

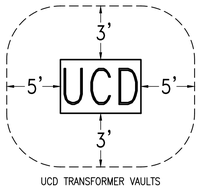
Vizion Utility PARTNERS
UTILITY ENGINEERS, CONSULTANTS & STREETLIGHT DESIGN
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SHEET:	2 OF: 4

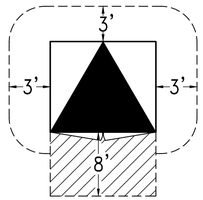
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WORKSPACE & EASEMENT REQUIREMENTS

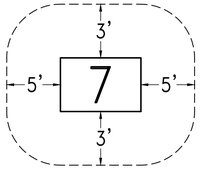
MAINTAIN A CLEAR AND LEVEL WORKSPACE AS SHOWN (N.T.S), PER PG&E DOCUMENT 051122.
MAINTAIN 20' UNOBSTRUCTED OVERHEAD CLEARANCE U.N.O.



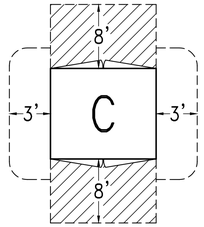
UCD TRANSFORMER VAULTS



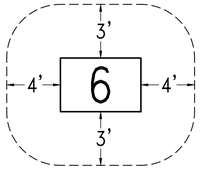
PAD-MOUNTED TRANSFORMERS



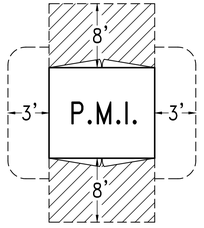
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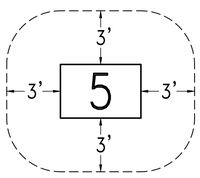
PAD-MOUNTED CAPACITORS



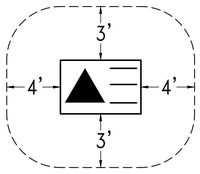
#6 VAULTS



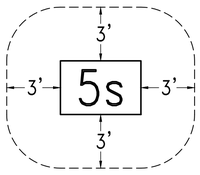
PAD-MOUNTED INTERRUPTERS



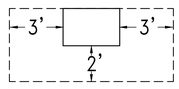
#5 VAULTS



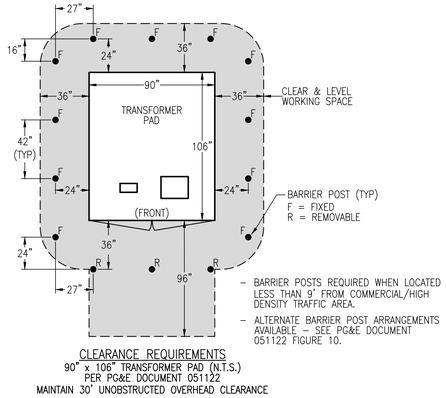
SUBSURFACE TRANSFORMERS



#5S VAULTS

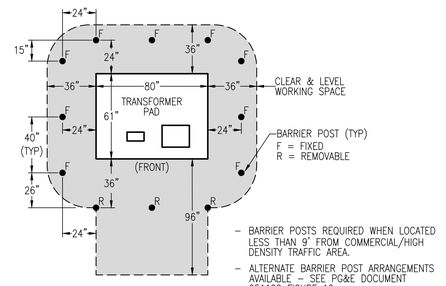


#1,#2 OR #3 SECONDARY BOXES



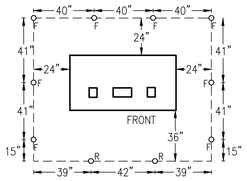
- BARRIER POSTS REQUIRED WHEN LOCATED LESS THAN 9' FROM COMMERCIAL/HIGH DENSITY TRAFFIC AREA.
- ALTERNATE BARRIER POST ARRANGEMENTS AVAILABLE – SEE PG&E DOCUMENT 051122 FIGURE 10.

CLEARANCE REQUIREMENTS
90" x 106" TRANSFORMER PAD (N.T.S.)
PER PG&E DOCUMENT 051122
MAINTAIN 30' UNOBSTRUCTED OVERHEAD CLEARANCE



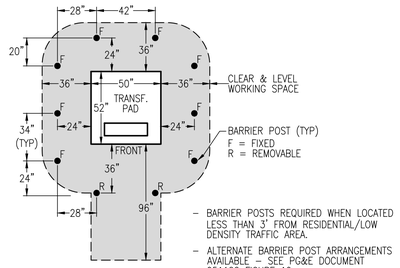
- BARRIER POSTS REQUIRED WHEN LOCATED LESS THAN 9' FROM COMMERCIAL/HIGH DENSITY TRAFFIC AREA.
- ALTERNATE BARRIER POST ARRANGEMENTS AVAILABLE – SEE PG&E DOCUMENT 051122 FIGURE 10.

CLEARANCE REQUIREMENTS
80" x 61" TRANSFORMER PAD (N.T.S.)
PER PG&E DOCUMENT 051122



F = FIXED
R = REMOVABLE

72" X 36" PAD MOUNT JUNCTION



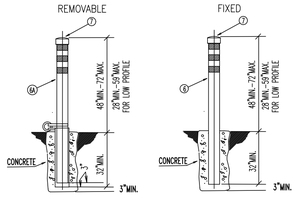
- BARRIER POSTS REQUIRED WHEN LOCATED LESS THAN 3' FROM RESIDENTIAL/LOW DENSITY TRAFFIC AREA.
- ALTERNATE BARRIER POST ARRANGEMENTS AVAILABLE – SEE PG&E DOCUMENT 051122 FIGURE 10.

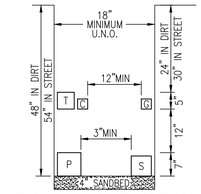
CLEARANCE REQUIREMENTS
50" x 52" TRANSFORMER PAD (N.T.S.)
PER PG&E DOCUMENT 051122

BARRIER POSTS NOTE:

BARRIER POSTS TO BE INSTALLED AS REQUIRED IF CLEARANCES NOTED IN GREEN BOOK SECTION 5, DWG. 051122, SHT. 2, NOTE 9.B. CANNOT BE ATTAINED.

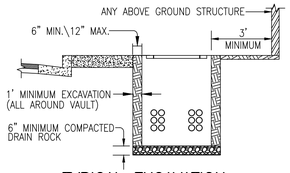
BARRIER POST DETAIL





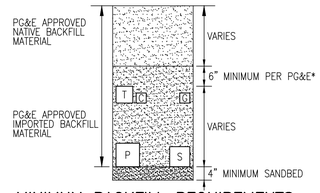
TYPICAL JOINT TRENCH

PER PG&E STANDARD S5453, EXHIBIT B



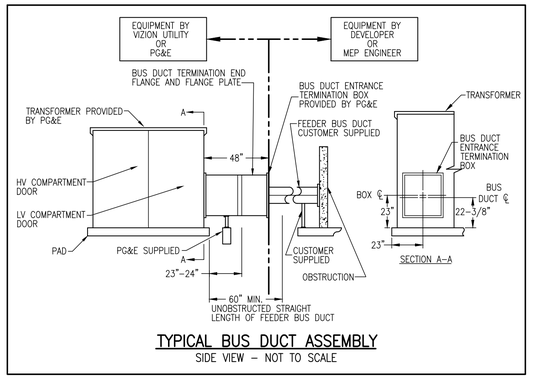
TYPICAL EXCAVATION:

FOR PG&E PRIMARY VAULTS, TRANSFORMERS, U.N.O.



MINIMUM BACKFILL REQUIREMENTS

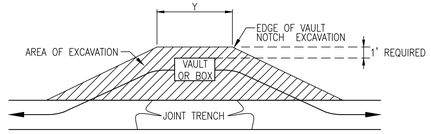
*CHECK WITH LOCAL GOVERNING AGENCIES FOR POSSIBLE VARIATIONS



TYPICAL BUS DUCT ASSEMBLY

SIDE VIEW – NOT TO SCALE

NOTE:
DO NOT INSTALL THE TRANSFORMER PAD UNTIL BUS DUCT ALIGNMENT IS CONFIRMED WITH ELECTRIC PANEL INSTALLER. SEE PG&E DOCUMENT 063929 FOR UTILITY COMPANY REQUIREMENTS.



	BOX EXCAVATION	
PRIMARY BOX SIZE	"Y"	NOTE:
3' x 5'	7'	DISTANCE VARIES PER FIELD CONDITIONS
4'-6" x 8'-6"	11'	

TYPICAL PG&E PRIMARY BOX

EXCAVATION DETAIL

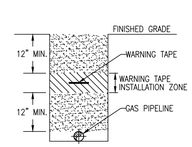
ELECTRIC CONDUIT MINIMUM BEND RADIUS

CONDUIT DIAMETER	VERTICAL RADIUS	HORIZONTAL RADIUS
2"	24"	36"
3"	24"	36"
4"	36"	36"
5"	36"	60"

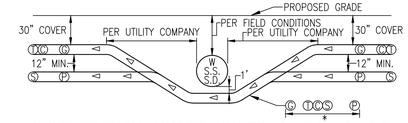
NOTE: 315° MAX BENDS IN ANY SECONDARY CONDUIT RUN 200' OR LESS.
300° MAX BENDS IN ANY PRIMARY CONDUIT RUN.

GAS PIPELINE UNDERGROUND WARNING TAPE NOTES:

1. A WARNING TAPE IS TO BE INSTALLED IN OPEN TRENCH INSTALLATION OVER GAS PIPELINES IN BOTH TRANSMISSION AND DISTRIBUTION FACILITIES. THIS INCLUDES TRENCHES, BELL HOLES, EXCAVATIONS FOR REPAIR PURPOSES AND RISER REPLACEMENTS. THE WARNING TAPE IS INTENDED FOR EXCAVATOR DIGGING IN THE "TOLERANCE ZONE" TO STRIKE THE WARNING TAPE PRIOR THAN THE PIPELINE. WHEN THE WARNING TAPE IS EXPOSED AND GRABBED WITH EXCAVATING EQUIPMENT, IT STRETCHES WITHOUT BREAKING, THUS ALERTING THE EXCAVATOR OF THE GAS FACILITY BELOW.
2. INSTALL 6" WIDE WARNING TAPE ABOVE THE GAS PIPELINE AT LEAST 12" BELOW GRADE, AND NO CLOSER THAN 12" FROM THE PIPE. INSTALLATION SHOULD PROVIDE THE GREATEST DISTANCE BETWEEN THE PIPELINE AND THE TAPE AS POSSIBLE. INSTALL THE TAPE ALONG THE LENGTH OF THE EXCAVATION. ENSURE THAT THE TAPE OVERLAPS WHEN TWO OR MORE PIECES OF TAPE ARE USED. EXCEPTION: WHEN A JOINT TRENCH DESIGN DOES NOT ALLOW FOR INSTALLMENT OF WARNING TAPE WITHIN THE "WARNING TAPE INSTALLATION ZONE", INSTALL THE WARNING TAPE A MINIMUM OF 6" ABOVE THE GAS PIPELINE, AND BELOW THE FACILITY ABOVE THE PIPE.
3. WARNING TAPE SHALL BE BRIGHTLY COLORED YELLOW AND MARKED "CAUTION: GAS LINE BURIED BELOW" OR MARKED WITH A SIMILAR NOTIFICATION.
4. WARNING TAPE SHALL BE STORED IN SUCH A MANNER THAT LIMITS ULTRAVIOLET (UV) EXPOSURE.

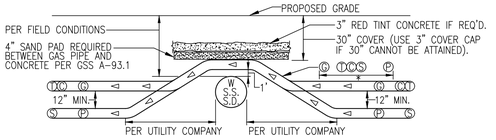


TYPICAL DETAIL
GAS PIPELINE UNDERGROUND WARNING TAPE INSTALLATION
(N.T.S.)



JOINT TRENCH UNDER WATER & S.S. & S.D.

*WIDTH PER SIZE & NUMBER OF EACH UTILITY. PG&E AND CITY INSPECTOR TO DETERMINE METHOD OF CROSSING.



JOINT TRENCH OVER WATER & S.S. & S.D

*WIDTH PER SIZE & NUMBER OF EACH UTILITY. PG&E AND CITY INSPECTOR TO DETERMINE METHOD OF CROSSING.

NOTE: TRENCH DEPTH NOT TO EXCEED 5' UNLESS APPROVED BY PG&E INSPECTOR. IN NO CASE SHOULD PLASTIC GAS PIPE BE INSTALLED AT A DEPTH GREATER THAN 10' UNLESS APPROVED BY PG&E SENIOR GAS ENGINEER.

TRENCHING CONTRACTOR SHALL NOT ASSUME THAT EITHER OF THE ABOVE DETAILS WILL BE ACCEPTABLE TO PG&E. YOU ARE REQUIRED TO CONTACT THE LOCAL PG&E ENGINEERING OFFICE WITH ANY ISSUE RELATING TO COVERS LESS THAN MINIMUM OR COVERS REQUIRING SHORING. CONCRETE CAPPING IS ONLY ACCEPTABLE WHERE NO OTHER SOLUTION IS POSSIBLE AND ONLY WHEN CERTAIN CRITERIA ARE MET AND ONLY WITH PG&E APPROVAL.

NOTE:
PRIOR TO ENERGIZING THIS PROJECT
A PSE/PUE WILL NEED TO BE RECORDED FOR ALL UTILITIES WITHIN THIS PROJECT. INCLUDING THE "WORKING SPACE" REQUIRED AROUND ALL EQUIPMENT.

DATE:
REVISION
DELTA NO:

CALL 811 BEFORE YOU DIG
811 UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER
DAVID B. VOORHIS
No. 26429
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA
DATE OF SIGNATURE

CALIFORNIA

JOINT TRENCH DETAILS
8875 MURRAY AVE
RULE 15/16 PHASE 1
HIGHLY VISUAL

GILROY

Vizion Utility
PLANNERS
UTILITY ENGINEERS, CONSULTANTS & STREETLIGHT DESIGN
7901 STONERIDGE DRIVE, SUITE 270 PLEASANTON, CA 94588
PH: (925) 882-1114

PROJ. NO:	22-289
SCALE:	N.T.S
PM:	K. ARATA
DRAWN BY:	R. FALCÓN
PG&E QUALIFIED DESIGNER:	M. WEBB
LAST UPDATED:	10-28-2024
DRAWING NO:	JT PH1-3
SHEET:	3 OF: 4

\\192.168.213.10\company_shared\Dropbox\projects\2022\22-289 8875 Murray Avenue, Gilroy\Vizion Work\MS 22-289-JT.dwg, 11/5/2024 8:22:24 AM, AutoCAD PDF (General Documentation).pc3

KISHIMURA DR

FOREST ST

FOREST ST

LINCOLN CT

KENNEDY CT

GAVILAN CT

MADISON CT

GARFIELD CT

MURRAY AVE

MURRAY AVE

8899 MURRAY AVE

8855 MURRAY AVE

8875 MURRAY AVE
GILROY, CA 95020
3 COMMERCIAL BUILDINGS
110,000 SQ. FT

PHASE 1

PHASE 2

PHASE 3

DRIVE AISLE A

DRIVE AISLE A

DRIVE AISLE B

DRIVE AISLE B

DRIVE AISLE C

DRIVE AISLE D

DRIVE AISLE D

DRIVE AISLE E

DRIVE AISLE F

STUB SPARE CONDUIT FOR PHASE 2 & 3

STUB SPARE CONDUIT FOR PHASE 2 & 3

MSB–
ELECTRIC 2000A
277/480V, ~5~W
DEMAND = ___ KVA
METERS:
___ RESIDENTIAL
HOUSE
___ COMMERCIAL
___ OTHER

PHONE
CATV
FIBER

EXISTING JOINT TRENCH
(PER PG&E GAS RECORD MAP)

PROPOSED TIE INTO EXISTING
ELECTRIC SPARE LINE

4' x 6'-6" x 5'
3-WAY J-BOX (PG&E)

CAUTION!! EXISTING GAS LINE IN VICINITY.
EXERCISE EXTREME CAUTION WHEN WORKING
AROUND GAS MAIN LINES. HAND EXCAVATE
ONLY IN THE PRESENCE OF THE INSPECTOR.

48" x 48" INTERRUPTER SWITCH
(PG&E) WORKING SPACE SHOWN

72" x 36" PAD MOUNT
4-WAY JUNCTION (PG&E)

3' x 5' x 3'-6" SPLICE BOX (PG&E)
WORKING SPACE SHOWN

EXISTING OH LINE
TO BE UNDERGROUNDED
DURING PHASE 2 AND 3

EXISTING OH LINE

EXISTING OH LINE
TO REMAIN

EXISTING GAS LINE

EXISTING JOINT POLE
TO REMAIN

EXISTING JOINT POLE
TO REMAIN

EXISTING JOINT POLE
TO REMAIN

EXISTING JOINT POLE
TO REMAIN

EXISTING JOINT POLE
TO REMAIN

EXISTING JOINT POLE
TO REMAIN

EXISTING JOINT POLE
TO REMAIN

OH

COM

HO

LEGEND

- JOINT TRENCH
- 108" x 90" TRANSFORMER PAD (PG&E) WORKING SPACE SHOWN MAINTAIN 35' UNOBSTRUCTED OVERHEAD CLEARANCE OVER TRANSFORMER PAD
- 5' x 5' x 3'-6" SPLICE BOX (PG&E) WORKING SPACE SHOWN
- 4' x 6'-6" x 5' SPLICE BOX (PG&E) WORKING SPACE SHOWN MAINTAIN 25' UNOBSTRUCTED OVERHEAD CLEARANCE OVER BOX
- 72" x 36" PAD MOUNT JUNCTION (PG&E) WORKING SPACE SHOWN, BOLLARD PROTECTION PER ELECTRIC CONSTRUCTION SKETCH
- 48" x 48" INTERRUPTER SWITCH (PG&E) WORKING SPACE SHOWN, BOLLARD PROTECTION PER ELECTRIC CONSTRUCTION SKETCH
- NEW POLE
- G — EXISTING GAS TO REMAIN.
- E — EXISTING ELECTRIC TO REMAIN
- COM — EX. O.H. COMMUNICATION LINE ONLY TO BE REMOVED
- OH — EX. O.H. LINE TO REMAIN

PRELIMINARY
NOT FOR CONSTRUCTION

NOTE:
PRIOR TO ENERGIZING THIS PROJECT
A PSE/PUE WILL NEED TO BE RECORDED FOR ALL UTILITIES WITHIN THIS PROJECT. INCLUDING THE "WORKING SPACE" REQUIRED AROUND ALL EQUIPMENT. THE AREA MUST ALSO BE LEVEL.

SUBSTRUCTURE LOCATIONS MUST BE STAKED BY A LICENSED SURVEYOR PRIOR TO CONSTRUCTION. SEE CONSTRUCTION NOTES ON JOINT TRENCH NOTES SHEET (JT–2) REGARDING EXISTING CONDITIONS.

THIS IS NOT A BID DOCUMENT
THIS DRAWING HAS NOT YET BEEN REVIEWED BY UTILITY COMPANIES AND IS SUBJECT TO CHANGE.

UTILITIES:
PLEASE CONFIRM TIE IN LOCATIONS

NOTE:
BOX PADS AND CONDUIT TO BE INSTALLED DURING PHASE 1 WORK FOR FUTURE PHASES.

N

0 25 50 100

DATE:
REVISION:
DELTA NO:

CALL 811 BEFORE YOU DIG
811 UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER
DAVID B. VOORHIS
No. 26429
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA
DATE OF SIGNATURE

JOINT TRENCH INTENT
8875 MURRAY AVE
RULE 15/16 PHASE 1
HIGHLY VISUAL
GILROY CALIFORNIA

Vizion Utility PARTNERS
UTILITY ENGINEERS, CONSULTANTS & STREETLIGHT DESIGN
7901 STONERIDGE DRIVE, SUITE 290 PLEASANTON, CA 94588
TEL: (925) 800.1114

PROJ. NO: 22-289
SCALE: 1" = 50'
PM: K. ARATA
DRAWN BY: R. FALCÓN
PG&E QUALIFIED DESIGNER: M. WEBB
LAST UPDATED: 10-28-2024
DRAWING NO: JT PH1-4
SHEET: 4 OF: 4

8875 MURRAY AVE

GILROY, CALIFORNIA

PHASE 2 & 3

DEVELOPER:
HIGHLY VISUAL
8840 FOREST ST.
GILROY, CA 95020
JUSTIN MARC HERTEL
T: 408-309-9004
E: JUSTIN@HEATWAVEVISUAL.COM

PG&E PM#S:
ELECTRIC:
GAS:

DESIGN CHANGE COMPONENT
ANY CHANGES TO THIS DESIGN MUST BE APPROVED BY

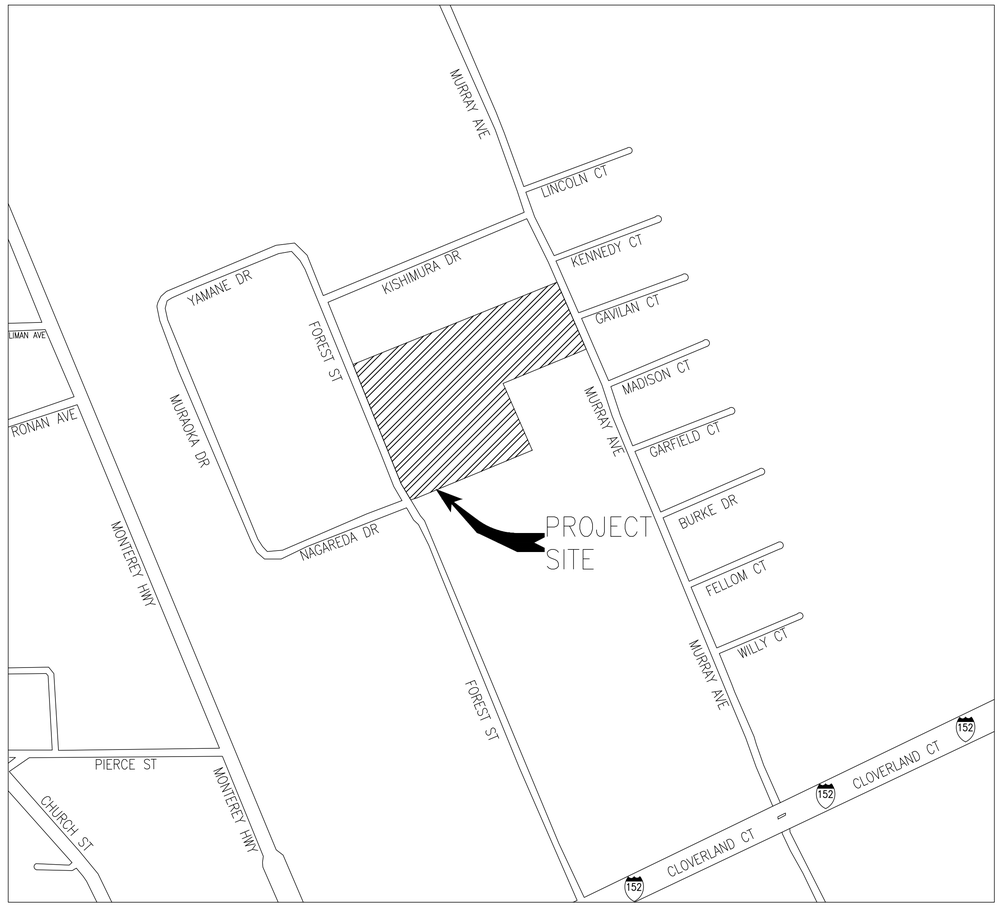
PG&E GAS ADE | PHONE NUMBER

WORK RESPONSIBILITY
JOINT TRENCH

	PG&E ELECTRIC	PG&E GAS	TELEPHONE	C.A.T.V.	CONTRACTOR
TRENCHING					
EXCAVATE & BACKFILL	○	○	○	○	●
GAS MATERIAL					
SUPPLY & INSTALL	○	●	○	○	○
*ELECTRIC CABLE					
SUPPLY & INSTALL	○	○	○	○	●
ELECTRIC CONDUIT					
SUPPLY & INSTALL	○	○	○	○	●
ELECTRIC BOXES					
SUPPLY & INSTALL	○	○	○	○	●
EXCAVATION	○	○	○	○	●
ELECTRIC TRANSFORMER PADS					
SUPPLY & INSTALL	○	○	○	○	●
EXCAVATION	○	○	○	○	●
ELECTRIC TRANSFORMER					
SUPPLY & INSTALL	○	○	○	○	●
TELEPHONE CONDUIT					
SUPPLY & INSTALL	○	○	○	○	○
TELEPHONE CABLE					
SUPPLY & INSTALL	○	○	○	○	○
TELEPHONE SPLICE BOXES					
SUPPLY & INSTALL	○	○	○	○	○
EXCAVATION	○	○	○	○	○
TELEPHONE S.A.I. PAD					
SUPPLY & INSTALL	○	○	○	○	○
EXCAVATION	○	○	○	○	○
C.A.T.V. CONDUIT					
SUPPLY & INSTALL	○	○	○	○	○
C.A.T.V. SPLICE BOXES					
SUPPLY & INSTALL	○	○	○	○	○
EXCAVATION	○	○	○	○	○
C.L.E.C. FIBER CONDUIT					
SUPPLY & INSTALL	○	○	○	○	○
C.L.E.C. FIBER SPLICE BOXES					
SUPPLY & INSTALL	○	○	○	○	○
EXCAVATION	○	○	○	○	○
(OPTIONAL) DIRECTIONAL DRILL / JACK AND BORE					
SUPPLY & INSTALL CONDUIT	○	○	○	○	○
EXCAVATION	○	○	○	○	○

● SYMBOL DESIGNATES THE WORK TO BE PERFORMED BY THE RESPECTIVE CONTRACTOR & UTILITY COMPANIES.
○ NOT APPLICABLE UNLESS OTHERWISE SPECIFIED
* PG&E TO PULL CABLE INTO ENERGIZED ENCLOSURES

NOTE:
PRIOR TO ENERGIZING THIS PROJECT
A PSE/PUE WILL NEED TO BE RECORDED FOR ALL UTILITIES WITHIN THIS PROJECT. INCLUDING THE "WORKING SPACE" REQUIRED AROUND ALL EQUIPMENT.



VICINITY MAP
N. T. S.

SUBSTRUCTURE VERIFICATION STAMP

DEVELOPER NOTE AND SIGN

ALL PG&E ENCLOSURES AND BOXES HAVE BEEN SET TO GRADE ACCORDING TO GRADE STAKES PROVIDED BY DEVELOPERS ENGINEER. ALL COSTS TO RELOCATE OR RE-ADJUST BOXES AT A LATER DATE WILL BE BILLED TO THE DEVELOPER. PLEASE HAVE YOUR SUPT. VERIFY THE CORRECT GRADE OF ALL ENCLOSURES OR BOXES, AND SIGN AND DATE DRAWING.

THANK YOU

SIGNED _____

DATE _____

THESE PLANS WERE PREPARED IN CONJUNCTION WITH THE FOLLOWING PLANS:

	RECEIVED	APPROVED
CIVIL IMPROVEMENT PLANS/GRADING PLANS	01-03-2023	PRELIMINARY
ARCHITECTURAL ELECTRONIC FILE	12-22-2022	PRELIMINARY
APPLICANT DESIGN (GAS)		
APPLICANT DESIGN (ELECTRIC)		
TELEPHONE		
C.A.T.V.		
LANDSCAPE	01-19-2023	PRELIMINARY
LIGHT LOCATIONS		
TRAFFIC SIGNAL LOCATIONS		

VIZION UTILITY PARTNERS IS NOT RESPONSIBLE FOR ANY SUBSEQUENT CHANGES OR REVISIONS.
OTHER UTILITIES SHOWN ARE APPROXIMATE AND BASED ON FIELD SURVEY AND AVAILABLE UTILITY INFORMATION. IT IS THE CONTRACTORS' RESPONSIBILITY TO VERIFY THE ACTUAL LOCATION AND EXTENT OF UTILITIES PRIOR TO THE COMMENCEMENT OF WORK. PHYSICAL VERIFICATION OF UTILITY LOCATIONS SHALL BE PERFORMED BY CAREFUL PROBING OR HAND DIGGING IN ACCORDANCE WITH ARTICLE 6 OF THE CAL/OSHA CONSTRUCTION SAFETY ORDERS.

UTILITY APPROVALS

UTILITY	APPROVED BY	DATE
AT&T (PHONE)		
COMCAST (CATV)		
CITY ENGINEER		

SHEET INDEX

PH-1	JOINT TRENCH TITLE SHEET
PH-2	JOINT TRENCH NOTES
PH-3	JOINT TRENCH DETAILS
PH-4	JOINT TRENCH INTENT

DATE:
REVISION
DELTA NO:

CALL 811 BEFORE YOU DIG
USA UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER
DAVID B. VOORHIS
No. 26429
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA
DATE OF SIGNATURE

JOINT TRENCH TITLE SHEET
8875 MURRAY AVE
RULE 15/16 PHASE 2 & 3
HIGHLY VISUAL
GILROY
CALIFORNIA

Vizion Utility Partners
UTILITY ENGINEERS, CONSULTANTS & STREET LIGHT DESIGN
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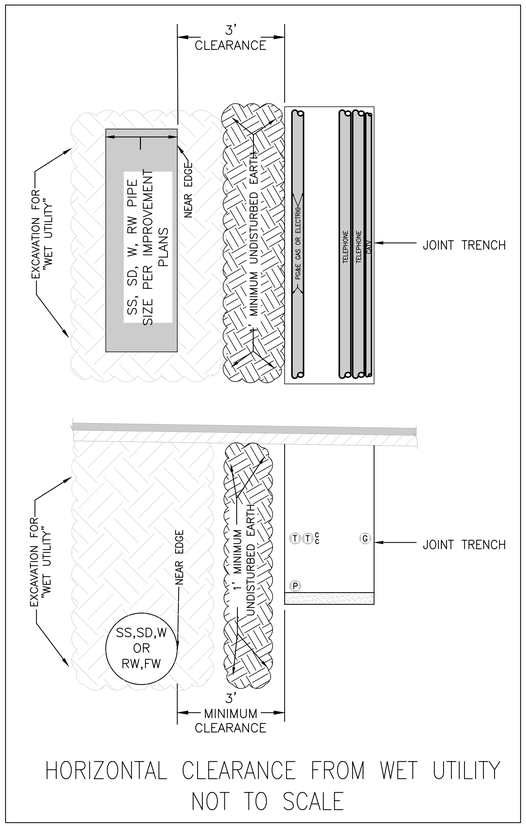
PROJ. NO: 22-289
SCALE: N.T.S.
PM: K. MENDOZA
DRAWN BY: R. FALCÓN
PG&E QUALIFIED DESIGNER: M. WEBB
LAST UPDATED: 10-28-2024
DRAWING NO: JT PH2&3-1
SHEET: 1 OF: 4

GENERAL NOTES:

1. THE PREFERRED TRENCH LOCATION IS IN A PUBLIC UTILITY EASEMENT (P.U.E.).
2. ALL DEPTHS AND RESULTING COVER REQUIREMENTS ARE MEASURED FROM FINAL GRADE.
3. COVER, CLEARANCES, AND SEPARATION SHALL BE AS GREAT AS PRACTICABLE UNDER THE CIRCUMSTANCES, BUT UNDER NO CIRCUMSTANCES SHALL BE LESS THAN THE MINIMUM COVER, CLEARANCE, AND SEPARATION REQUIREMENTS SET FORTH IN GENERAL ORDER 128 AND 49CFR 192.321 , 49CFR 192.325, AND 49CFR 192.327. ALL FACILITIES SHALL BE ANCHORED IN PLACE PRIOR TO COMPACTION, OR OTHER MEANS SHALL BE TAKEN TO ENSURE NO MOTION OF THE FACILITIES. DIMENSIONAL REQUIREMENTS FOR SHADING, LEVELING, AND BACKFILLING SHALL BE DETERMINED SUBSEQUENT TO COMPACTION.
4. TRENCH DIMENSIONS SHOWN ARE TYPICAL. TRENCH SIZES AND CONFIGURATIONS MAY VARY DEPENDING UPON OCCUPANCY AND/OR FIELD CONDITIONS. TRENCH SIZE AND CONFIGURATION MUST AT ALL TIMES BE CONSTRUCTED IN A MANNER THAT ENSURES PROPER CLEARANCES AND COVER REQUIREMENTS ARE MET. ANY "CHANGE" TO THE TRENCH WIDTH AND CONFIGURATIONS AS SHOWN IN THIS EXHIBIT MUST BE DESIGNED TO ENSURE THIS REQUIREMENT.
5. IT IS PREFERRED TO HAVE NON-PG&E OWNED STREETLIGHTS AT A LEVEL OTHER THAN THE GAS OR ELECTRIC LEVEL. NON-PG&E OWNED STREETLIGHTS MAY BE AT THE ELECTRIC LEVEL OF THE TRENCH AS LONG AS MINIMUM CLEARANCES ARE PROVIDED AND COMPLY WITH ALL SPECIAL NOTES FOR A JOINT TRENCH WITH A SECOND ELECTRIC UTILITY.
6. NON-UTILITY FACILITIES ARE NOT ALLOWED IN ANY JOINT UTILITY TRENCH, E.G., IRRIGATION CONTROL LINES, BUILDING FIRE ALARM SYSTEMS, PRIVATE TELEPHONE SYSTEMS, OUTDOOR ELECTRICAL CABLE, ETC.
7. WHEN COMMUNICATION DUCTS ARE INSTALLED, A MINIMUM OF 12" RADIAL SEPARATION SHALL BE MAINTAINED FROM GAS FACILITIES. EXCEPTION: WITH MUTUAL AGREEMENT, WHEN 4-INCH DIAMETER OR SMALLER GAS PIPE IS INSTALLED, THE SEPARATION MAY BE REDUCED TO NOT LESS THAN 6 INCHES.
8. PROVIDE SEPARATION FROM TRENCH WALL AND OTHER FACILITIES SUFFICIENT TO ENSURE PROPER COMPACTION.
9. MAINTAIN PROPER SEPARATION BETWEEN PG&E FACILITIES AND "WET" UTILITY LINES AS DESCRIBED IN UO STANDARD S5453. THE MINIMUM ALLOWABLE HORIZONTAL SEPARATION BETWEEN COMPANY FACILITIES AND "WET" FACILITIES IS 3" WITH A MINIMUM 1" OF UNDISTURBED EARTH OR THE INSTALLATION OF A SUITABLE BARRIER BETWEEN THE FACILITIES. IF A 3" HORIZONTAL SEPARATION CANNOT BE ATTAINED BETWEEN "WET" UTILITIES AND COMPANY DRY FACILITIES, A VARIANCE MAY BE APPROVED BY THE LOCAL INSPECTION SUPERVISOR AND SUBMITTED TO THE SERVICE PLANNING SUPPORT PROGRAM MANAGER FOR APPROVAL. SEPARATIONS OF 1" OR LESS ARE NOT PERMISSIBLE AND WILL NOT BE ALLOWED. THE COMPANY MAY AGREE TO WAIVE THE MINIMUM 3" SEPARATION REQUIREMENT AT THE REQUEST OF AN APPLICANT IF WARRANTED AND THE NEED IS JUSTIFIED. THE REQUEST FOR A WAIVER MUST:
   - BE MADE IN WRITING AND SUBMITTED TO THE COMPANY ADE DURING THE PLANNING AND DESIGN PHASE OF THE PROJECT,
   - CLEARLY DESCRIBE THE CONDITIONS NECESSITATING THE WAIVER,
   - INCLUDE A PROPOSED DESIGN, AND INCLUDE A DESIGN FOR A BARRIER BETWEEN THE "WET" UTILITIES AND COMPANY DRY FACILITIES IN THE EVENT 1" OF UNDISTURBED EARTH CANNOT BE MAINTAINED. NOTE: DRAIN LINES CONNECTED TO DOWNSPOUTS ON BUILDINGS ARE CONSIDERED A "WET" UTILITY FOR THE PURPOSES OF THIS STANDARD.
10. SEPARATIONS SHALL BE MAINTAINED AT ABOVE GROUND TERMINATION POINTS.
11. PROCEDURES FOR APPROVING NATIVE BACKFILL FOR SHADING OF PG&E GAS FACILITIES:
    - RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF 3 LOCATIONS PER 1,000' OF TRENCH. 100% OF THE SAMPLE MUST PASS THROUGH A 1/2" SIEVE AND 75% MUST PASS THROUGH A #4 SCREEN. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND ARE TO BE TAKEN AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE.
    - THE SOILS MUST NOT CONTAIN ANY ROCKS THAT HAVE SHARP EDGES OR THAT MAY OTHERWISE BE ABRASIVE.
    - THE SOILS MUST NOT CONTAIN CLODS LARGER THAN 1/2" IF TO BE USED AS SHADING, BEDDING, OR LEVELING MATERIALS.
    - COMPACTION REQUIREMENTS MUST MEET ANY APPLICABLE PG&E, FEDERAL, STATE, COUNTY, OR LOCAL REQUIREMENTS.
    - AT NO TIME SHALL THE OVER SATURATION OF NATIVE SOILS BE USED TO ACHIEVE THESE REQUIREMENTS.
    - THE SIEVES AND SCREENS SHALL BE:
      1/2" SIEVE: 8" DIAMETER BY 2" DEEP, STAINLESS STEEL MESH SCREEN.
      #4 SCREEN: 8" DIAMETER BY 2" DEEP, STAINLESS STEEL MESH SCREEN.
12. PROCEDURES FOR APPROVING NATIVE BACKFILL FOR SHADING AT PG&E ELECTRIC FACILITIES:
    - RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF 3 LOCATIONS PER 1,000' OF TRENCH. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND ARE TO BE TAKEN AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE.
    - SHADING MATERIAL CONTAINING LARGE ROCK, PAVING MATERIAL, CINDERS, SHARPLY ANGULAR SUBSTANCES, OR CORROSIVE MATERIAL SHALL NOT BE PLACED IN THE TRENCH WHERE SUCH MATERIAL MAY DAMAGE THE CONDUITS AND/OR PREVENT PROPER COMPACTION OVER OR AROUND THE CONDUITS.
    - NATIVE SOILS CONTAINING CLODS NOT TO EXCEED 6" IN DIAMETER MAY BE INCLUDED IN THE SHADING MATERIAL PROVIDED THE CLODS ARE READILY BREAKABLE BY HAND. NOTE: SOILS CONSISTING PRIMARILY OF ADOBE, HARD COMPACT (DENSE) CLAY, AND BAY MUDS SHALL NOT BE USED AS SHADING MATERIAL.
    - AT NO TIME SHALL THE OVER SATURATION OF NATIVE SOILS BE USED TO ACHIEVE THESE REQUIREMENTS.
    - REFER TO ENGINEERING DOCUMENT 062288, ITEM 13 ON PAGE 2.
13. COMPETENT NATIVE SOILS ARE PREFERRED TO BE USED FOR SHADING, BEDDING, AND BACKFILLING THROUGHOUT THE TRENCH.
    - WHERE NATIVE SOILS EXCEED 1/2" MINUS AND/OR WHERE GAS IS TO BE PLACED AT THE BOTTOM OF A TRENCH IN AREAS THAT EXCEED 1/2" MINUS SOIL CONDITIONS, OR WHERE THE BOTTOM OF A TRENCH IS CONSIDERED TO CONSIST OF HARD PAN, PG&E APPROVED 1/2" MINUS IMPORT MATERIAL SHALL BE USED FOR SHADING AND/OR BEDDING OF GAS FACILITIES.
    - PG&E APPROVED IMPORT MATERIAL IS PER CGT ENGINEERING GUIDELINE 4123.
    - IF A LEVELING COURSE IS REQUIRED FOR GAS FACILITIES, THE USE OF NATIVE SOILS IS PREFERRED, BUT IF 1/2" MINUS CONDITIONS ARE NOT ATTAINABLE WITH THE NATIVE SOILS, THEN THE USE OF PG&E APPROVED IMPORT MATERIALS IS REQUIRED. BEDDING UNDER GAS FACILITIES WILL BE A MINIMUM OF 2" OF COMPACTED 1/2" MINUS NATIVE SOILS OR PG&E APPROVED IMPORT MATERIAL.
    - FOR ELECTRIC FACILITIES, REFER TO NOTE 12. THIS APPLIES TO LEVELING COURSES AS WELL AS SHADING.
    - THE MINIMUM PG&E APPROVED BEDDING MATERIAL MAY BE INCREASED AT THE DISCRETION OF PG&E WHEN WARRANTED BY EXISTING FIELD CONDITIONS (E.G., ROCKY SOILS, HARD PAN, ETC.).
    - THE USE OF ANY IMPORTED MATERIAL FOR BACKFILLING PURPOSES SHALL BE LIMITED TO THOSE SITUATIONS WHEN NATIVE SOILS DO NOT ALLOW FOR REQUIRED COMPACTION.
14. THE APPLICANT IS RESPONSIBLE FOR THE REMOVAL OF EXCESS SPOIL AND ASSOCIATED COSTS.
15. SEPARATION BETWEEN GAS FACILITIES AND ELECTRIC FACILITIES MAY BE REDUCED TO 6" WHEN CROSSING.
16. SERVICE SADDLES ARE THE PREFERRED SERVICE FITTINGS FOR USE THROUGHOUT THE JOINT TRENCH PROJECT. ALL PROJECTS WILL BE DESIGNED AND ESTIMATED USING SERVICE SADDLES; HOWEVER, SERVICE TEES MAY BE USED IF ALL CLEARANCES, SEPARATION, AND COVERAGE REQUIREMENTS ARE MAINTAINED.
17. CONTRACTOR TO INCREASE METER SPACING AS NECESSARY WHEN EARTHQUAKE VALVES OR OTHER ADDITIONAL SAFETY EQUIPMENT ARE REQUIRED. EARTHQUAKE VALVES ARE REQUIRED IN SOME AREAS AND ARE NOT PART OF PG&E/VIZION UTILITY PARTNERS SCOPE. THIS INFORMATION CAN BE FOUND ON BUILDING MECHANICAL ENGINEER'S PLANS. PG&E STANDARD METER SPACING REQUIREMENTS DO NOT INCLUDE CLEARANCE FOR EARTHQUAKE VALVES.

CONSTRUCTION NOTES:

1. ALL TRENCHING, BACKFILLING AND INSTALLATION BY CONTRACTOR MUST COMPLY WITH PG&E UO STANDARD S5453 (EFFECTIVE DATE 7-5-2006).
2. ALL WORK MUST COMPLY WITH P.G. & E., TELEPHONE, C.A.T.V., STANDARDS AND PRACTICES. ALL WORK MUST BE INSPECTED AND APPROVED BY RESPECTIVE INSPECTORS. RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF THREE LOCATIONS PER 1,000' OF TRENCH. 100% OF THE SAMPLE MUST PASS THROUGH A ½" SIEVE AND 75% MUST PASS THROUGH A #4 SCREEN. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND IS TO BE AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE. THE SOILS MUST NOT CONTAIN ANY ROCKS THAT HAVE SHARP EDGES OR THAT MAY OTHERWISE BE ABRASIVE. THE SOILS MUST NOT CONTAIN CLODS LARGER THAN ½" IF TO BE USED AS SHADING, BEDDING OR LEVELING MATERIALS. COMPACTION REQUIREMENTS MUST MEET ANY APPLICABLE P.G.& E. FEDERAL, STATE, COUNTY OR LOCAL REQUIREMENTS. ANY NATIVE SOILS OR IMPORT MATERIALS USED MUST NOT HINDER THOSE EFFORTS.
3. BACKFILL SHALL BE APPROVED BY THE UTILITY COMPANIES AND THE CITY. COMPACTION WILL BE TESTED AND PASSED BY THE SOILS ENGINEER.
4. IF SOIL IS NOT ROCK FREE, ADD 4" DEPTH OF TRENCH FOR SAND BEDDING.
5. VERIFY SPLICE BOX EXCAVATION SIZES WITH SUPPLIER(S).
6. THE TRENCHING CONTRACTOR SHALL COORDINATE THE UTILITY COMPANIES' INSTALLATION. THE TRENCHING CONTRACTOR TO PLACE CONNECTING CONDUIT WITHIN 5' OF BUILDING EXTERIOR WALL.
7. CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE PROJECT IMPROVEMENT PLANS AND CONDUCT HIS WORK ACCORDINGLY.
8. IT IS THE TRENCHING CONTRACTOR'S RESPONSIBILITY TO PROTECT IN PLACE ALL EXISTING FACILITIES. NO EXTRA PAYMENT WILL BE CONSIDERED FOR CROSSING OTHER SYSTEMS.
9. VIZION UTILITY PARTNERS ASSUMES NO RESPONSIBILITY FOR THE PROJECT CONDITIONS. THESE DRAWINGS WERE PREPARED USING DATA SUPPLIED BY PG&E, TELEPHONE, C.A.T.V., IMPROVEMENT PLANS AND THE CITY'S VARIOUS "AS BUILT" INFORMATION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PHYSICALLY REVIEW THE PROJECT PRIOR TO SUBMITTING HIS BID.
10. CONTRACTOR WILL COMPLY WITH ALL LAWS, ORDINANCES AND REGULATIONS. CONTRACTOR SHALL BE FAMILIAR WITH O.S.H.A., INDUSTRIAL SAFETY ORDERS AND SHALL CONDUCT HIS WORK ACCORDINGLY. WHEN WORKING NEAR ENERGIZED OR "HOT" EQUIPMENT, THE UTILITY OWNER SHALL BE NOTIFIED TO SUPPLY THE APPROPRIATE MAN POWER. PUBLIC SAFETY AND TRAFFIC CONTROL MEASURES ARE THE CONTRACTOR'S RESPONSIBILITY.
11. THE CONTRACTOR SHALL PROTECT CONSTRUCTION STAKING. HE SHALL COORDINATE STAKING WITH THE PROJECT'S CIVIL ENGINEER.
12. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) TWO WORKING DAYS PRIOR TO START OF WORK.
13. CONTRACTOR SHALL NOTIFY INSPECTORS OF ANY POTENTIAL CONFLICTS PRIOR TO START OF WORK.
14. THIS PLAN IS TO BE USED FOR SOLE PURPOSE OF DIGGING THE JOINT TRENCH. SEE PG&E, AT&T, AND COMCAST PLANS FOR EXACT SIZE AND NUMBER OF CONDUITS INSTALLED IN THE JOINT TRENCH. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE CORRECT NUMBER, SIZE AND TYPES OF CONDUITS ARE INSTALLED PER THE ENGINEERED PLANS BY EACH UTILITY COMPANY.
15. NOTE PLANS ISSUED AT THE PRE-CONSTRUCTION MEETING MAY BE SUBJECT TO REVISIONS, IF FINAL PLANS FROM EACH UTILITY COMPANY WERE NOT AVAILABLE AT THE START OF CONSTRUCTION.
16. WATER, SEWER, DRAINS, SANITARY WASTE, FUELS (INCLUDING DIESEL AND GASOLINE), OIL, PROPANE AND OTHER VOLATILE HEAVIER THAN AIR GASES, SPRINKLER, IRRIGATION, STEAM AND OTHER "WET" FACILITIES SHALL MAINTAIN A MINIMUM OF THREE FEET FROM THE NEAREST OUTER SURFACE OF PG&E FACILITIES WITH NO LESS THAN ONE FOOT OF EARTH (SOIL BARRIER) BETWEEN THE ADJACENT SIDES OF THE INDIVIDUAL TRENCHES.
17. IN THE EXTRAORDINARY CASE THAT THE MINIMUM THREE FOOT HORIZONTAL SEPARATION CANNOT BE ATTAINED BETWEEN "WET" UTILITIES AND COMPANY DRY FACILITIES, A VARIANCE MAY APPROVED BY THE LOCAL INSPECTION SUPERVISOR AND SUBMITTED TO SERVICE PLANNING SUPPORT PROGRAM MANAGER FOR APPROVAL.
18. ALL METER PANELS: INDIVIDUAL, RESIDENTIAL, OR NONRESIDENTIAL APPLICANTS WITH A METER PANEL RATING OF ANY SIZE, INSTALLED INSIDE A METER ROOM OR OTHER STRUCTURE, MUST FOLLOW ALL OF THE REQUIREMENTS DESCRIBED BELOW.
    A. INSTALL, OWN, AND MAINTAIN A SEPARATE, NOMINAL, 2-INCH DIAMETER CONDUIT WITH PULL TAPE INSIDE. THE CONDUIT AND PULL TAPE MUST EXTEND FROM THE OUTSIDE SURFACE OF THE BUILDING AND TERMINATE OUTSIDE THE METER PANEL OR SWITCHBOARD AT THE TOP OF THE METER SECTION.
    B. ENSURE THE 2-INCH DIAMETER CONDUIT AND PULL TAPE EXIT THE OUTSIDE OF THE BUILDING A MINIMUM OF 8 FEET AND A MAXIMUM OF 10 FEET ABOVE GROUND. THE OPEN END OF THE CONDUIT THAT IS EXPOSED TO THE OUTSIDE MUST HAVE A REMOVABLE, TEMPORARY CAP OR PLUG.
    C. DO NOT USE THE CONDUIT. THE CONDUIT IS FOR PG&E'S METERING EQUIPMENT ONLY.
19. THIS JOINT TRENCH PLAN WAS PREPARED BASED ON TOPOGRAPHICAL SURVEY AS PROVIDED BY A CIVIL ENGINEER. THE CONTRACTOR IS CAUTIONED THAT EXPLORATORY WORK IS NECESSARY TO DETERMINE THE ACTUAL LOCATION OF ANY EXISTING UTILITY. V.U.P. STRONGLY RECOMMENDS THAT ALL UTILITIES BE PHYSICALLY LOCATED ON THE SITE BEFORE THE ONSET OF SITE WORK. SUBSTRUCTURE LOCATIONS MAY REQUIRE FIELD ADJUSTMENT TO COMPENSATE FOR ACTUAL EXISTING UTILITY LOCATIONS.
20. SUBSTRUCTURE LOCATIONS MUST BE STAKED BY A LICENSED SURVEYOR PRIOR TO CONSTRUCTION. SEE CONSTRUCTION NOTES ON JOINT TRENCH TITLE SHEET (JT-1) REGARDING EXISTING CONDITIONS.



HORIZONTAL CLEARANCE FROM WET UTILITY
NOT TO SCALE

LEGEND

TYPICAL

- JOINT TRENCH
- JOINT TRENCH SERVICE
- SD — STORM DRAIN
- G — GAS
- SS — SANITARY SEWER
- E — ELECTRICAL
- W — DOMESTIC WATER
- FW — WATER (FIRE)
- JT — JOINT TRENCH
- OH — OVERHEAD
- SI — SIGNAL INTERCONNECT
- T — TELEPHONE
- C — C.A.T.V.
- FO — FIBER OPTIC
- COM — COMMUNICATIONS
- SL — STREETLIGHT
- ATT — AT&T
- MCI — MCI
- FACE OF CURB, BACK OF CURB
- PROPERTY LINE
- CENTER LINE
- EASEMENT LINE
- x — FENCELINE
- BIOSWALE
- TIE-IN TO CONDUITS
- METER PEDESTAL
- AREA DRAIN
- CATCH BASIN
- DS — DOWNSPOUT
- FIRE HYDRANT
- (S) — SS MANHOLE
- cv — COMMUNICATIONS VAULT
- ev — ELECTRIC VAULT
- x 20.25 — SPOT ELEVATION

NEW

- PROPOSED JOINT TRENCH SERVICE RUN
- 106" x 90" TRANSFORMER PAD (PG&E) WORKING SPACE SHOWN
- 48" x 48" INTERRUPTER SWITCH (PG&E) WORKING SPACE SHOWN
- JOINT TRENCH SERVICE INSTALLED DURING PHASE 1
- 106" x 90" TRANSFORMER PAD (PG&E) WORKING SPACE SHOWN MAINTAIN 30' UNOBSTRUCTED OVERHEAD CLEARANCE OVER TRANSFORMER PAD (PHASE 1)
- 4' x 6'-6" x 5' SPLICE BOX (PG&E) WORKING SPACE SHOWN MAINTAIN 20' UNOBSTRUCTED OVERHEAD CLEARANCE OVER BOX (PHASE 1)
- 3' x 5' x 3'-6" SPLICE BOX (PG&E) WORKING SPACE SHOWN (PHASE 1)
- 48" x 48" INTERRUPTER SWITCH (PG&E) WORKING SPACE SHOWN (PHASE 1)
- 72" x 36" PAD MOUNT JUNCTION (PG&E) WORKING SPACE SHOWN (PHASE 1)

EXISTING

- JT — (E) JOINT TRENCH
- OH — (E) OVERHEAD LINE
- E — (E) ELECTRIC LINE
- G — (E) GAS LINE
- T — (E) PHONE LINE
- (E) PHONE VAULT
- (E) CATV VAULT
- (E) UTILITY VAULT
- (E) STREET LIGHT
- (E) STREET LIGHT BOX
- (E) ELECTRIC VAULT
- (E) JOINT POLE

ABBREVIATIONS

AD	AREA DRAIN	FOC	FACE OF CURB	(N)	NORTH	STD	STANDARD
APPROX	APPROXIMATE	FUT	FUTURE	NTS	NOT TO SCALE	STLT	STREET LIGHT
AVE	AVENUE	G	GAS	OH	OVERHEAD	SVC	SERVICES
BNDY	BOUNDARY	GND	GROUND	P	PAD	SW, S/W	SIDEWALK
C	CURB	I.D.	INNER DIAMETER	PKWY	PARKWAY	TC	TOP OF CURB
C/G	CURB & GUTTER	IRR	IRRIGATION	PL	PROPERTY LINE	TEL	TELEPHONE
CL, C/L	CENTER LINE	J.P.	JOINT POLE	PR	PROPOSED	TERM	TERMINATION
DR	DRIVE	LT	LEFT	PUE	PUBLIC UTILITY EASEMENT	THRU	THROUGH
DW/DWY	DRIVEWAY	M	MONUMENT	PVMT	PAVEMENT	TYP	TYPICAL
(E)	EAST	MCI	MCI, INC. COMPANY	RT	RIGHT	U.G.	UNDERGROUND
EL	ELEVATION	MH	MAINTENANCE HOLE	R/W	RIGHT OF WAY	VER	VERIZON
ELB	ELBOW	MIN	MINIMUM	S	SANITARY SEWER LATERAL	(W)	WEST
ELEC	ELECTRIC	MID PT	MID POINT	S.I.	SIGNAL INTERCONNECT	W	WATER
ELECT	ELECTROLIER	MPOE	MAIN POINT OF ENTRY	SS	SANITARY SEWERS	WM	WATER METER
EP	EDGE OF PAVEMENT	MSB	MAIN SWITCH BOARD	SSCO	SANITARY SEWER CLEAN OUT		
EX	EXISTING	MSS	MAIN SWITCH SIZE	SSMH	SANITARY SEWER MANHOLE		
FC	FACE OF CURB	MTR	METER				
FH	FIRE HYDRANT						

DELTA NO:	REVISION	DATE:

CALL 811 BEFORE YOU DIG
811 UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER
DAVID B. VOORHIS
No. 26429
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA
DATE OF SIGNATURE

JOINT TRENCH NOTES
8875 MURRAY AVE
RULE 15/16 PHASE 2 & 3
HIGHLY VISUAL
GILROY
CALIFORNIA

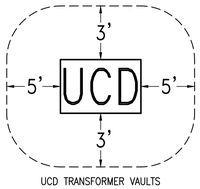
Vizion Utility PARTNERS
UTILITY ENGINEERS, CONSULTANTS & STREETLIGHT DESIGN
7901 STONERIDGE DRIVE, SUITE 270, PLEASANTON, CA 94588
PH: (925) 820-1114

PROJ. NO: 22-289
SCALE: N.T.S.
PM: K. MENDOZA
DRAWN BY: R. FALCÓN
PG&E QUALIFIED DESIGNER: M. WEBB
LAST UPDATED: 10-28-2024
DRAWING NO: JT PH2&3-2
SHEET: 2 OF: 4

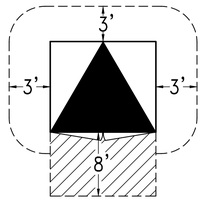
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WORKSPACE & EASEMENT REQUIREMENTS

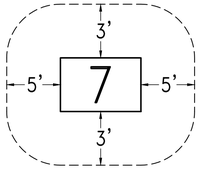
MAINTAIN A CLEAR AND LEVEL WORKSPACE AS SHOWN (N.T.S), PER PG&E DOCUMENT 051122.
MAINTAIN 20' UNOBSTRUCTED OVERHEAD CLEARANCE U.N.O.



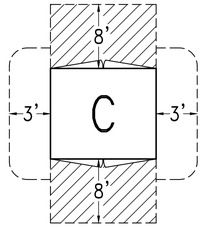
UCD TRANSFORMER VAULTS



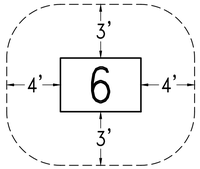
PAD-MOUNTED TRANSFORMERS



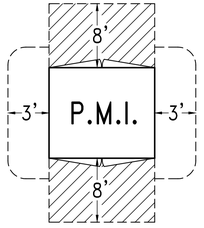
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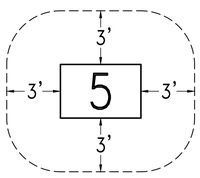
PAD-MOUNTED CAPACITORS



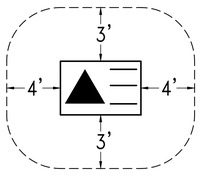
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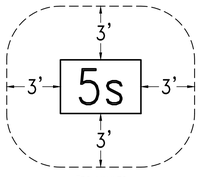
PAD-MOUNTED INTERRUPTERS



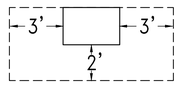
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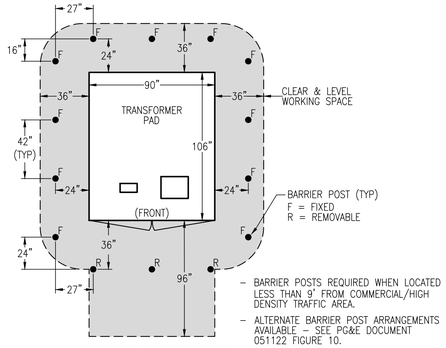
SUBSURFACE TRANSFORMERS



#5S VAULTS

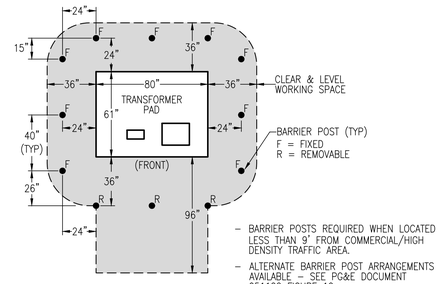


#1,#2 OR #3 SECONDARY BOXES



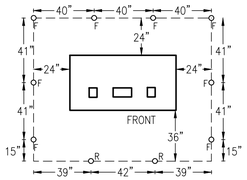
- BARRIER POSTS REQUIRED WHEN LOCATED LESS THAN 9' FROM COMMERCIAL/HIGH DENSITY TRAFFIC AREA.
- ALTERNATE BARRIER POST ARRANGEMENTS AVAILABLE – SEE PG&E DOCUMENT 051122 FIGURE 10.

CLEARANCE REQUIREMENTS
90" x 106" TRANSFORMER PAD (N.T.S.)
PER PG&E DOCUMENT 051122
MAINTAIN 30' UNOBSTRUCTED OVERHEAD CLEARANCE



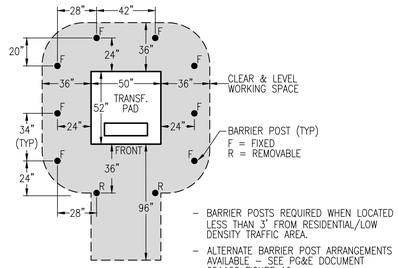
- BARRIER POSTS REQUIRED WHEN LOCATED LESS THAN 9' FROM COMMERCIAL/HIGH DENSITY TRAFFIC AREA.
- ALTERNATE BARRIER POST ARRANGEMENTS AVAILABLE – SEE PG&E DOCUMENT 051122 FIGURE 10.

CLEARANCE REQUIREMENTS
80" x 61" TRANSFORMER PAD (N.T.S.)
PER PG&E DOCUMENT 051122



F = FIXED
R = REMOVABLE

72" X 36" PAD MOUNT JUNCTION



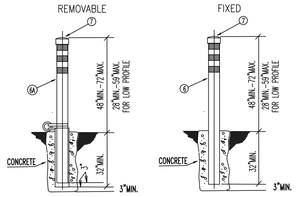
- BARRIER POSTS REQUIRED WHEN LOCATED LESS THAN 3' FROM RESIDENTIAL/LOW DENSITY TRAFFIC AREA.
- ALTERNATE BARRIER POST ARRANGEMENTS AVAILABLE – SEE PG&E DOCUMENT 051122 FIGURE 10.

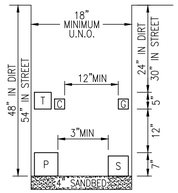
CLEARANCE REQUIREMENTS
50" x 52" TRANSFORMER PAD (N.T.S.)
PER PG&E DOCUMENT 051122

BARRIER POSTS NOTE:

BARRIER POSTS TO BE INSTALLED AS REQUIRED IF CLEARANCES NOTED IN GREEN BOOK SECTION 5, DWG. 051122, SHT. 2, NOTE 9.B. CANNOT BE ATTAINED.

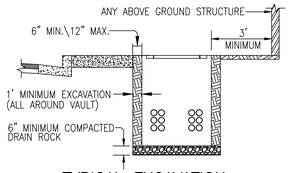
BARRIER POST DETAIL





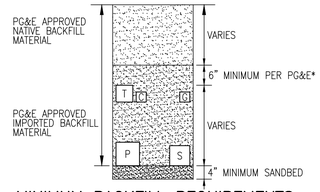
TYPICAL JOINT TRENCH

PER PG&E STANDARD S5453, EXHIBIT B



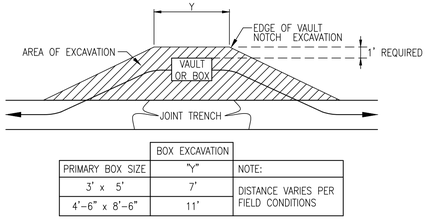
TYPICAL EXCAVATION:

FOR PG&E PRIMARY VAULTS, TRANSFORMERS, U.N.O.



MINIMUM BACKFILL REQUIREMENTS

*CHECK WITH LOCAL GOVERNING AGENCIES FOR POSSIBLE VARIATIONS



	BOX EXCAVATION	
PRIMARY BOX SIZE	"Y"	NOTE:
3' x 5'	7'	DISTANCE VARIES PER FIELD CONDITIONS
4'-6" x 8'-6"	11'	

TYPICAL PG&E PRIMARY BOX

EXCAVATION DETAIL

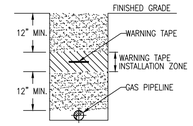
ELECTRIC CONDUIT MINIMUM BEND RADIUS

CONDUIT DIAMETER	VERTICAL RADIUS	HORIZONTAL RADIUS
2"	24"	36"
3"	24"	36"
4"	36"	36"
5"	36"	60"

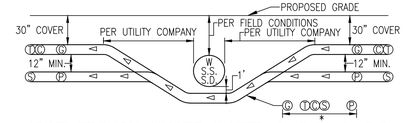
NOTE: 315° MAX BENDS IN ANY SECONDARY CONDUIT RUN 200' OR LESS.
300° MAX BENDS IN ANY PRIMARY CONDUIT RUN.

GAS PIPELINE UNDERGROUND WARNING TAPE NOTES:

1. A WARNING TAPE IS TO BE INSTALLED IN OPEN TRENCH INSTALLATION OVER GAS PIPELINES IN BOTH TRANSMISSION AND DISTRIBUTION FACILITIES. THIS INCLUDES TRENCHES, BELL HOLES, EXCAVATIONS FOR REPAIR PURPOSES AND RISER REPLACEMENTS. THE WARNING TAPE IS INTENDED FOR EXCAVATOR DIGGING IN THE "TOLERANCE ZONE" TO STRIKE THE WARNING TAPE PRIOR THAN THE PIPELINE. WHEN THE WARNING TAPE IS EXPOSED AND GRABBED WITH EXCAVATING EQUIPMENT, IT STRETCHES WITHOUT BREAKING, THUS ALERTING THE EXCAVATOR OF THE GAS FACILITY BELOW.
2. INSTALL 6" WIDE WARNING TAPE ABOVE THE GAS PIPELINE AT LEAST 12" BELOW GRADE, AND NO CLOSER THAN 12" FROM THE PIPE. INSTALLATION SHOULD PROVIDE THE GREATEST DISTANCE BETWEEN THE PIPELINE AND THE TAPE AS POSSIBLE. INSTALL THE TAPE ALONG THE LENGTH OF THE EXCAVATION. ENSURE THAT THE TAPE OVERLAPS WHEN TWO OR MORE PIECES OF TAPE ARE USED. EXCEPTION: WHEN A JOINT TRENCH DESIGN DOES NOT ALLOW FOR INSTALLMENT OF WARNING TAPE WITHIN THE "WARNING TAPE INSTALLATION ZONE", INSTALL THE WARNING TAPE A MINIMUM OF 6" ABOVE THE GAS PIPELINE, AND BELOW THE FACILITY ABOVE THE PIPE.
3. WARNING TAPE SHALL BE BRIGHTLY COLORED YELLOW AND MARKED "CAUTION: GAS LINE BURIED BELOW" OR MARKED WITH A SIMILAR NOTIFICATION.
4. WARNING TAPE SHALL BE STORED IN SUCH A MANNER THAT LIMITS ULTRAVIOLET (UV) EXPOSURE.

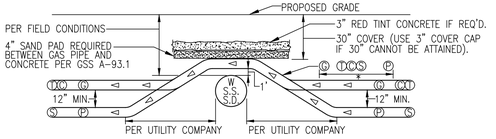


TYPICAL DETAIL
GAS PIPELINE UNDERGROUND WARNING TAPE INSTALLATION (N.T.S.)



JOINT TRENCH UNDER WATER & S.S. & S.D.

*WIDTH PER SIZE & NUMBER OF EACH UTILITY. PG&E AND CITY INSPECTOR TO DETERMINE METHOD OF CROSSING.

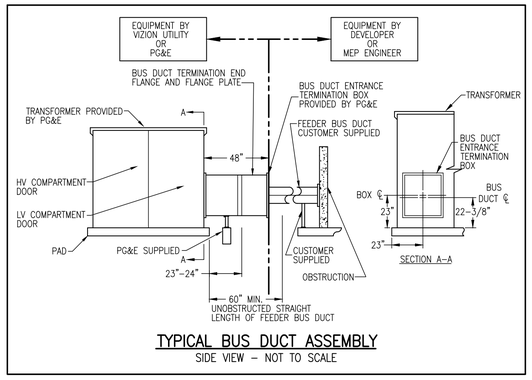


JOINT TRENCH OVER WATER & S.S. & S.D

*WIDTH PER SIZE & NUMBER OF EACH UTILITY. PG&E AND CITY INSPECTOR TO DETERMINE METHOD OF CROSSING.

NOTE: TRENCH DEPTH NOT TO EXCEED 5' UNLESS APPROVED BY PG&E INSPECTOR. IN NO CASE SHOULD PLASTIC GAS PIPE BE INSTALLED AT A DEPTH GREATER THAN 10' UNLESS APPROVED BY PG&E SENIOR GAS ENGINEER.

TRENCHING CONTRACTOR SHALL NOT ASSUME THAT EITHER OF THE ABOVE DETAILS WILL BE ACCEPTABLE TO PG&E. YOU ARE REQUIRED TO CONTACT THE LOCAL PG&E ENGINEERING OFFICE WITH ANY ISSUE RELATING TO COVERS LESS THAN MINIMUM OR COVERS REQUIRING SHORING. CONCRETE CAPPING IS ONLY ACCEPTABLE WHERE NO OTHER SOLUTION IS POSSIBLE AND ONLY WHEN CERTAIN CRITERIA ARE MET AND ONLY WITH PG&E APPROVAL.



TYPICAL BUS DUCT ASSEMBLY

SIDE VIEW – NOT TO SCALE

NOTE:
DO NOT INSTALL THE TRANSFORMER PAD UNTIL BUS DUCT ALIGNMENT IS CONFIRMED WITH ELECTRIC PANEL INSTALLER. SEE PG&E DOCUMENT 063929 FOR UTILITY COMPANY REQUIREMENTS.

NOTE:
PRIOR TO ENERGIZING THIS PROJECT
A PSE/PUE WILL NEED TO BE RECORDED FOR ALL UTILITIES WITHIN THIS PROJECT. INCLUDING THE "WORKING SPACE" REQUIRED AROUND ALL EQUIPMENT.

DATE:
REVISION
DELTA NO:

CALL 811 BEFORE YOU DIG
811 UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER
DAVID B. VOORHIS
No. 26429
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA
DATE OF SIGNATURE

JOINT TRENCH DETAILS
8875 MURRAY AVE
RULE 15/16 PHASE 2 & 3
HIGHLY VISUAL

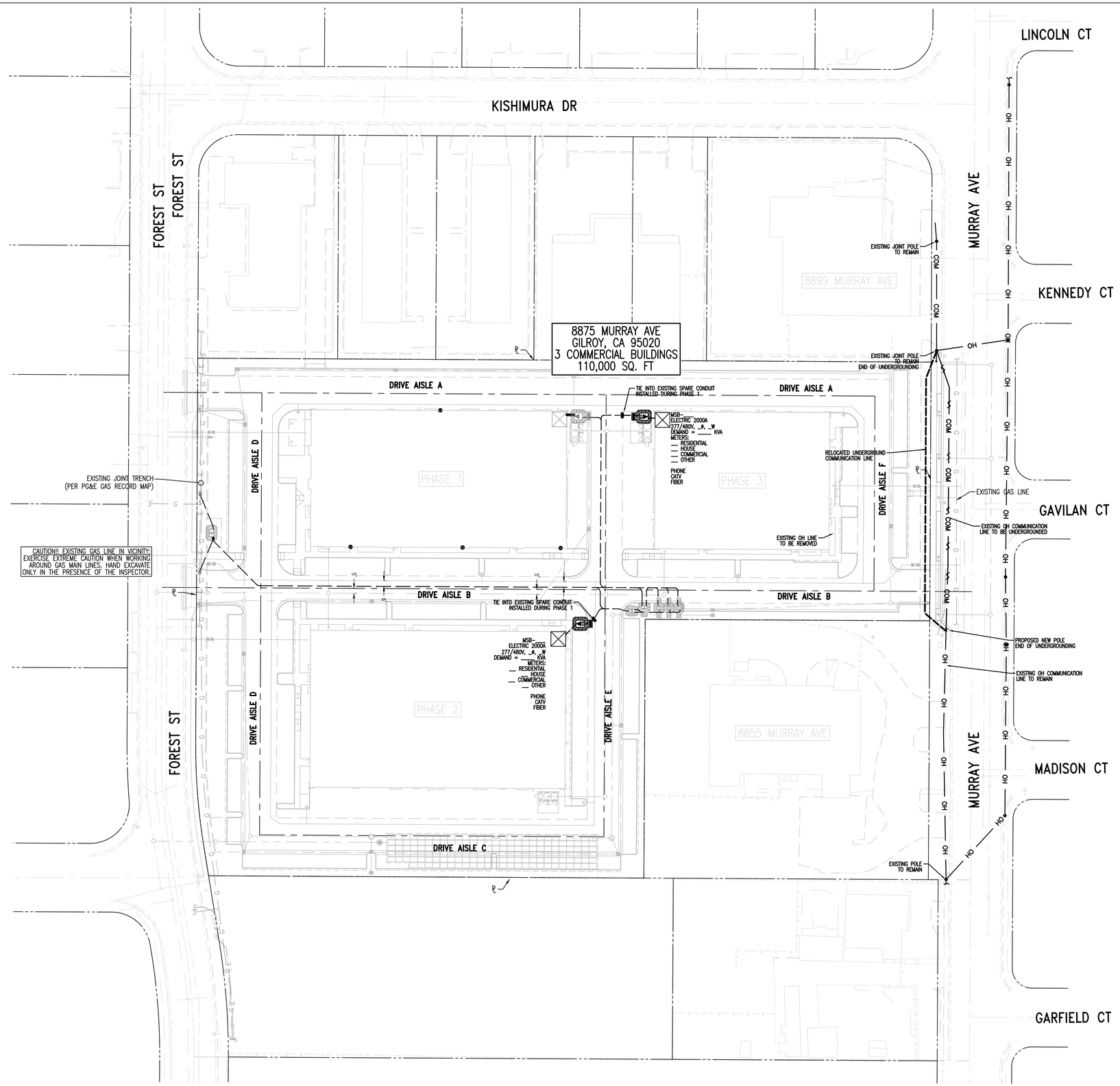
GILROY

CALIFORNIA

Vizion Utility ENGINEERS
UTILITY ENGINEERS, CONSULTANTS & STREET LIGHT DESIGN
7901 STONERIDGE DRIVE, SUITE 210 PLEASANTON, CA 94588
PH: (925) 852-1114

PROJ. NO: 22-289
SCALE: N.T.S
PM: K. MENDOZA
DRAWN BY: R. FALCÓN
PG&E QUALIFIED DESIGNER: M. WEBB
LAST UPDATED: 10-28-2024
DRAWING NO: JT PH2&3-3
SHEET: 3 OF: 4

\\192.168.213.10\company_shared\Dropbox\projects\2022\22-289 8875 Murray Avenue, Gilroy\Vizion Work\MS 22-289-JT.dwg, 11/5/2024 8:23:37 AM, AutoCAD PDF (General Documentation).pc3



PRELIMINARY
NOT FOR CONSTRUCTION

NOTE:

PRIOR TO ENERGIZING THIS PROJECT
A PSE/PUE WILL NEED TO BE RECORDED FOR ALL UTILITIES WITHIN THIS PROJECT. INCLUDING THE "WORKING SPACE" REQUIRED AROUND ALL EQUIPMENT. THE AREA MUST ALSO BE LEVEL.

SUBSTRUCTURE LOCATIONS MUST BE STAKED BY A LICENSED SURVEYOR PRIOR TO CONSTRUCTION. SEE CONSTRUCTION NOTES ON JOINT TRENCH NOTES SHEET (JT-2) REGARDING EXISTING CONDITIONS.

THIS IS NOT A BID DOCUMENT

THIS DRAWING HAS NOT YET BEEN REVIEWED BY UTILITY COMPANIES AND IS SUBJECT TO CHANGE.

UTILITIES:

PLEASE CONFIRM TIE IN LOCATIONS

N

0 25 50 100

DELTA NO: | REVISION | DATE:

CALL 811 BEFORE YOU DIG
UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER
DAVID B. VOORHIS
No. 26429
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA
DATE OF SIGNATURE

JOINT TRENCH INTENT
8875 MURRAY AVE
RULE 15/16 PHASE 2 & 3
HIGHLY VISUAL

CALIFORNIA
GILROY

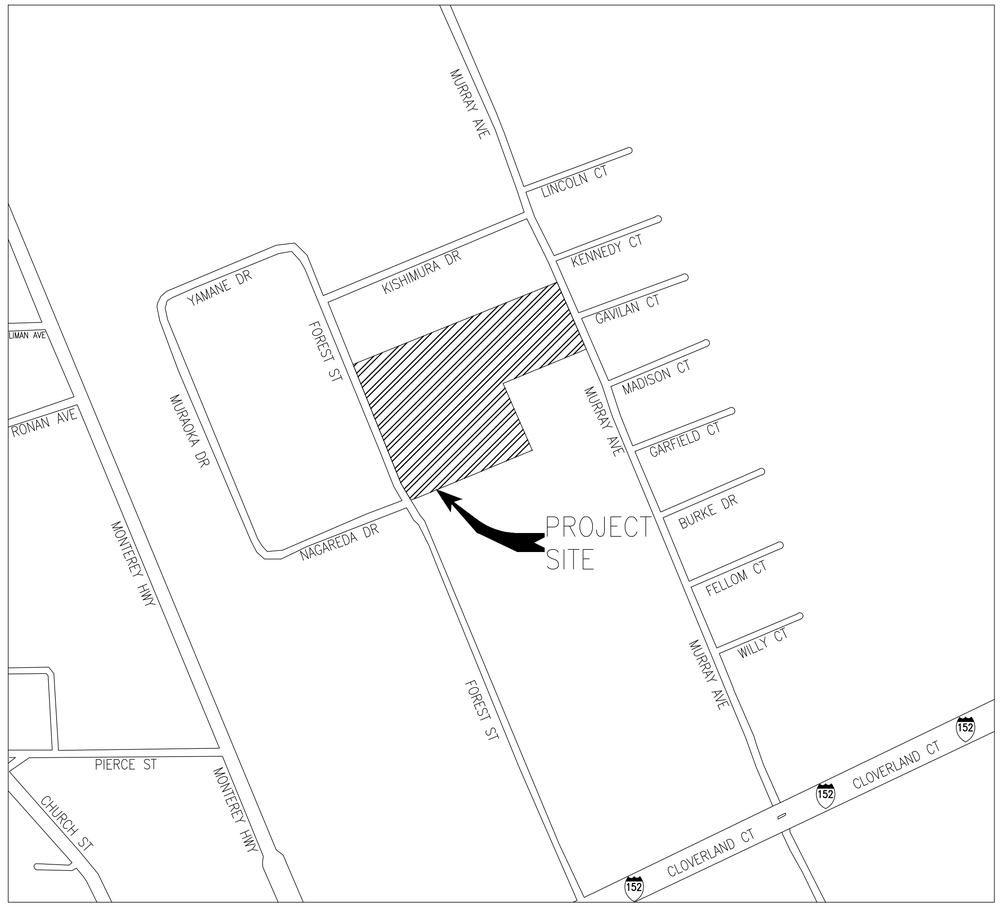
Vizion Utility PARTNERS
UTILITY ENGINEERS, CONSULTANTS & STREETLIGHT DESIGN
7901 STONERIDGE DRIVE, SUITE 290, PLEASANTON, CA 94588
TEL (925) 852-1114

PROJ. NO:	22-289
SCALE:	1" = 50'
PM:	K. MENDOZA
DRAWN BY:	R. FALCÓN
PG&E QUALIFIED DESIGNER:	M. WEBB
LAST UPDATED:	10-28-2024
DRAWING NO:	JT PH2&3-4
SHEET:	4 OF: 4

8875 MURRAY AVE

GILROY, CALIFORNIA

PHOTOMETRIC PLAN OFF SITE



VICINITY MAP
N. T. S.

N

SHEET INDEX

PM-1	PHOTOMETRIC TITLE SHEET OFF SITE
PM-2	PHOTOMETRIC NOTES AND DETAILS OFF SITE
PM-3	PHOTOMETRIC PLANS OFF SITE

DELTA NO: | REVISION: | DATE:

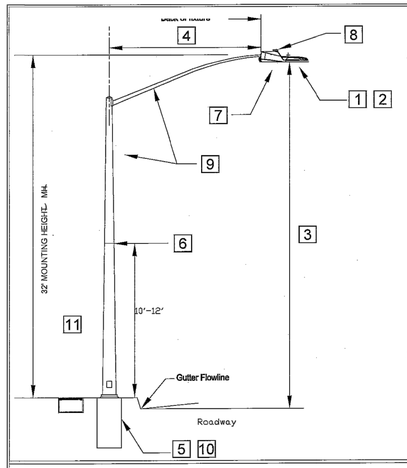
CALL 811 BEFORE YOU DIG
811 UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER
DAVID B. VOORHIS
No. 26429
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA
DATE OF SIGNATURE

PHOTOMETRIC TITLE SHEET - OFF SITE
8875 MURRAY AVE
NEW BUSINESS
GILROY CALIFORNIA

Vizion Utility PARTNERS
UTILITY ENGINEERS, CONSULTANTS & STREETLIGHT DESIGN
7901 STONERIDGE DRIVE, SUITE 270 PLEASANTON, CA 94588
tel (925) 825-1114

PROJ. NO: 22-289
SCALE: N.T.S.
PM: K. ARATA
DRAWN BY: S.WINGERD
PG&E QUALIFIED DESIGNER:
LAST UPDATED: 11-05-2024
DRAWING NO: PM-1
SHEET: 1 OF: 3



NOTES

1. Luminaires have the following characteristics based on IES Luminaire Classifications
   a.) Vertical Light Distribution - Medium
   b.) Lateral Light Distribution - Type III
   c.) Control of Light Distribution above maximum candle power - full cutoff
2. Light source shall be Light Emitting Diode (LED).
3. All LED fixture heads shall be installed perpendicular to the road surface.
4. See Detail EL-1B
5. Concrete, bolt-down foundations for electroliers
6. All Electrolier Poles are to be numbered with photo-reflective numbers placed 10' to 12' above grade and facing the street. (To be coordinated with the City on numbering)
7. All LED fixtures shall have a wattage sticker as per ANSI Standard C136.15 (Identifying the fixture technology)
8. Luminaire shall have an independent photocell
9. Pole and mast arm shall be spun aluminum or galvanized steel. (An optional powder-coat paint finish may be applied at the discretion of the City Engineer)
10. Refer to 2010 Caltrans Standard Details ES-7N for foundation detail.
11. Pull box lid shall be anti-theft type per City Detail. Pull box lid shall have "City of Gilroy Streetlighting" inscribed on the lid.

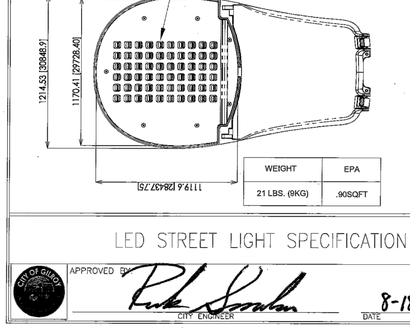
CONSTRUCTION NOTES

1. A fiberglass or polypropylene pull rope shall be left in all empty conduits.
2. No mechanical means shall be used to pull wires smaller than No.1AWG
3. Fusable- links shall be located in the pull box adjacent to each electrolier.
4. At the installation of each LED fixture a 24-hour burn-in test shall be conducted.

ELECTROLIER DETAIL

DRAWN BY: CSG
CHECKED BY:
LAST REVISED: 6/20/14
SCALE: N.T.S

APPROVED BY: CITY ENGINEER DATE 8-18-14
SECTION: ELECTRICAL
DRAWING NO.: EL–3



WEIGHT	EPA
21 LBS. (9KG)	.90SQFT

LED STREETLIGHT SPECIFICATION

LUMINAIRE SPECIFICATIONS

LUMINAIRE SPECIFICATION: Die cast aluminum housing with universal four-bolt slip fitter mounts to 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter mast arm. Cooling fins maintain LED junction temperature assuring long LED life and efficiency. Electrical components are accessed without tools and are mounted on removable power door. Power door features quick electrical disconnects to terminal block and LED board. Photocontrol receptacle is standard and can be aimed without tools.

Light Emitting Diode: Hi-flux/Hi-power white LEDs produce a minimum of 95% of initial intensity at 100,000 hours of life. LEDS are tested in accordance with IESNA LM-80 testing procedures. They have a mean correlated color temperature of 4300K (standard). LEDs are 100% mercury and lead free.

Optical System: Micro-lens system produce IESNA Type 2 or Type 3 distributions. Luminaire is classified as Full-Cutoff with 0% total lumens above 90 degrees. (see EL-10 for application)

Electrical Supply: Power supply features a minimum power factor of .90 and <20% Total Harmonic Distortion (THD). EMC meets and exceeds FCC CFR Park 15. Transient voltage complies with ANSI C62.41 CAT.A. Power supply is field adjustable to 350mA, 530mA or 700mA drive current. Standard factory setting is 700mA. Integral surge protector is tested per ANSI/IEEE C62.45 procedures based on ANSI/IEEE C62.41.2 definitions for standard and optional waveforms for location Category C-High.

Finish: Housing receivers a fade and abrasion resistant, epoxy polyester powder coat, light gray finish standard.

Listings/Ratings/Warranties/Patents: Luminaires are UL listed for use in wet locations in the United States and Canada. Optical systems maintain an IP66 rating. Ten-year limited warranty is standard on all components. Patents pending.

Photometry: Proof shall be provided that all luminaires are photometrically tested by certified independent testing laboratories in accordance with IESNA LM-79 testing procedures.

LED STREET LIGHT SPECIFICATION

DRAWN BY: CSG
CHECKED BY:
LAST REVISED: 6/20/14
SCALE: N.T.S

APPROVED BY: CITY ENGINEER DATE 8-18-14
SECTION: ELECTRICAL
DRAWING NO.: EL–5

Luminaire Schedule LED		
Project: 8875 MURRAY AVE		
Symbol	Arrangement	Description
	EXISTING STREETLIGHT	LEOTEK GC1 35W LED TYPE 3 DISTRIBUTION 6FT ARM 32FT MOUNTING HEIGHT
	NEW STREETLIGHT	LEOTEK GCM2-60J-MV-40K-3R-155 14786 LUMENS 100W LED TYPE 3 DISTRIBUTION 6FT ARM 32FT MH
	NEW STREETLIGHT	LEOTEK GCJ1-30J-MV-40K-3F-055 5474 LUMENS 35W LED TYPE 3 DISTRIBUTION 6FT ARM 32FT MH

Calculation Summary

Label	Avg	Max	Min	Avg/Min	Max/Min
FOREST ST	0.46	1.22	0.11	4.18	11.09
MURRAY ST	1.09	3.09	0.35	3.11	8.83

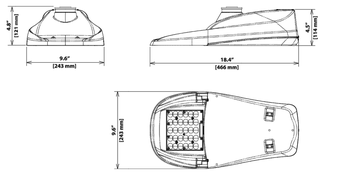
LEOTEK LITE-ON GROUP

Project
Type
Catalog No.

GreenCobra™ Jr. LED Street Light
GCJ J-Series Specification Data Sheet

Luminaire Data

Weight 7 lbs [3.2 kg]
EPA 0.39 ft²



Ordering Information
Sample Catalog No. GCJ1-30J-MV-40K-2R-GY-055-PCR7-WL

GCJ1	30J	MV	40K	3F	GY	055	PCR7-CR
Model*	**LED Code**	**Voltage**	**Color Temperature**	**Distribution**	**Finish**[1]	**Output Code**[2]	**Options**
GCJ1* **GCJ2*** **GCJ3***	30J	**MV** 120-277V **HV** 347-480V	**27K** 2700K **30K** 3000K **40K** 4000K **50K** 5000K	**2R** Type 2 **3R** Type 3R **3F** Type 3F **4** Type 4 **5** Type 5	**GY** Gray **DB** Dark Bronze **BK** Black	Refer to Page 3 to select the performance code.	**FOC**[3] Fixed Output Code **LPCR** Less Photocontrol Receptacle **PCR7**[4] ANSI 7-wire Photo-control Receptacle **PCR7-CR**[5] Control Ready 7-wire PC Receptacle **WL** Utility Wattage Label **4B** 4-Bolt Mounting Bracket **RWG** Rubber Wildlife Guard **SWTB** Straight Wire Terminal Block **BBL** Bubble Level **DSC** Door Safety Cable **CF**[6] Coastal Paint Finish **SP2**[7] Extreme Surge Protection, 20KV/10KA, Fail-to-on **LSSP2**[7] Extreme Surge Protection, Fail-to-off

Accessories*	
HSSJGCJ[8]	House Side Shield, Snap-On*
CSSJGCJ[8]	Cul-De-Sac Side Shield, Snap-On*
FSSJGCJ[10]	Front Side Shield, Snap-On*
SPB[11]	Square Pole Horizontal Arm Bracket
RPB[11]	Round Pole Horizontal Arm Bracket
PTB[11]	Pole Top Tenon Horizontal Arm Bracket
PTB2[11]	Pole Top Tenon Horizontal Arm Bracket (2@180°)
WB[11]	Wall Horizontal Arm Bracket
BSK	Bird Deterrent Spider Kit
LLPC[12]	Long-Life Twist Lock Photocontrol
SC	Twist Lock Shorting Cap

* Refer to performance data table on page 3 for specific model with corresponding output code

Notes:
1 Gray, Black, and Dark Bronze standard. Consult factory for other finishes. See page 2 for RAL codes of Standard finishes.
2 Specified output code is the factory set lumen performance. Refer to performance data table on page 3 of this spec sheet. Field adjustable output selector enables fixture to be changed in the field to adjust light output for local conditions (not available with Fixed Output Code, FOC) or PCR7-CR option. Consult factory if wattage limits require a special drive current.
3 Non-field adjustable, fixed output code. Specify required output code. Not available with PCR7-CR option.
4 Includes output selector that enables field adjustability of light levels. Includes connectors to allow easy upgrade of wireless dimming via PCR7. Wireless node by others.
5 Control-ready wired at factory for wireless node dimming (node by others). Output selector not included in the fixture. Not able to adjust above specified output code.
6 Specify the CF Option for coastal installation. See warranty for details.
7 Standard surge protection, 10kV/5kA, fail-to-on, meets enhanced surge protection based on ANSI 136.25-2015 3-part test.
8 Flush mounted house side shield. Shield cuts light off at 1 mounting height behind luminaire. Gray frame with black louvres.
9 Flush mounted cul-de-sac shield. Shield cuts light off at 1 mounting height behind luminaire and 2 times the mounting height on either side of luminaire. Gray frame with black louvres.
10 Flush mounted front side shield cuts light off at approximately 1½ mounting height in front of luminaire (street side). Gray frame with black louvres.
11 Specify Color (GY, DB, BK). Refer to Leotek web site for specific mounting details and drawings at https://leotek.com/lighting-library/
12 Specify MV (120-277V) or HV (347-480V).

*Accessories are ordered separately and not to be included in the catalog number. For factory installed HSS, CSS, and FSS specify as option in luminaire catalog number.

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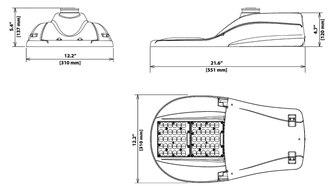
LEOTEK LITE-ON GROUP

Project
Type
Catalog No.

GreenCobra™ Midsize LED Street Light
GCM J-Series Specification Data Sheet

Luminaire Data

Weight 11 lbs [5.0 kg]
EPA 0.44 ft²



Ordering Information
Sample Catalog No. GCM2-60J-MV-30K-2R-GY-130-PCR7-WL

GCM2	60J	MV	40K	3R	GY	155	PCR7-CR
Model*	**LED Code**	**Voltage**	**Color Temperature**	**Distribu-tion**	**Finish**[1]	**Output Code**[2]	**Options**
GCM1* **GCM2*** **GCM3***	60J	**MV** 120-277V **HV** 347-480V	**30K** 3000K **40K** 4000K **50K** 5000K	**2R** Type 2 **3R** Type 3R **3F** Type 3F **4** Type 4 **5** Type 5	**GY** Gray **DB** Dark Bronze **BK** Black	Refer to Page 3 to select the performance code.	**FOC**[3] Fixed Output Code **LPCR** Less Photocontrol Receptacle **PCR7**[4] ANSI 7-wire Photo-control Receptacle **PCR7-CR**[5] Control Ready 7-wire PC Receptacle **MSL3** Motion Sensor, L3 Lens **MSL7** Motion Sensor, L7 Lens **WL** Utility Wattage Label **4B** 4-Bolt Mounting Bracket **RWG** Rubber Wildlife Guard **SWTB** Straight Wire Terminal Block **BBL** Bubble Level **DSC** Door Safety Cable **CF**[6] Coastal Paint Finish **SP2**[7] Extreme Surge Protection, 20KV/10KA, Fail-to-on **LSSP2**[7] Extreme Surge Protection, Fail-to-off, 20kv/10kA Rating

Accessories*	
HSSJGCM[8]	House Side Shield, Snap-On*
CSSJGCM[8]	Cul-De-Sac Side Shield, Snap-On*
FSSJGCM[10]	Front Side Shield, Snap-On*
SPB[11]	Square Pole Horizontal Arm Bracket
RPB[11]	Round Pole Horizontal Arm Bracket
PTB[11]	Pole Top Tenon Horizontal Arm Bracket
PTB2[11]	Pole Top Tenon Horizontal Arm Bracket (2@180°)
WB[11]	Wall Horizontal Arm Bracket
BSK	Bird Deterrent Spider Kit
LLPC[12]	Long-Life Twist Lock Photocontrol
SC	Twist Lock Shorting Cap

* Refer to performance data table on page 3 for specific model with corresponding output code

Notes:
1 Gray, Black, and Dark Bronze standard. Consult factory for other finishes. See page 2 for RAL codes of Standard finishes.
2 Specified output code is the factory set lumen performance. Refer to performance data table on page 3 of this spec sheet. Field adjustable output selector enables fixture to be changed in the field to adjust light output for local conditions (not available with Fixed Output Code, FOC) or PCR7-CR option. Consult factory if wattage limits require a special drive current.
3 Non-field adjustable, fixed output code. Specify required output code. Not available with PCR7-CR option.
4 Includes output selector that enables field adjustability of light levels. Includes connectors to allow easy upgrade of wireless dimming via PCR7. Wireless node by others.
5 Control-ready wired at factory for wireless node dimming (node by others). Output selector not included in the fixture. Not able to adjust above specified output code.
6 Specify the CF Option for coastal installation. See warranty for details.
7 Standard surge protection, 10kV/5kA, fail-to-on, meets enhanced surge protection based on ANSI 136.25-2015 3-part test.
8 Flush mounted house side shield. Shield cuts light off at 1 mounting height behind luminaire. Gray frame with black louvres.
9 Flush mounted cul-de-sac shield. Shield cuts light off at 1 mounting height behind luminaire and 2 times the mounting height on either side of luminaire. Gray frame with black louvres.
10 Flush mounted front side shield cuts light off at approximately 11/2 mounting height in front of luminaire (street side). Gray frame with black louvres.
11 Specify Color (GY, DB, BK). Refer to Leotek web site for specific mounting details and drawings at https://leotek.com/lighting-library/
12 Specify MV (120-277V) or HV (347V-480V)

*Unless specified for field installation, Shields and Shorting Caps are shipped installed. All other options are shipped separately.

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DATE:
REVISION
DELTA NO:

CALL 811 BEFORE YOU DIG
USA
UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER
DAVID B. VOORHIS
No. 26429
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA
DATE OF SIGNATURE

PHOTOMETRIC NOTES AND DETAILS OFF-SITE
8875 MURRAY AVE
NEW BUSINESS
GILROY
CALIFORNIA

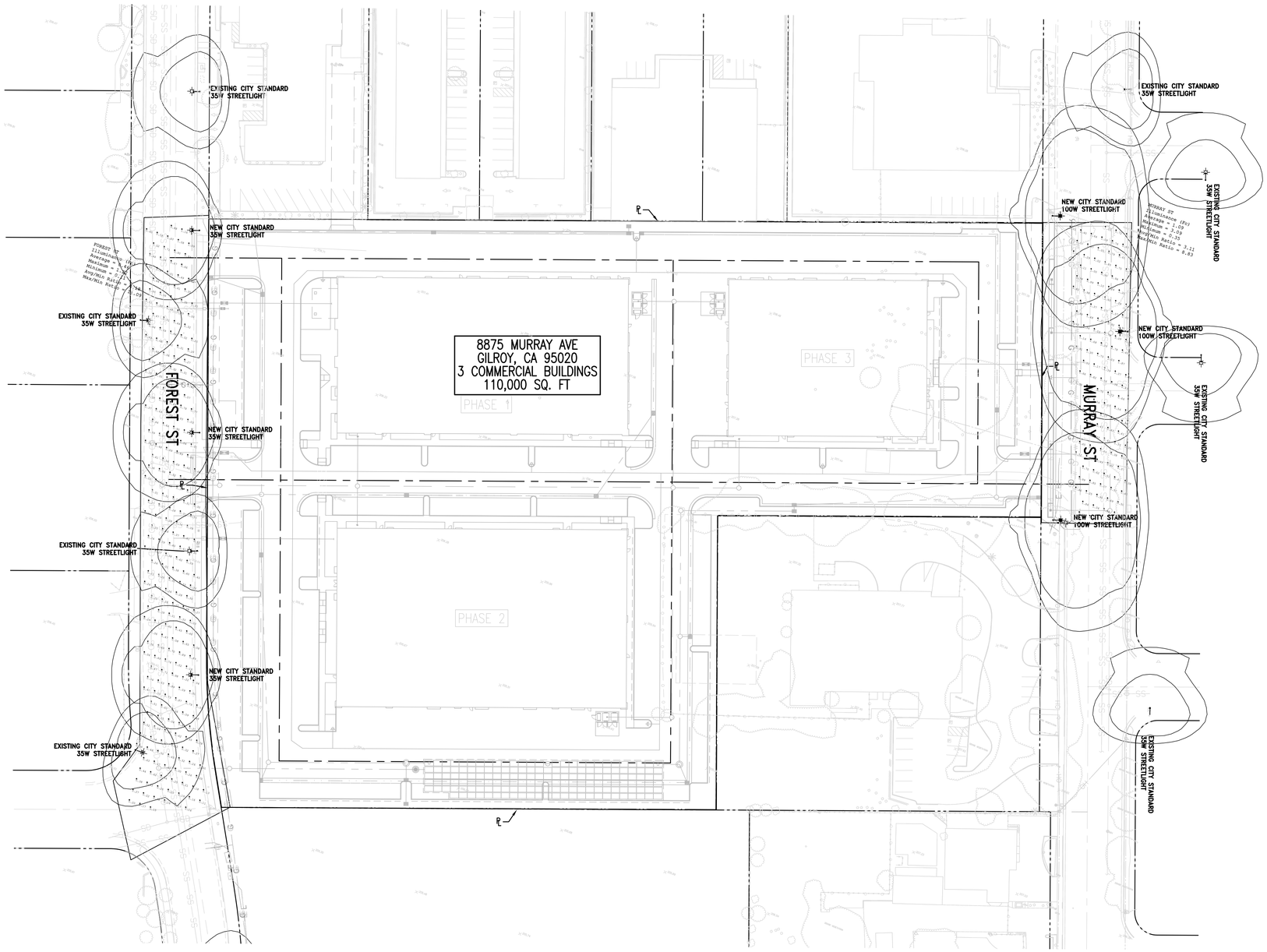
Vision Utility Partners
UTILITY ENGINEERS, CONSULTANTS & STREETLIGHT DESIGN
7901 STONERIDGE DRIVE, SUITE 210 PLEASANTON, CA 94588
Tel (925) 682-1114

PROJ. NO: 22-289
SCALE: N.T.S.
PM: K. ARATA
DRAWN BY: S.WINGERD
PG&E QUALIFIED DESIGNER:
LAST UPDATED: 11-05-2024
DRAWING NO: PM-2
SHEET: 2 OF: 3

Luminaire Schedule LED		
Project: 8875 MURRAY AVE		
Symbol	Arrangement	Description
	EXISTING STREETLIGHT	LEOTEK GC1 35W LED TYPE 3 DISTRIBUTION 6FT ARM 32FT MOUNTING HEIGHT
	NEW STREETLIGHT	LEOTEK GCM2-60J-MV-40K-3R-155 14786 LUMENS 100W LED TYPE 3 DISTRIBUTION 6FT ARM 32FT MH
	NEW STREETLIGHT	LEOTEK GCJ1-30J-MV-40K-3F-055 5474 LUMENS 35W LED TYPE 3 DISTRIBUTION 6FT ARM 32FT MH

Calculation Summary

Label	Avg	Max	Min	Avg/Min	Max/Min
FOREST ST	0.46	1.22	0.11	4.18	11.09
MURRAY ST	1.09	3.09	0.35	3.11	8.83



PRELIMINARY
NOT FOR CONSTRUCTION

N

0 25 50 100

DATE:

REVISION

DELTA NO:

CALL 811 BEFORE YOU DIG
USA
UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER
DAVID B. VOORHIS
No. 26429
Exp. 03-31-24
CIVIL
STATE OF CALIFORNIA
DATE OF SIGNATURE

PHOTOMETRIC PLAN OFF-SITE
8875 MURRAY AVE
NEW BUSINESS

GILROY CALIFORNIA

Vision Utility Partners
UTILITY ENGINEERS, CONSULTANTS & STREETLIGHT DESIGN
7901 STONERIDGE DRIVE, SUITE 450, PLEASANTON, CA 94588
tel (925) 462-1114

PROJ. NO: 22-289
SCALE: 1" = 50'
PM: K. ARATA
DRAWN BY: S.WINGERD
PG&E QUALIFIED DESIGNER:
LAST UPDATED: 11-05-2024
DRAWING NO: PM-3
SHEET: 3 OF: 3

Heat Wave Project

Section 15183 Consistency Evaluation

Lead Agency
City of Gilroy
Community Development Department, Planning Division
7351 Rosanna Street
Gilroy, California 95020

Technical Assistance:
Stantec Consulting Services Inc.
2999 Oak Road, Suite 800
Walnut Creek, California 94597

March 26, 2025

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Acronyms and Abbreviations

AB	Assembly Bill
ABAG	Association of Bay Area Governments
ADA	Americans with Disabilities Act
AF	acre-feet
APN	Assessor's Parcel Number
Applicant	Highly Visual, LLC
BAAQMD	Bay Area Air Quality Management District
Basin Plan	Central Coast RWQCB's Water Quality Control Plan
BCMM	Basic Construction Mitigation Measure
BMP	Best Management Practice
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH_4	methane
City	City of Gilroy
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CY	cubic yards
dBA	decibel
DOC	California Department of Conservation
DOF	Department of Finance
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EV	Electric Vehicle
EVA	emergency vehicle access
FAR	floor area ratio
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
Geotech Report	Geotechnical Investigation Report
GFD	Gilroy Fire Department
GHG	greenhouse gas
gpcd	gallons per capita per day

gpd	gallons per day
GUSD	Gilroy Unified School District
HFC	hydrofluorocarbons
H_2S	Hydrogen sulfide
Ldn	day-night sound level
LED	light-emitting diode
LESA	Land Evaluation and Site Assessment
LID	Low Impact Development
Live Oak	Live Oak Associates, Inc.
LRA	Local Responsibility Area
mgd	million gallons per day
mg/m^3	milligrams per cubic meter
MLD	Most Likely Descendants
mph	miles per hour
$MTCO_2e$	metric tons of carbon dioxide equivalent
MRZ	Mineral Resource Zone
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NF_3	nitrogen trifluoride
NO_2	nitrogen dioxide
NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NWIC	Northwest Information Center
N_2O	nitrous oxide
O_3	ozone
Pb	lead
PFC	perfluorocarbons
PG&E	Pacific Gas and Electric Company
PM_{10}	particulate matter smaller than 10 microns in diameter
$PM_{2.5}$	particulate matter smaller than 2.5 microns in diameter
ppm	parts per million
PRC	Public Resources Code
proposed project	Heat Wave Project
ROG	reactive organic gases
RPS	Renewable Portfolio Standards
SB	Senate Bill
SCRWA	South County Regional Wastewater Authority
SCVHP	Santa Clara Valley Habitat Plan
SFB	Steven, Ferrone and Bailey Engineering Company, Inc.
SFBAAB	San Francisco Bay Area Air Basin
SF_6	sulfur hexafluoride
SOI	Sphere of Influence
SO_2	sulfur dioxide
SR	State Route
SRA	State Responsibility Area

Stantec	Stantec Consulting Services Inc
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCP	traffic control plan
TDM	transportation demand management
UPRR	Union Pacific Railroad
USEPA	U.S. Environmental Protection Agency
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VTA	Valley Transportation Authority
$\mu g/m^3$	micrograms per cubic meter

SECTION 15183 CONSISTENCY EVALUATION

Project Title: Heat Wave Project

Project Description: The Heat Wave Project (proposed project) proposes to develop three light industrial buildings that would become Highly Visual, LLC (Applicant) new main headquarters consisting of offices, product storage, and warehouse operations such as assembly and distribution. The proposed project would be constructed in three phases on a vacant 7.29 acre site located in the City of Gilroy (City). Phase I involves the construction of Building 1 (42,266 square feet) and associated driveways along Forest Street, an internal driveway to the existing northern property that will provide secondary access during Phases I and II, parking areas, and infrastructure improvements. Phase II involves construction of Building 2 (48,600 square feet), parking areas, and infrastructure improvements. Phase III involves construction of Building 3 (29,920 square feet), a driveway connection to Murray Avenue, construction of associated parking areas, and infrastructure improvements.

Project Location: The project site is located in the City of Gilroy at 8875 Murray Avenue. The project site is located along Forest Street on the northeast corner of the Forest Street and Nagareda Drive intersection and has frontages along both Murray Avenue and Forest Street. The project site consists of one vacant parcel identified as Assessor Parcel Numbers (APN) 835-01-059. The project site is covered by non-native annual grasslands with a few scattered trees throughout the project site.

Summary of Findings and Determination: This evaluation concludes that the proposed project qualifies for an exemption from additional environmental review because it is consistent with the development density and use characteristics established by the Gilroy General Plan and analyzed in the accompanying Environmental Impact Report (EIR, State Clearinghouse #2015082014), which were approved and certified by the Gilroy City Council on November 2, 2020. In accordance with CEQA Guidelines Section 15183, the proposed project qualifies for an exemption because the following findings can be made:

1. The proposed project is consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified.

2. There are no project-specific effects which are peculiar to the proposed project or its site, and which the General Plan EIR failed to analyze as significant effects.

3. There are no potentially significant offsite and/or cumulative impacts which the General Plan EIR failed to evaluate.

4. There is no substantial new information which results in more severe impacts than anticipated by the General Plan EIR.

5. The proposed project would undertake feasible policies and actions specified in the General Plan EIR.

1.0 INTRODUCTION

Highly Visual, LLC (Applicant) is proposing to construct the Heat Wave Project (proposed project) which includes the construction of three new light industrial buildings on a vacant 7.29 acre site in Gilroy, California (Figure 1-1). The proposed project would be constructed in three phases and consist of three buildings (Building 1 – 42,266 square feet; Building 2 – 48,600 square feet; and Building 3 – 29,920 square feet) with a mix of office, warehouse, and light industrial uses; associated parking; landscaping; and onsite/offsite infrastructure improvements (Figure 1-2).

1.1 PROJECT TITLE

Heat Wave Project

1.2 LEAD AGENCY

City of Gilroy
Community Development Department, Planning Division
7351 Rosanna Street
Gilroy, California, 95020

1.3 LEAD AGENCY CONTACT

Erin Freitas, Senior Planner
Phone: (408) 846-0242
Email: erin.freitas@cityofgilroy.org

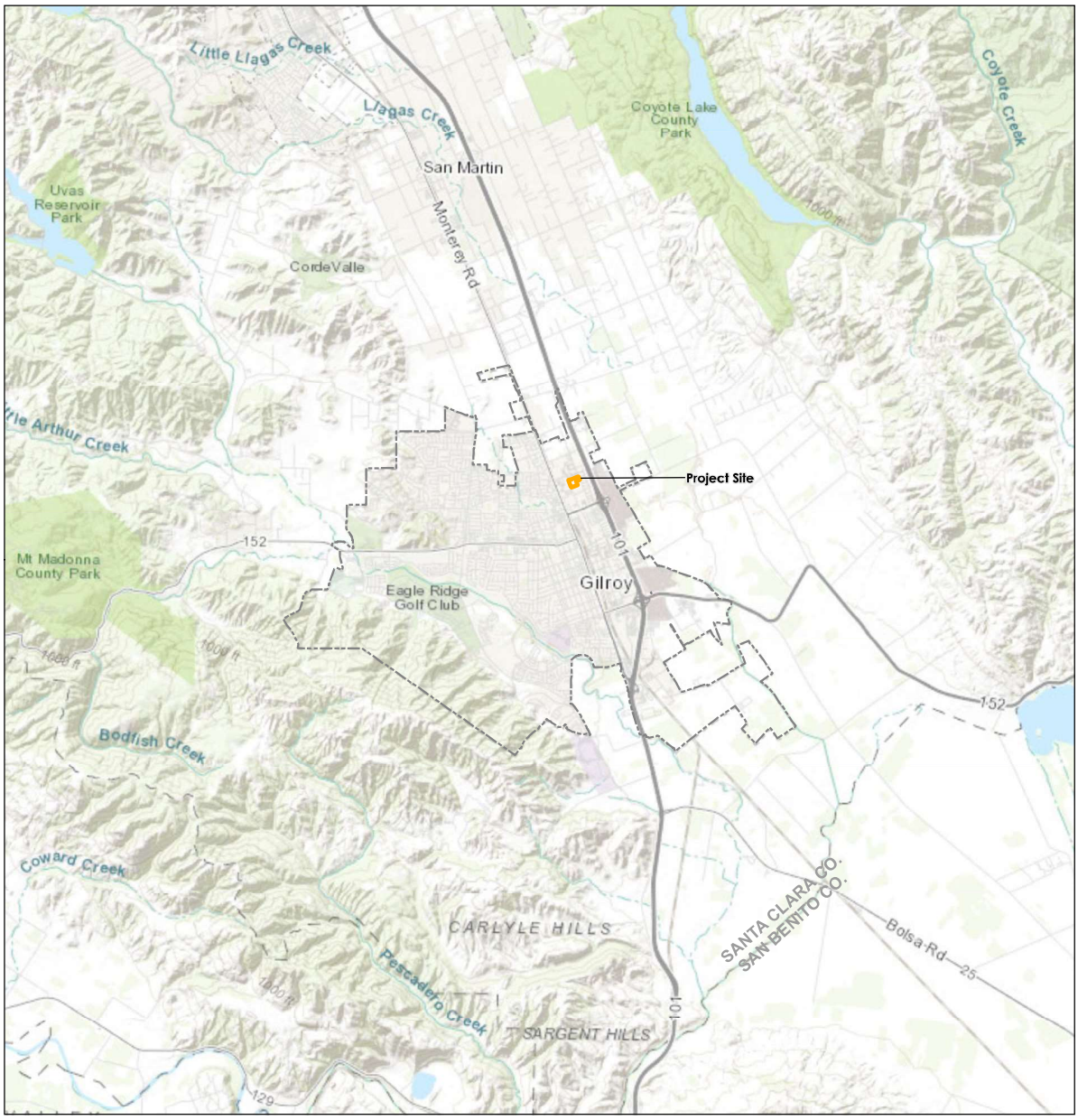
1.4 OVERVIEW OF CEQA GUIDELINES SECTION 15183

California Public Resources Code (PRC) Section 21083.3 and California Environmental Quality Act (CEQA) Guidelines Section 15183 provide an exemption from additional environmental review for projects that are consistent with the development density established by existing zoning, community plan or general plan policies for which an Environmental Impact Report (EIR) was certified, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. Section 15183 specifies that examination of environmental effects shall be limited to those effects that:

1. Are peculiar to the project or the parcel on which the project would be located and were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent.

2. Are potentially significant offsite impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan, or zoning action, or

3. Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.





Legend

- Project Site
- City Limits

0 0.5 1 Miles

1:130,000
(At original document size of 8.5x11)

N

Stantec

Project Location
Gilroy, California

Prepared by KJ on 2025-02-19

Client/Project
City of Gilroy
Heat Wave Project
15183 Consistency Evaluation

Figure No.
1-1

Title
Regional Location

Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.





Legend

Project Site

0 200 400 Feet

1:8,000
(At original document size of 8.5x11)

N

Stantec

Project Location
Gilroy, California

Prepared by KJ on 2025-02-19

Client/Project
City of Gilroy
Heat Wave Project
Section 15183 Consistency Evaluation

Figure No.
1-2

Title
Project Site

Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

Section 15183(c) further specifies that if an impact is not peculiar to the parcel or to the proposed project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards, then an additional EIR need not be prepared for that project solely on the basis of that impact.

1.5 GILROY GENERAL PLAN

California law requires each city to adopt a comprehensive, long-term general plan for the physical development of the city. The general plan is the constitution for the city's development, governs all land use regulations, including zoning, and identifies the community's vision for the future and provides a framework that will guide decisions on growth, development, and conservation of open space and resources in a manner that is consistent with the quality of life desired by the city's residents and businesses.

In 2013, Gilroy began a multi-year process to update the City's General Plan. The update focused on a number of important steps, including gathering information about existing conditions, establishing a vision and guiding principles, and evaluating land use alternatives. The process also included, preparing new General Plan goals, policies, and programs to address changing conditions and priorities, and new state laws. The updated Gilroy General Plan includes a framework of goals, policies, and actions that will guide land use, housing, transportation, open space, public safety, community services, and other policy decisions throughout the City. The General Plan includes the elements and topics mandated by state law, to the extent that they are relevant locally and other topics of interest, including: Land Use, Mobility, Economic Prosperity, Housing, Public Facilities and Services, Parks and Recreation, Natural and Cultural Resources, Potential Hazards, and Environmental Justice. As part of the General Plan, the City and the consultant team prepared several support documents that serve as the building blocks for the General Plan and analyzed the environmental impacts associated with implementing the General Plan. The General Plan EIR was certified in conjunction with adoption of the General Plan on November 2, 2020.

The General Plan EIR comprehensively evaluates the anticipated development that could occur within the City's Planning Area if every parcel in the City developed at the densities and intensities expected under the General Plan.

1.6 PROJECT LOCATION AND EXISTING SITE CONDITIONS

The 7.29 acre project site is located in the City of Gilroy at 8875 Murray Avenue. The project site is located along Forest Street on the northeast corner of the Forest Street and Nagareda Drive intersection and has frontages along both Murray Avenue and Forest Street (Figure 1-2). The project site consists of one parcel identified as Assessor Parcel Number (APN) 835-01-059. The project site's topography is generally level, undeveloped, and covered by non-native annual grasslands. There are a few scattered trees throughout the project site.

1.7 SURROUNDING LAND USES

The project site is within an urbanized area of the City and the surrounding areas include a variety of different uses and developments. The project site is located approximately 0.18 mile west of U.S. 101. The project site is surrounded by the following land uses:

- **North.** Light Industrial uses are located north of the project site.
- **South.** Vacant, undeveloped land borders the project site to the south, beyond which lies lands developed with light industrial uses, followed by a church and residential developments.
- **West.** Forest Street borders the project site to the west, beyond which lies lands developed with industrial uses and land that is under construction with light industrial uses.
- **East.** An existing social services development borders the project site along the southeast corner. Murray Avenue borders the project site to the east, beyond which lies single-family developments.

1.8 GENERAL PLAN AND ZONING DESIGNATIONS

1.8.1 General Plan Land Use Designation

The project site is designated Industrial Park by the City's General Plan. According to the City's General Plan, the Industrial Park land use designation's purpose is to allow for low-intensity industrial developments that can locate in proximity to residential and light industrial uses with a minimum of environmental conflict. Although development in these areas still must meet strict landscaping, buffering, and design standards, it does not require a "campus" setting or integrated open space areas. Typical uses under this designation include office, light manufacturing operations, electronic assembly plants, and large warehouses. The floor area ratio (FAR) is limited to 1.0 (City of Gilroy 2020a).

1.8.2 Zoning

The project site is within the City's M1 Limited Industrial zoning district as well as within the Murray Las Animas Overlay district. The intent of the M1 Limited Industrial district is to designate industrial areas in the City that are appropriate to locate in close proximity to residential and commercial zones. The M1 Limited Industrial district is suitable for small-scale light manufacturing and industrial park uses with low noise and traffic levels, not generally frequented by retail users.

The Murray Las Animas Avenue overlay combining district includes all parcels within the geographical area bounded by Leavesley Avenue to the south, U.S. 101 to the east, Cohansey Avenue to the north, and Monterey Road to the west. The purpose of the Murray Las Animas Avenue overlay combining district is to provide development standards and regulations to soften the impact of industrial buildings fronting Murray Avenue, especially when they are across the street from existing homes.

1.9 REQUIRED PERMITS AND APPROVALS

The Applicant is requesting approval of an Architectural and Site Review permit. Other ministerial approvals, such as building-related permits and encroachment permits, are also anticipated. Additionally, all work related to improvements and project grading would be subject to the City of Gilroy Municipal Code, including the Zoning Code, Building Code, and Fire Code.

1.10 DOCUMENT ORGANIZATION

This CEQA document is organized as follows:

Section 1.0: Introduction. This section introduces the proposed project and describes the purpose, location, existing setting and surrounding land uses, land use and zoning designations, required permits and approvals, scope of the Section 15183 Consistency Evaluation, and organization of this document.

Section 2.0: Project Description. This section provides a detailed description of the proposed project.

Section 3.0: Environmental Checklist and Evaluation. This section analyzes the environmental impacts resulting from the proposed project and evaluates whether the proposed project is exempt from additional environmental review pursuant to CEQA Guidelines Section 15183.

Section 4.0: References. This section lists the references used in preparing this Section 15183 Consistency Evaluation.

Section 5.0: List of Preparers. This section identifies the report preparers.

2.0 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

The project proposes to develop three light industrial buildings that would become Heat Wave Visual's new main headquarters consisting of offices, product storage, and warehouse operations such as assembly and distribution (Figure 2-1). The proposed project would be constructed in three phases on a vacant 7.29 acre site located in the City of Gilroy. Phase I involves the construction of Building 1 (42,266 square feet) and associated driveways along Forest Street, an internal driveway to the existing northern property that will provide secondary access during Phases I and II, parking areas, and infrastructure improvements. Phase II involves construction of Building 2 (48,600 square feet, parking areas, and infrastructure improvements. Phase III involves construction of Building 3 (29,920 square feet), a driveway connection to Murray Avenue, construction of associated parking areas, and infrastructure improvements. The components of the three phases are described in the following sections.

2.2 EXISTING OPERATIONS

The Applicant currently operates out of their 9,450 square foot office and showroom building located at 8840 Forest Street, located directly adjacent to the northwest corner of the proposed project site. Additionally, the Applicant's current warehouse operations are operated out of an 8,000 square foot building located at 8884 Forest Street, across the street from the existing office and showroom space.

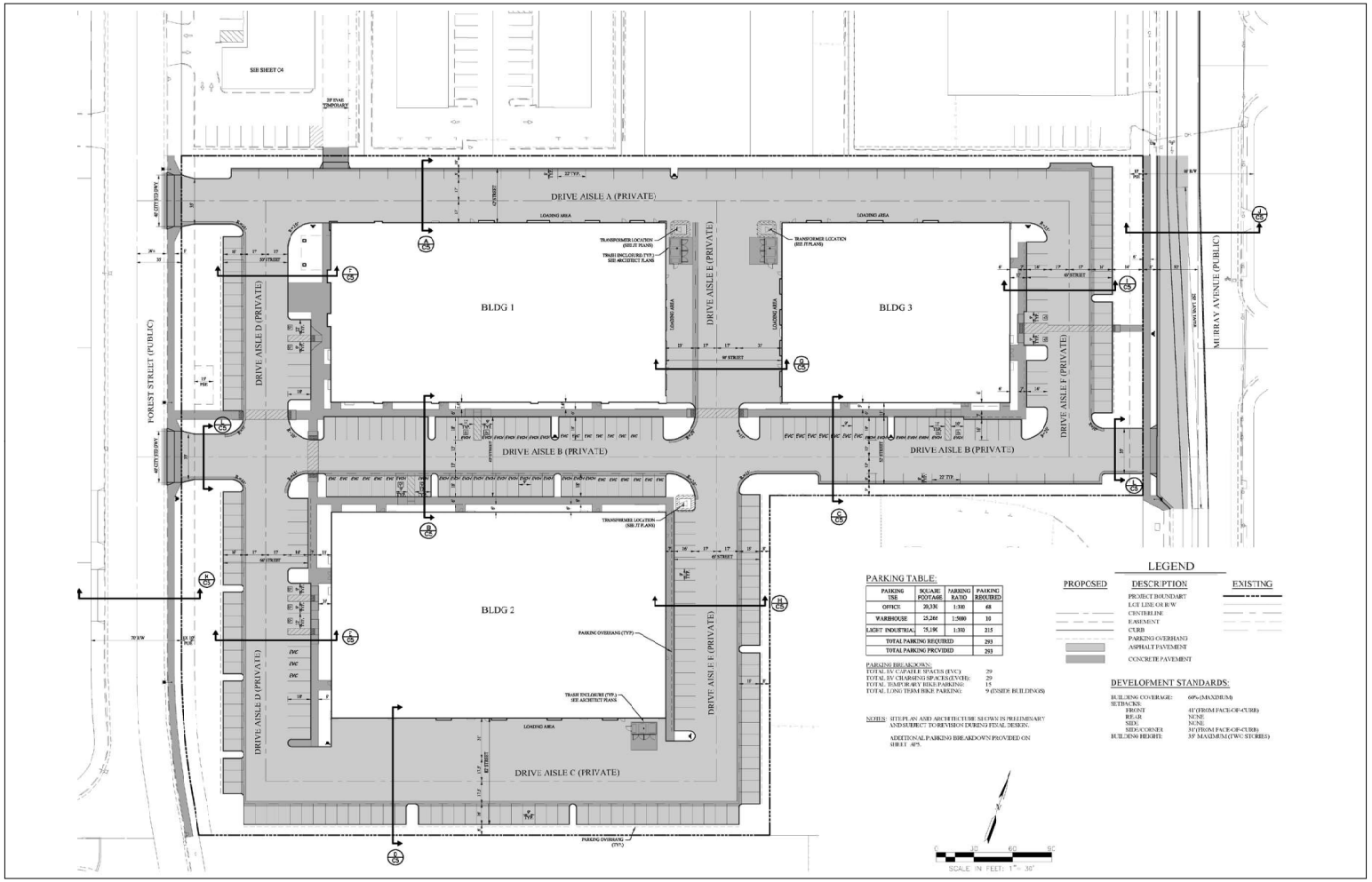
Existing hours of operation are Monday through Friday 9:00 AM to 5:00 PM and the existing operations employ 29 employees. However, a number of employees work remotely and do not travel to and from existing operations daily. Approximately three delivery vehicles access the project site daily for daily shipment and receiving of products from each carrier (UPS, FedEx, USPS) and there are approximately two large truck shipments per week to the existing operations.

2.3 PROJECT CHARACTERISTICS

2.3.1 Phase I

Project phasing predictions are conceptual. The actual amount and timing of development and occupancy would be dependent upon numerous factors, many of which are outside the control of the City or the developer, including interest by building users, private developers and local, regional, and national economic conditions. These and other factors acting together would ultimately determine the location and rate at which development at the project site occurs.

Phase I involves the construction of Building 1 (42,266 square feet) that would be utilized as the main headquarters and would include office, warehousing, and light industrial uses, and construction of associated driveways along Forest Street, an internal driveway to the existing northern property that would provide secondary EVA access, parking, and infrastructure improvements (Figure 2-2). Building 1 would include 8,330 square feet of office uses, 23,086 square feet of warehouse uses, and 10,850 square feet of light industrial uses.



Source: E2 Architecture, December 2024

Project Location
Gilroy, CA

Client/Project
City of Gilroy
Heat Wave Project
Section 15183 Consistency Evaluation

Figure No.
2-1

Title
Overall Site Plan

Stantec



PROPOSED PHASING SITE PLAN - PHASE 1

1" = 40'-0"

1

LEGEND

- LENGTH OF PROPERTY LINE
- PARKING TOTAL
- PROPERTY LINE
- HARDSCAPE
- LANDSCAPE, REFER TO LANDSCAPE PLANS
- PAVING
- NEW UNDERGROUND STORMWATER CONTROL SYSTEM

PHASE DESCRIPTION

PHASE 1 CONCERNS 2 - STORY, 42,266 SF, BUILDING 1. BUILDING 1 WILL HOUSE OFFICE, WAREHOUSE, AND MANUFACTURING OPERATIONS. DRIVEWAYS AND PARKING WILL ALSO BE BUILT TO ACCOMODATE SITE. FOR INFRASTRUCTURE-RELATED PHASING INFORMATION, PLEASE SEE SHEET C1.2.

PARKING TABULATIONS (PHASE 1)

USE	SQUARE FOOTAGE	PARKING RATIO	REQUIRED PARKING
OFFICE	8,300 SF	1:300	28
WAREHOUSE	25,296 SF	1:5000	5
MANUFACTURING	8,670 SF	1:350	25
TOTAL PARKING SPACES REQUIRED			58
TOTAL PARKING SPACES PROVIDED			64

PARKING BREAKDOWN

TOTAL EV CAPABLE SPACES (PER CBSC TABLES 10X.6.3.1)	19
TOTAL EVCS WITH EVSE (PER CBSC TABLES 10X.6.3.1)	4
TOTAL TEMPORARY BIKE PARKING	4
TOTAL LONG TERM BIKE PARKING	4

SITE TABULATION (PHASE 1)

SITE AREA 317,470 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
BUILDING COVERAGE	0 SF	36,466 SF	0 %	11 %
LANDSCAPE COVERAGE	317,470 SF	219,540 SF	100 %	68 %
PAVING COVERAGE	0 SF	65,464 SF	0 %	21%
BUILDING AREA	0 SF	42,266 SF		

F.A.R: $\frac{42,266}{317,470} = 0.13$

Source: E2 Architecture, June 2023

Project Location

Gilroy, CA

Client/Project

City of Gilroy
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Figure No.

2-2

Title

Site Plan - Phase I

Stantec

Building 1 is proposed in the northwest portion of the project site, adjacent to Forest Street and the existing light industrial developments located to the north of the project site. Pedestrian entrances into Building 1 would be provided along the western and southern sides of the building. The proposed building would be equipped with at grade metal roll-up doors and provide a total of eight loading spaces for truck deliveries.

Building 1 would be two stories tall with a maximum height of 35 feet. Level 1 would be approximately 36,466 square feet and would include office, warehouse, and light industrial areas. Level 2 would be approximately 5,800 square feet and would include office areas. Additionally, an outdoor deck would be provided on Level 2 of the building.

In addition to Building 1, Phase I would include the construction of driveways, parking, and infrastructure improvements to serve Building 1. Phase I would include the construction of 65 parking spaces to meet City standards and requirements for parking. Out of the 65 total parking spaces, seven parking spaces would be EV capable spaces, seven parking spaces would be EV charging spaces including one Americans with Disabilities Act (ADA) charging space and one van-accessible charging space, and two spaces would be ADA compliant spaces. Additionally, Phase I would provide three short-term and three long-term bicycle parking spaces onsite.

Phase I would include the construction of two new driveways off of Forest Street, an internal driveway to the existing northern property for secondary access, and an internal circulation system around Building 1. Phase I would also include a water line extension to Murray Avenue for water line looping, Forest Street frontage improvements including sidewalk and utility connections, and construction of onsite stormwater treatment/detention facilities. Circulation and infrastructure improvements are discussed below.

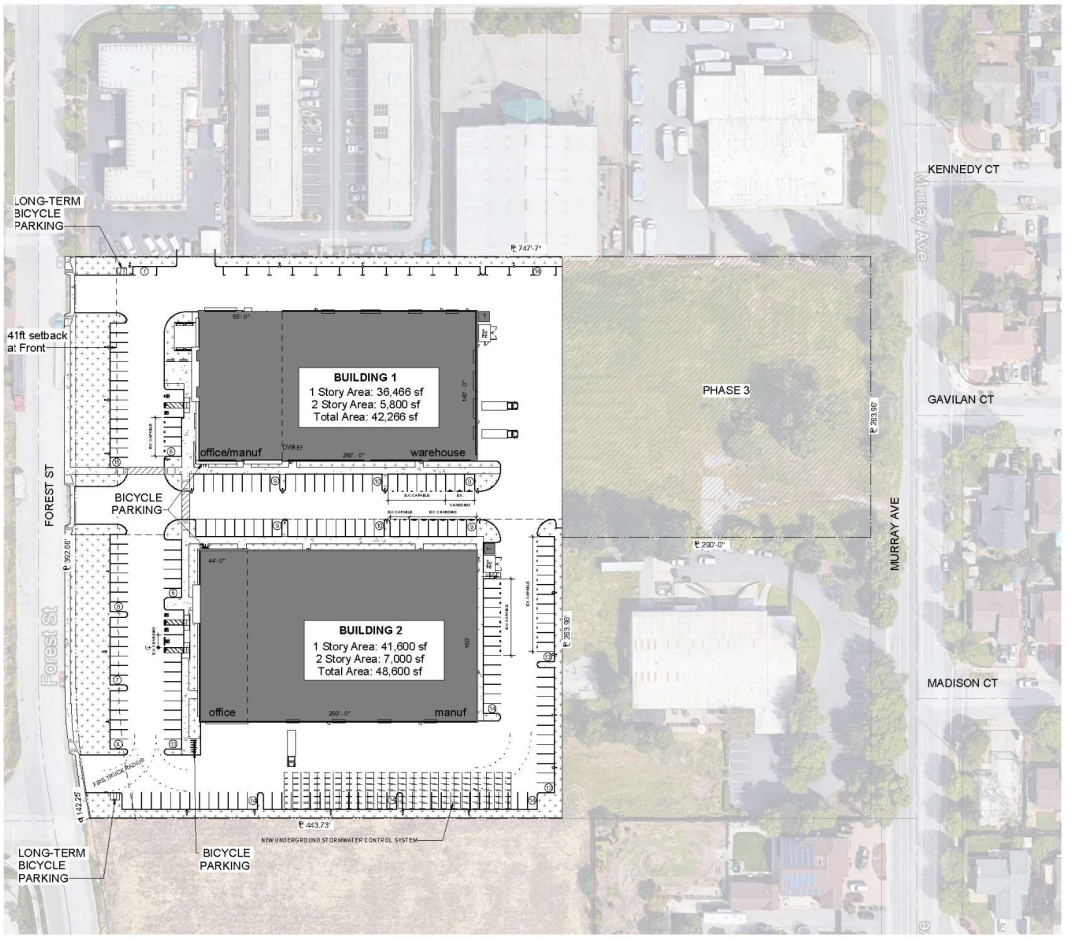
2.3.2 Phase II

Phase II involves the construction of Building 2 that would be a total of 48,600 square feet, parking, and infrastructure improvements (Figure 2-3). Building 2 would include 7,000 square feet of office uses and 41,600 square feet of light industrial uses.

Building 2 is proposed in the southwest portion of the project site, adjacent to Forest Street and the vacant undeveloped parcels located to the south of the project site. Additionally, the existing social services development is located to the east. The proposed building would be equipped with at grade metal roll-up doors and provide a total of four loading spaces for truck deliveries.

Building 2 would be two stories tall with a maximum height of 35 feet. Level 1 would be approximately 41,600 square feet and Level 2 would be approximately 7,000 square feet.

In addition to Building 2, Phase II would include the construction of a driveway, parking and infrastructure improvements to serve Building 2. Phase II would include the construction of 155 parking spaces to meet City standards and requirements for parking. Out of the 155 parking spaces, 15 parking spaces would be EV capable spaces, 15 parking spaces would be EV charging spaces including one ADA charging space and one van-accessible space, and three would be ADA compliant spaces. Additionally, Phase II would provide six short-term and three long-term bicycle parking spaces onsite.



PROPOSED PHASING SITE PLAN - PHASE 2 1

1" = 40'-0"

LEGEND

- LENGTH OF PROPERTY LINE
- PARKING TOTAL
- PROPERTY LINE
- HARDSCAPE
- LANDSCAPE: REFER TO LANDSCAPE PLANS
- PAVING
- NEW UNDERGROUND STORMWATER CONTROL SYSTEM

PHASE DESCRIPTION

PHASE 2 CONCERNS 2-STORY, 48,600 SF, BUILDING 2. BUILDING 2 WILL HOUSE OFFICE AND MANUFACTURING OPERATIONS FOR FUTURE TENANT. DRIVEWAYS AND PARKING WILL ALSO BE BUILT TO ACCOMODATE THOROUGHFARE. FOR INFRASTRUCTURE-RELATED PHASING INFORMATION, PLEASE SEE SHEET C12.

PARKING TABULATIONS (PHASE 1)

USE	SQUARE FOOTAGE	PARKING RATIO	REQUIRED PARKIN
OFFICE	6,200 SF	1:300	28
WAREHOUSE	25,266 SF	1:5000	5
MANUFACTURING	8,870 SF	1:350	25
TOTAL PARKING SPACES REQUIRED			58
TOTAL PARKING SPACES PROVIDED			64

PARKING TABULATIONS (PHASE 2)

USE	SQUARE FOOTAGE	PARKING RATIO	REQUIRED PARKIN
OFFICE	15,200 SF	1:300	51
WAREHOUSE	25,266 SF	1:5000	5
MANUFACTURING	50,270 SF	1:350	144
TOTAL PARKING SPACES REQUIRED			200
TOTAL PARKING SPACES PROVIDED			214
PARKING BREAKDOWN			
TOTAL EV CAPABLE SPACES (PER CGBSC TABLE 5.106.5.2.1)			43
TOTAL CHARGING SPACES (WITHIN EVCS) (PER CGBSC TABLE 5.106.5.3.1)			11
TOTAL TEMPORARY BIKE PARKING			9
TOTAL LONG TERM BIKE PARKING			6

SITE TABULATION (PHASE 1)

SITE AREA: 317,470 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSE
BUILDING COVERAGE	0 SF	36,466 SF	0 %	11 %
LANDSCAPE COVERAGE	317,470 SF	215,540 SF	100 %	68 %
PAVING COVERAGE	0 SF	65,464 SF	0 %	21 %
BUILDING AREA	0 SF	42,266 SF		

F.A.R: $\frac{42,266}{317,470} = 0.13$

SITE TABULATION (PHASE 2)

SITE AREA: 317,470 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSE
BUILDING COVERAGE	36,466 SF	78,866 SF	11 %	25 %
LANDSCAPE COVERAGE	215,540 SF	105,316 SF	68 %	33 %
PAVING COVERAGE	65,464 SF	134,088 SF	21 %	42 %
BUILDING AREA	41,600 SF	90,400 SF		

F.A.R: $\frac{90,666}{317,470} = 0.29$

Source: E2 Architecture, June 2023

Project Location

Gilroy, CA

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Figure No.

2-3

Title

Site Plan - Phase II

Stantec

Phase II would include the construction of an internal circulation system around Building 2. Phase II would also include infrastructure improvements to connect utility services required for Building 2. Circulation and infrastructure improvements are discussed below.

2.3.3 Phase III

Phase III involves the construction of Building 3 that would be a total of 29,920 square feet and construction of associated parking and infrastructure improvements (Figure 2-4). Building 3 would include 5,000 square feet of office uses, 2,180 square feet of warehouse uses, and 22,740 square feet of light industrial uses.

Building 3 is proposed in the northeast portion of the project site, adjacent to Murray Avenue. The existing light industrial developments would be located to the north and the existing social services would be located to the south. The proposed building would be equipped with at grade metal roll-up doors and provide a total of seven loading spaces for truck deliveries.

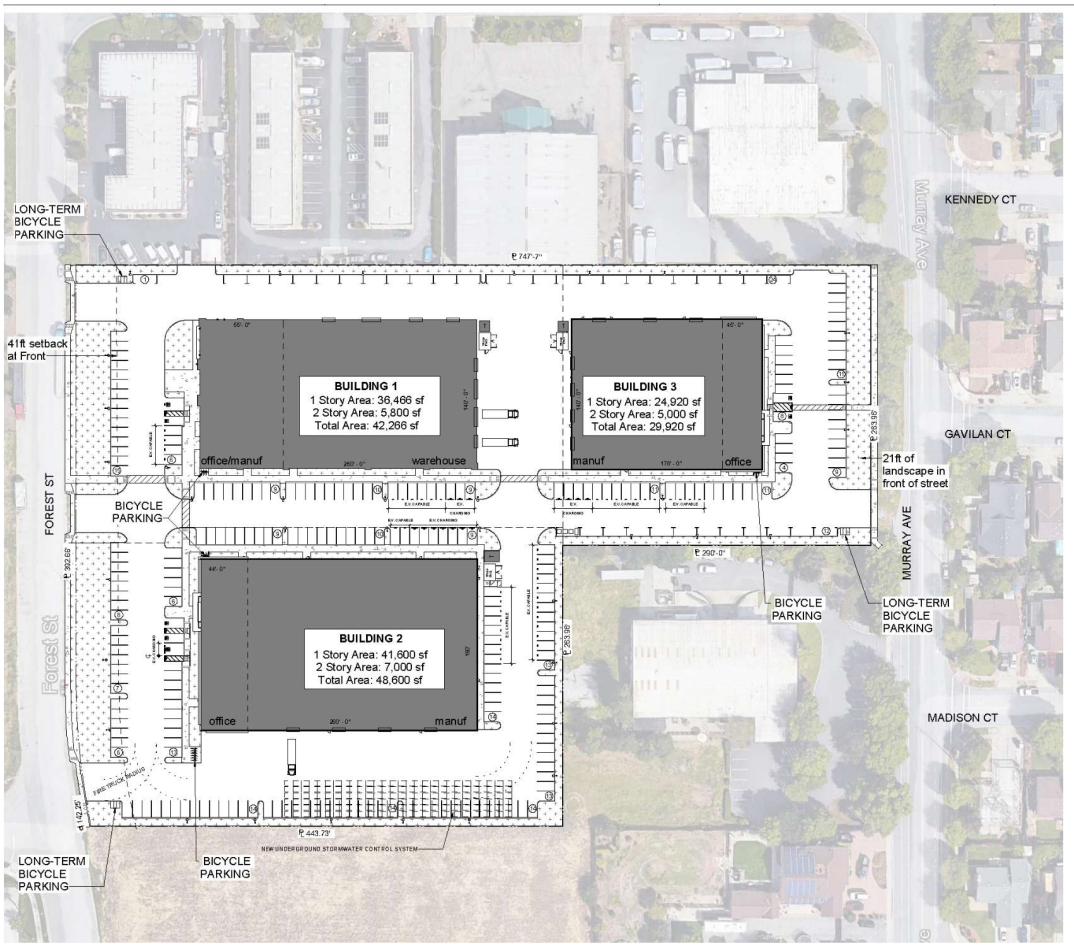
Building 3 would be two stories tall with a maximum height of 35 feet. Level 1 would be approximately 24,920 square feet and Level 2 would be approximately 5,000 square feet.

In addition to Building 3, Phase III would include the construction of parking and infrastructure improvements to serve Building 3. Phase III would include the construction of 73 parking spaces to meet City standards and requirements for parking. Of the total 73 parking spaces, seven parking spaces would be EV capable spaces, seven parking spaces would be EV charging spaces that would include one ADA charging space and one van-accessible space, and two would be ADA compliant spaces. Additionally, Phase III would provide six short-term and three long-term bicycle parking spaces onsite.

Phase III would include the construction of an internal circulation system around Building 3. Phase III would also include construction of a new driveway that would provide access to Murray Avenue. Murray Avenue frontage improvements including road widening, sidewalk, undergrounding existing overhead utilities, and utility connections; and Murray Avenue storm drain extension. Circulation and infrastructure improvements are discussed below.

2.3.4 Facility Operation

The proposed project is planned to support a mix of office, warehouse, and light industrial uses. Currently, Heat Wave Visual runs its headquarters out of a 9,450 square foot building located at 8840 Forest Street, adjacent to the project site. The Applicant purchased the project site as a vacant lot to build and expand their operation size from 9,450 square feet to the proposed 42,266 square foot Building 1 where all existing offices and warehouse operations would be moved to, making Building 1 its new official headquarters. The timing of development of Phase II and III and occupancy of Buildings 2 and 3 would depend upon numerous factors, including the rate of expansion of Applicant's business and local, regional, and national economic conditions. It is the Applicant's intent to operate out of all three buildings at full buildout of the proposed project. However, depending on the Applicant's needs and rate of expansion of business, other tenants may be identified for rental of Buildings 2 or 3. Therefore, this Section 15183 Consistency Evaluation analyzes two potential scenarios, one where the Applicant operates out of all three buildings and another where all three buildings are operated under the light industrial designation with no specified tenants.



PROPOSED PHASING SITE PLAN 1

1" = 40'-0"

LEGEND

- LENGTH OF PROPERTY LINE
- PARKING TOTAL
- PROPERTY LINE
- HARDSCAPE
- LANDSCAPE: REFER TO LANDSCAPE PLANS
- PAVING
- NEW UNDERGROUND STORMWATER CONTROL SYSTEM

PHASE DESCRIPTION

PHASE 3 CONCERNS 2-STORY, 29,920 SF, BUILDING 3. BUILDING 3 WILL HOUSE OFFICE AND MANUFACTURING OPERATIONS FOR FUTURE TENANT. DRIVEWAYS AND PARKING WILL ALSO BE BUILT TO ACCOMODATE THOROUGHFARE FOR INFRASTRUCTURE-RELATED PHASING INFORMATION, PLEASE SEE SHEET C12.

PARKING TABULATIONS (PHASE 1)

USE	SQUARE FOOTAGE	PARKING RATIO	REQUIRED PARKING
OFFICE	8,330 SF	1:300	28
WAREHOUSE	25,266 SF	1:5000	5
MANUFACTURING	8,670 SF	1:350	25
TOTAL PARKING SPACES REQUIRED			58
TOTAL PARKING SPACES PROVIDED			64

PARKING TABULATIONS (PHASE 2)

USE	SQUARE FOOTAGE	PARKING RATIO	REQUIRED PARKING
OFFICE	15,330 SF	1:300	51
WAREHOUSE	25,266 SF	1:5000	5
MANUFACTURING	50,270 SF	1:350	144
TOTAL PARKING SPACES REQUIRED			200
TOTAL PARKING SPACES PROVIDED			214

PARKING TABULATIONS (PHASE 3)

USE	SQUARE FOOTAGE	PARKING RATIO	REQUIRED PARKING
OFFICE	20,330 SF	1:300	68
WAREHOUSE	25,266 SF	1:5000	5
MANUFACTURING	75,190 SF	1:350	215
TOTAL PARKING SPACES REQUIRED			288
TOTAL PARKING SPACES PROVIDED			290
PARKING BREAKDOWN			
TOTAL EV CAPABLE SPACES (PER CGBSC TABLE 5.106.5.2.1)			58
TOTAL CHARGING SPACES (WITHIN EVCS) (PER CGBSC TABLE 5.106.5.3.1)			15
TOTAL TEMPORARY BIKE PARKING			15
TOTAL LONG TERM BIKE PARKING			9

SITE TABULATION (PHASE 1)

SITE AREA: 317,470 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
BUILDING COVERAGE	0 SF	36,466 SF	0 %	11 %
LANDSCAPE COVERAGE	317,470 SF	215,540 SF	100 %	68 %
PAVING COVERAGE	0 SF	65,464 SF	0 %	21%
BUILDING AREA	0 SF	42,266 SF		

F.A.R. $\frac{42,266}{317,470} = 0.13$

SITE TABULATION (PHASE 2)

SITE AREA: 317,470 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
BUILDING COVERAGE	36,466 SF	78,066 SF	11 %	25 %
LANDSCAPE COVERAGE	215,540 SF	105,316 SF	68 %	33 %
PAVING COVERAGE	65,464 SF	134,088 SF	21 %	42 %
BUILDING AREA	41,800 SF	90,400 SF		

F.A.R. $\frac{90,866}{317,470} = 0.29$

SITE TABULATION (PHASE 3)

SITE AREA: 317,470 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
BUILDING COVERAGE	78,066 SF	102,986 SF	25 %	32 %
LANDSCAPE COVERAGE	105,316 SF	39,592 SF	33 %	13 %
PAVING COVERAGE	134,088 SF	174,892 SF	42 %	55%
BUILDING AREA	90,400 SF	120,326 SF		

F.A.R. $\frac{120,786}{317,470} = 0.38$

Source: E2 Architecture, June 2023

Project Location

Gilroy, CA

Client/Project

City of Gilroy
Heat Wave Project
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Figure No.

2-4

Title

Site Plan - Phase III

Stantec

Facility operation would require truck shipments to receive and send out products. For operation of the Applicant's operations, the proposed project assumed one LCL truck shipment per week per building and is anticipated to require three LCL truck shipments per week at full buildout. Additionally, the proposed project is anticipated to require three daily truck trips per building per day for daily shipping and receiving of products from USPS, FedEx, and UPS. However, if all three buildings are operated under the light industrial designation with no specified tenants, the proposed project could generate up to 9 daily truck trips.

2.3.5 Employees and Hours of Operation

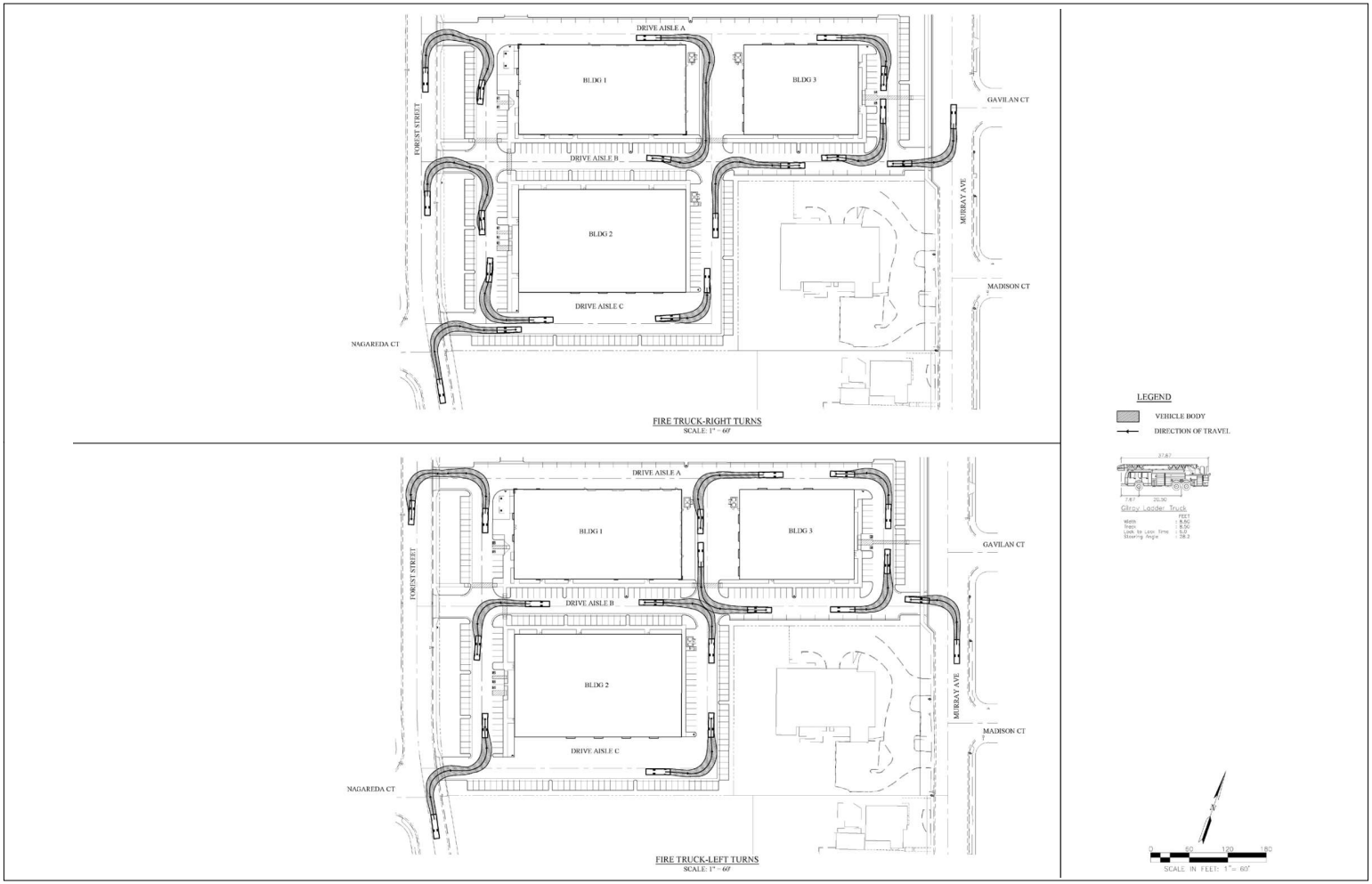
It is anticipated that after construction of Phase I, Building 1 would generate approximately 35 employees. Phase II and Phase III are both anticipated to generate an additional 30 employees each and therefore, buildout of the proposed project would result in approximately 95 employees. General hours of operation would be Monday through Friday, 9:00 AM to 5:00 PM.

However, if the Applicant does not occupy all three buildings, the proposed project's combined 120,786 square feet of limited industrial designated building area would result in generation of approximately 190 employees. Therefore, buildout of the proposed project would generate approximately 95 to 190 total employees.

2.3.6 Access, Circulation, and Parking

The proposed project would construct three new driveways throughout the project site to provide access. Two driveways would be constructed along Forest Street during Phase I and one driveway would be constructed along Murray Avenue during Phase III. In addition, the proposed project would construct a secondary EVA access to the existing northern property during Phase I that would serve the project site during Phase I and Phase II. The two driveways along Forest Street would have 40 foot wide driveway aprons while the Murray Avenue driveway apron would be 35 feet wide. Additionally, all internal drive aisles would be at least 26 feet wide to allow for truck and emergency vehicle access throughout the project site. Two-way interior drive aisles would be constructed throughout the project site to allow access to all buildings, parking areas, and loading areas at buildout of the proposed project (Figure 2-5). Additionally, the proposed project would construct sidewalks along the project frontages and throughout the project site to provide pedestrian access.

Phase I would construct a total of 65 parking spaces, including two spaces that would be ADA compliant spaces, seven EV capable spaces, and seven EV charging spaces. Of the seven EV charging spaces constructed during Phase I, one would be an ADA charging space and one would be a van accessible space. Phase II would construct 155 parking spaces, including three ADA compliant spaces, 15 EV capable spaces, and 15 EV charging spaces. Of the 15 EV charging spaces constructed during Phase II, one would be an ADA charging space and one would be a van accessible space. Phase III would construct 73 parking spaces, including two ADA compliant spaces, seven EV capable spaces, and seven EV charging spaces. Of the seven EV charging spaces constructed during Phase III, one would be an ADA charging space and one would be a van accessible space. At full buildout of the proposed project, the project would provide a total of 293 surface parking spaces. Within the total 293 parking spaces provided, the proposed project would provide seven ADA compliant spaces, 29 EV capable spaces, 29 EV charging spaces. Of the total 29 EV capable spaces at full buildout, three



Source: RJA, May 2023

Project Location
Gilroy, CA

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City of Gilroy
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Figure No.
2-5

Title
Circulation Plan

Stantec

would be ADA charging spaces and three would be van accessible spaces. The number of EV charging and EV capable spaces proposed to be constructed are based on the City's Green Building Code Section 5.106.5.3.3.1 requirements. Additionally, the proposed project would provide 15 short-term bicycle parking spaces and 9 long-term bicycle parking spaces.

Table 2-1: Proposed Parking Ratio

	Phase 1	Phase 2	Phase 3	Total
Standard spaces	49	122	57	**228**
EV capable spaces	7	15	7	**29**
EV charging	7 (1 ADA charging; 1 van accessible)	15 (1 ADA charging; 1 van accessible)	7 (1 ADA charging; 1 van accessible)	**29 (3 ADA charging; 3 van accessible)**
ADA	2	3	2	**7**
Total parking spaces	**65**	**155**	**73**	**293**
Short-term bicycle parking	**3**	**6**	**6**	**15**
Long-term bicycle parking	**3**	**3**	**3**	**9**

2.3.7 Utilities

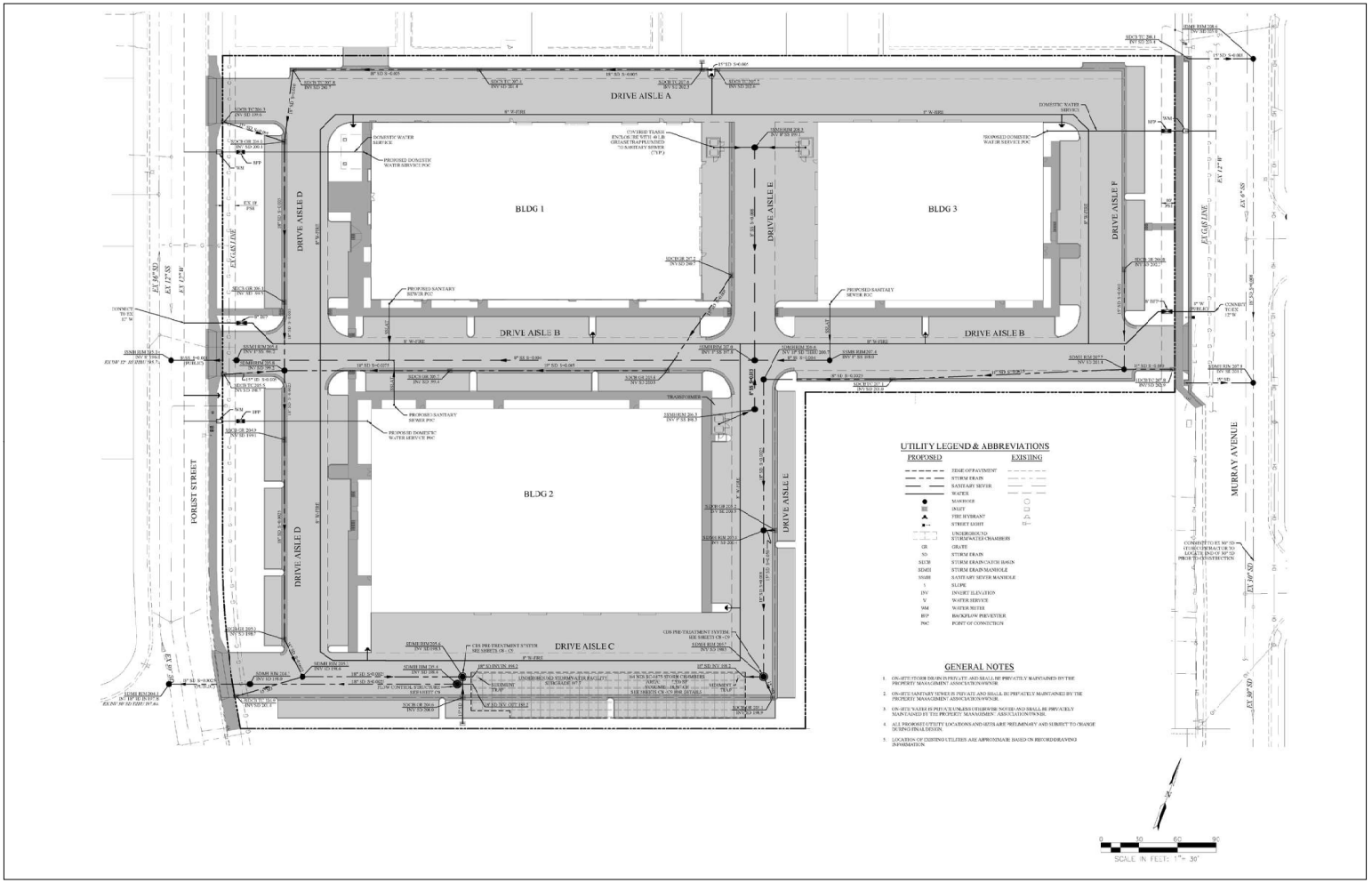
The proposed project would include utility connections in accordance with the requirements of the applicable utility providers for water, wastewater, stormwater drainage, power, and telecommunications services. These utilities would connect to existing infrastructure in the vicinity of the project site (Figure 2-6).

Water Supply

The proposed project would connect to the existing 12-inch water main located on Forest Street and the existing 12-inch water main located on Murray Avenue. Buildings 1 and 2 would connect to the existing water main located on Forest Street via a new water lateral and back flow preventor. Building 3 would connect to the existing water main located on Murray Avenue via a new water lateral and back flow preventor. Additionally, the proposed project would install a new 8-inch water line to come off of the existing 12-inch water mains on Forest Street and Murray Avenue. The new 8-inch water line would connect to a back flow preventor which would then connect to a new 8-inch fire water loop that would serve the project site.

The City of Gilroy Water System Master Plan includes recommended water unit factors for calculating water demand based on proposed land use classifications. For industrial land use classifications, the recommended water demand factor is 990 gallons per day (gpd) per net acre. With a project site of 7.29 acres, the proposed project would be anticipated to result in a water demand of approximately 7,200 gpd at full buildout. However, it is anticipated that the proposed uses similar to the existing Applicant's facility would generate less demand than typical industrial uses.

The City requires that building spaces be designed to handle the intended uses, with sprinklers and fire hydrants in accordance with the guidelines laid out in the City's Fire Code. The proposed project would be



Source: RJA, May 2023

Project Location

Gilroy, CA

Client/Project

City of Gilroy
Heat Wave Project
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Figure No.

2-6

Title

Utility Plan

Stantec

required to have sufficient firefighting flows to meet the City's requirements. Upon completion of the proposed project, occupancy is not allowed until a final inspection is made by the City Fire Department for conformance of all building systems with the City's Fire Code and National Fire Protection Association requirements including requirements for adequate firefighting flows and pressure to serve the proposed project.

Wastewater

The proposed project would construct a new 8-inch sanitary sewer line throughout the project site that would connect to individual buildings via a new sanitary sewer lateral. The proposed 8-inch sanitary sewer lines would connect to an existing 12-inch sanitary sewer main located on Forest Street.

The City of Gilroy Sewer System Master Plan includes recommended water unit factors for calculating wastewater generation based on proposed land use classifications. For industrial land use classifications, the recommended wastewater generation factor is 780 gpd per net acre. With a project site of 7.29 acres, the proposed project would be anticipated to result in a water demand of approximately 5,700 gpd at full buildout. However, it is anticipated that the proposed uses similar to the existing Applicant's facility would generate less wastewater than typical industrial uses.

Stormwater

The proposed project would construct an underground stormwater treatment facility to treat, retain, and/or detain stormwater runoff from the project site prior to it being discharged into the City's storm drainage system. The proposed project would construct and utilize storm drain catch basins, inlets, and a new storm drain line throughout the project site to convey captured runoff to the underground stormwater treatment facility. New storm drain lines proposed to be constructed onsite include 15-inch and 18-inch storm drain lines. After stormwater runoff generated at the project site is treated in the proposed underground stormwater facility, the treated runoff would be conveyed to the existing 30-inch storm drain main located on Forest Street.

Additionally, the proposed project would include the extension of the existing 27-inch storm drain main located along Murray Avenue. The proposed project would extend the existing storm drain main from its current stubbed location on Murray Avenue to the project site frontage. The proposed project would extend the storm drain main and would construct a new 18-inch storm drain line on Murray Avenue. Two existing storm drain inlets located on the northeast and southeast corner of the project site along Murray Avenue would connect to the extended Murray Avenue storm drain main via a new 15-inch storm drain line. Additionally, the offsite public sidewalk along Murray Avenue would direct runoff into the proposed landscape strip.

Electricity and Natural Gas

Pacific Gas and Electric Company (PG&E) provides electricity and natural gas service to the project site. The proposed project would not utilize natural gas service and would not construct new lines to connect to the existing gas lines located on Murray Avenue or the existing gas line located on the project site along the Forest Street project frontage.

The proposed project would be designed to include features required for Title 24 compliance. Energy conservation elements of the proposed project include light-emitting diode (LED) lighting and EV charging stations. At full buildout of the proposed project, the onsite parking would be wired for 29 EV capable spaces, thereby fulfilling California Green Building Standards (CALGreen) requirements. The proposed project would also construct solar ready areas to be provided on proposed building roofs. Additionally, the proposed project would underground the existing overhead utility lines along the Murray Avenue project frontage.

2.3.8 Mechanical Equipment

Mechanical equipment utilize during operation of the proposed project would vary depending on the exact use and tenants of the buildings. For buildings of the proposed size and use, typical operation would result in the use of nine forklifts and three back-up generators.

2.3.9 Landscaping and Tree Removal

The proposed project would provide landscaping along the project site frontage and throughout the project site. The proposed project would utilize drought-tolerant landscaping as required by City ordinance. Construction of the proposed project would require removal of existing trees located within the project site and all tree removal activities would be completed in accordance with the City's requirements. Of the 29 existing trees inventoried by the Arborist Report, seven of the trees located onsite meet the definition of a Protected Tree per Gilroy Municipal Code Section 30.28.270. In accordance with Gilroy Municipal Code Section 30.28.270, the proposed project would obtain a Tree Removal Permit from the City and would plant replacement trees onsite.

2.3.10 Lighting

The proposed project would provide exterior lighting in the parking lots and in areas that highlight the building's entrances, walkways, and landscaping features. Additionally, the proposed project's exterior lighting would be designed in accordance with CALGreen requirements which outlines design standards to limit and as appropriate prohibit light pollution incidents upon adjacent properties. As required by CALGreen requirements, the Applicant would be required to submit a lighting plan to the City for approval. Additionally, the proposed project would make improvement to existing public street lighting along the project frontages of Murray Avenue and Forest Street.

2.3.11 Construction and Operational Environmental Commitments

The proposed project would include environmental commitments to ensure compliance with applicable agency requirements and standards. The Applicant has identified the following environmental commitments to be implemented as part of the construction and operation of the proposed project.

Natural Resources and Construction Commitments

- In order to avoid potential impacts to seasonal nesting birds onsite, the Developer shall provide a pre-construction nesting bird survey prior to any tree removal activities if noise generation, ground disturbance, vegetation removal, or other construction activities begin during the bird nesting season (February 1 to August 31).

- The proposed project would comply with the City's Tree Ordinance as outlined in Gilroy Municipal Code Section 30.28.270. The proposed project would obtain a Tree Removal Permit for removal of existing Protected Trees located onsite and would plant replacement trees onsite at the ratio specified in Gilroy Municipal Code Section 30.28.270.

- Prior to the start of any construction activities, the proposed project shall complete pre-construction noise notification to neighbors in the area of the project site.

Transportation Commitments

- The Applicant shall commit to implementing operational vehicle miles traveled (VMT) reduction measures. These measures include:

    - TDM Strategy TP08 (Telecommuting and Alternative Work Schedule)

    - TDM Strategy TP13 (Ride-Sharing Programs)

2.4 PROJECT CONSTRUCTION

2.4.1 Construction Schedule

The proposed project would be constructed in three phases. As shown in Table 2-2, it is anticipated that the construction of Phase I would take approximately 13 months starting in July 2025 and ending in August 2026. The timing of development of Phase II and III and occupancy of Buildings 2 and 3 would depend upon numerous factors, including the rate of expansion of the Applicant's business and local, regional, and national economic conditions. To provide a conservative analysis, it is expected that construction of Phases II and III would be similar to Phase I. Construction of Phase II is anticipated to take approximately 13 months starting in July 2030 (Table 2-3). Construction of Phase III is anticipated to take approximately 14 months starting in July 2035 (Table 2-4).

Table 2-2: Project Construction Schedule – Phase I

Construction Task	Start Date	End Date	Construction Working Days
Site Preparation	7/3/2025	7/14/2025	10
Grading	7/17/2025	8/14/2025	10
Land Development/Building Construction	8/17/2025	6/30/2025	230
Paving	6/2/2026	7/27/2026	20
Architectural Coatings	8/2/2026	8/27/2026	20

Table 2-3: Project Construction Schedule – Phase II

Construction Task	Start Date	End Date	Construction Working Days
Site Preparation	7/7/2030	7/18/2030	10
Grading	7/21/2030	8/15/2030	20

Construction Task	Start Date	End Date	Construction Working Days
Land Development/Building Construction	8/18/2030	7/3/2031	230
Paving	7/6/2031	7/31/2031	20
Architectural Coatings	8/3/2031	8/28/2031	20

Table 2-4: Project Construction Schedule – Phase III

Construction Task	Start Date	End Date	Construction Working Days
Site Preparation	7/8/2035	8/2/2035	20
Grading	8/5/2035	9/2/2035	20
Land Development/Building Construction	9/5/2035	7/18/2036	230
Paving	7/21/2036	8/15/2036	20
Architectural Coatings	8/18/2036	9/14/2036	20

Construction would each require up to 51 construction workers during peak construction. It is anticipated that the construction workforce would be available from nearby areas.

2.4.2 Construction Equipment and Staging Areas

All construction materials and equipment would be stored onsite. Offsite staging, if necessary for construction of Phase III, would occur on the Applicant-owned parcel located immediately south of the project site. Construction activities would generally occur within the project site; however, work would extend into Forest Street and Murray Avenue to connect to existing utility lines and other necessary improvements. Any construction traffic, lane closures, or street staging would require an approved traffic control plan (TCP) and an encroachment permit from the City.

2.4.3 Construction Activities

The proposed project would create a total of 278,160 square feet of impervious surfaces and 48,240 square feet of pervious surfaces. The estimated amount of impervious and pervious surfaces created for each phase is provided in Table 2-5.

Table 2-5: Impervious and Pervious Surfaces by Phase

Activity	Phase I	Phase II	Phase III	Total
Impervious	100,500	112,000	74,660	287,160
Pervious	16,900	18,800	12,540	48,240

Notes:
Units in square feet

Construction activities associated with the proposed project would occur in three phases and would consist of site clearing, grading, utility connections, building construction, paving, frontage improvements, and landscaping on the project site. Phase I construction would disturb approximately 2.7 acres, Phase II

construction would disturb approximately 3 acres, and Phase III construction would disturb approximately 2 acres. Phase III construction would require offsite construction activities outside the project boundary and within the Murray Avenue right-of-way. Offsite construction activities would include construction of new driveways and sidewalks along the project frontages and extension of the existing storm drain main in Murray Avenue along the project frontage.

The estimated amount of cut and fill for each phase is provided in Table 2-6. It is estimated that the total amount of earth movement for the proposed project would require approximately 8,374 cubic yards (CY) of cut and approximately 3,010 CY of fill. Excess soil, if any, left over from construction of Phase I and Phase II would be moved to Phase III. The project engineer will refine the grading plan to either balance the project site or reduce off-haul of excess soil to the maximum extent possible. If the project site cannot be balanced and excess soil remains after construction of Phase III, the project Applicant would apply for a permit to stockpile the excess materials on the Applicant-owned parcel south of the project site or export it to a site within City limits needing fill material. Construction of the proposed project would require approximately seven feet of excavation for construction of the underground stormwater control system but could require excavation of up to 9.5 feet for construction of utility improvements.

Table 2-6: Estimated Cut and Fill

Activity	Phase I	Phase II	Phase III	Total
Cut (CY)	3,130	2,821	2,423	8,374
Fill (CY)	1,488	1,112	410	3,010
Net (CY)	**1,642**	**1,709**	**2,013**	**5,364 (export)**

Notes:
CY = cubic yards

3.0 ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

This section examines the proposed project's potential environmental effects within the parameters outlined in CEQA Guidelines Section 15183(b). The "Prior EIR" (as defined in CEQA Guidelines Section 15183[b][3]) is the City of Gilroy General Plan EIR, inclusive of all impact determinations, significance thresholds and policies and actions identified therein.

The evaluation builds from the Appendix G Environmental Checklist and has been modified to reflect the parameters outlined in CEQA Guidelines Section 15183(b). The checkboxes in the evaluation below indicate whether the proposed project would result in environmental impacts, as follows:

- **Significant Project Impact.** Indicates that the proposed project could result in a significant effect which either requires mitigation to be reduced to a less than significant level or which has a significant, unmitigated impact.
- **Impact not identified by General Plan EIR.** Indicates the proposed project would result in a project-specific significant impact (including peculiar offsite or cumulative impact) that was not identified in the General Plan EIR.
- **Impact Consistent with General Plan EIR.** Indicates the proposed project is consistent with the findings in the General Plan EIR.

A proposed project does not qualify for an exemption under CEQA Guidelines Section 15183 if it is determined that it would result in: 1) a peculiar impact that was not identified as a significant impact under the General Plan EIR; 2) a more severe impact due to new information; or 3) a potentially significant offsite impact or cumulative impact not discussed in the General Plan EIR.

As described herein, the proposed project would be required to comply with all applicable policies and actions identified in the General Plan EIR. This evaluation hereby incorporates the General Plan EIR discussion and analysis of all environmental topics. The General Plan EIR is a program level document that comprehensively evaluates the anticipated development that could occur within the City's Planning Area if every parcel in the City developed at the densities and intensities expected under the General Plan. As such, the analyses presented in the General Plan EIR represents a cumulative analysis of environmental impacts that may occur from buildout of the General Plan.

Determination

On the basis of this initial evaluation:

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

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

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

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

☒ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project. Therefore, no further environmental review is required under either CEQA Guidelines Sections 15168 or 15183.

Signature: _____ Date: _____

3.1 AESTHETICS

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☒
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☒
3) 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?	☐	☐	☒
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒

3.1.1 Environmental Setting

Visual Character of the Project Site

The project site is located in an urbanized area of the City and is surrounded by existing developments. The 7.29-acre project site is located in the City of Gilroy at 8875 Murray Avenue and consists of one parcel identified as APN 835-01-059. The project site is vacant and undeveloped and there are a few scattered trees throughout the project site. The project site is bordered by Forest Street to the west and Murray Avenue to the east and is located approximately 0.18 mile west of U.S. 101. Existing commercial uses border the project site to the north and vacant undeveloped land borders the project site to the south. Land uses surrounding the project site include a mix of commercial, industrial, and residential developments.

The project site does not contain any existing sources of light or glare. Nighttime lighting within the immediate vicinity consists of street lighting, parking lot lighting, vehicle headlights on the adjacent streets and highways, and exterior lighting associated with the nearby developments.

Scenic Resources and Corridors

The City is located in a broad, fertile valley bordered by the Diablo Mountains to the east and the Santa Cruz Mountains to the west. According to the City's General Plan EIR, visual character and scenic resources in the City are linked to the region's natural topography and some of the City's key scenic resources include natural resources and wildlife habitat areas, such as Uvas Creek and Llagas Creek

riparian communities, the heavily vegetated portions of the Santa Cruz mountains, steep hillsides and significant hillside features such as serpentine barrens, and natural features of high community value including the stands of trees along Miller Avenue and deodar cedar trees lining Hecker Pass Highway. Other scenic resources within and adjacent to the City include farmland, surrounding hillsides, areas viewed from Hecker Pass Highway, Uvas Park Drive, and the City's principal gateway areas (City of Gilroy 2020b).

Scenic Corridors

The California Department of Transportation (Caltrans) manages the California Scenic Highway Program. The goal of the program is to preserve and protect scenic highway corridors from changes that would affect the aesthetic value of the land adjacent to the highways. According to the California State Scenic Highways System Map, there are no officially designated or eligible state scenic highways near the project site (Caltrans 2024).

Listed below are goals and policies related to aesthetics from the City of Gilroy General Plan that are applicable to the proposed project:

Goal LU-1: Protect and enhance Gilroy's quality of life and unique identify while continuing to grow and change.

- **Policy LU-1.1: Pattern of Development.** Ensure an orderly, contiguous pattern of development that prioritizes infill development, phases new development, encourages compactness and efficiency, preserves surrounding open space and agricultural resources, and avoids land use incompatibilities.

Goal LU-5: Encourage, facilitate, and support the development of new employment and industrial uses and retention of existing industry to ensure compatibility with existing surrounding uses and planned uses.

- **Policy LU-5.1: Industrial Design Standards.** Ensure that new industrial developments contribute to the overall attractiveness of the community through appropriate site design, architectural design, and landscaping.
- **Policy LU-5.3: Screening in Industrial Areas.** Encourage the screening of loading areas and open storage areas so that they are not visible from major roads.

Goal LU-8: Support growth and development that preserves and strengthens the City's historic, small-town character; provides and maintains safe, livable, and affordable neighborhoods; and create beautiful places.

- **Policy LU-8.6: Utility Undergrounding.** Proceed with the undergrounding of existing overhead utility lines throughout the city, as funding allows, and require undergrounding of utilities in all new developments.
- **Policy LU-8.12: Outdoor Lighting Energy Efficiency.** Select outdoor lighting fixtures to provide maximum energy efficiency as well as effective lighting.

- **Policy LU-8.13: Limit Light Pollution.** Encourage measures to limit light pollution from outdoor sources, and direct outdoor lighting downward and away from sensitive receptors.

Goal PFS-8: Provide for the current and future energy and telecommunications needs of Gilroy.

- **Policy PFS-5.10: Outdoor Lighting and Energy Efficiency.** Select outdoor lamps and light fixtures that maximize energy efficiency, provide effective lighting, and are compatible with the neighborhood context.
- **Policy PFS-8.11: Light Pollution and Glare.** Require that light sources and fixtures be selected, designed, and located to minimize light pollution and glare.

Goal NCR-2: Allow residents to enjoy the views of the hills, creeks, and habitats that make Gilroy such a beautiful place to live.

- **Policy NCR-2.1: Scenic Routes.** Maintain the scenic character and ecology of the hillsides of the city when designing circulation facilities. Any roadways that must pass through hillside areas will be designed so as to preserve the ecological and scenic character of the hillsides, and high quality vistas.
- **Policy NCR-2.2: Scenic Highways.** Support the designation of Hecker Pass Highway as an official State Scenic Highway and establish appropriate development controls to ensure long-term protection of its scenic qualities. Controls should establish appropriate setbacks, sign standards, and other development regulations in keeping with State guidelines for the protection of scenic highway corridors.
- **Policy NCR-2.3: Other Scenic Roadways.** Protect important scenic qualities and natural features on other roadways in the Planning Area, including Miller Avenue from Uvas Park Drive to Mesa Road.

3.1.2 Discussion

Impact AES-1 Have a substantial adverse effect on a scenic vista?

According to the City's General Plan EIR, visual character and scenic resources in the City are linked to the region's natural topography and some of the City's key scenic resources include natural resources and wildlife habitat areas. Other scenic resources within the adjacent to the City include farmland, surrounding hillsides, areas viewed from Hecker Pass Highway, Uvas Park Drive, and the City's principal gateway areas (City of Gilroy 2020b). The City's General Plan EIR identified that development proposals would be subject to compliance with applicable zoning district design guidelines and standards, City ordinances, and General Plan policies would assist to mitigate the change in visual character that could substantially degrade the value of scenic resources. Therefore, with compliance with City requirements, the General Plan EIR determined new development would have less than significant impact on scenic vistas.

The project site is located within an urbanized area of the City and the surrounding uses consists of a mix of light industrial, commercial, and residential uses. As the project site is located within a highly urbanized area, views of hillsides identified as scenic resources are partially obscured due to existing development

and vegetation. The proposed project would construct three light industrial building that would be two stories with a maximum height of 35 feet. The proposed buildings would be consistent with the maximum height requirements of the M1 Limited Industrial zoning district which allows for a maximum height of 35 feet. The proposed project would not result in construction of buildings that would be taller than those already developed in the surrounding areas and would conform to the existing character of the area. Additionally, in accordance with the Murray Las Animas Avenue overlay combining district requirements, the proposed project would be required to comply with Gilroy Municipal Code Section 30.50.40 Architectural and Site Review which established requirements for Architectural and Site Review to consider the suitability of designed in terms of aesthetics. The Architectural and Site Review would ensure that the proposed project is not designed in such a way that would result in impacts views of scenic resources. Therefore, the proposed project would not have a substantial adverse effect on a scenic vista and impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact AES-2	**Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?**

There are no state-designated scenic highways located within the City (Caltrans 2024). The General Plan EIR concluded impacts to scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway would be less than significant.

The closest officially state-designated scenic highway is State Route (SR) 156, located over 17 miles southwest of the project site. U.S. 101, located 0.18 mile east of the project site, is identified in the City's General Plan EIR as a county designed scenic route. However, the project site is not visible from U.S. 101 as existing developments located between U.S. 101 and the project site block views of the site. Therefore, development of the proposed project would not result in substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway and there would be no impacts. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact AES-3	**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?**

The City's General Plan EIR identified that with compliance with applicable zoning district design guidelines and standards, City ordinances, and General Plan policies, new development would result in less than significant impacts to aesthetics.

The project site is designated as Industrial Park by the City's General Plan and zoned M1 Limited Industrial. As identified in the City's General Plan, the purpose of the Industrial Park land use designating is to allow for low-intensity industrial developments that can located in proximity to residential and

commercial uses with a minimum of environmental conflict (City of Gilroy 2020a). The M1 Limited Industrial zoning district implements the Industrial Park General Plan land use designation.

The proposed project would develop three light industrial buildings that would become the Applicant's new main headquarters consisting of offices, product storage, and warehouse operations such as assembly and distribution. The proposed buildings would have a maximum height of 35 feet, consistent with the maximum height requirements of the M1 Limited Industrial zoning district. The proposed project would provide landscaping along the project site frontage and throughout the project site. The proposed project would be designed and constructed in accordance with the City's buildings standards and regulations to ensure that it would not conflict with applicable zoning or other regulations governing scenic quality. In accordance with City Municipal Code Section 30.50.40, the proposed project would be reviewed by the community development director or designee to ensure compliance with these standards and ensure the proposed project is compatible with surrounding existing development. As such, the proposed project would not conflict with applicable zoning or other regulations governing scenic quality, and impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact AES-4	**Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

As discussed in the City's General Plan EIR, all new development would be subject to the lighting and glare standards outlined in the City Municipal Code. Implementation of these standards, as well as the Architectural and Site Review process, would prevent the creation of sources of light and glare sufficient to adversely affect views. Therefore, the General Plan EIR determined impacts associated with light and glare would be less than significant.

The project site is currently undeveloped and does not contain any sources of light and glare. Nighttime lighting within the immediate vicinity consists of street lighting, parking lot lighting, vehicle headlights on the adjacent streets, and exterior lighting associated with the nearby developments. The proposed project would provide exterior lighting in the parking lots and in areas that highlight the building's entrances, walkways, and landscaping features. The proposed project would be subject to Municipal Code Section 30.50.44(c) Exterior Lighting which requires lighting be constructed or located so that only the intended area is illuminated and offsite glare is fully controlled. The proposed project would be designed and constructed in accordance with these standards. Additionally, the proposed project's exterior lighting would be designed in accordance with CALGreen requirements which outlines design standards to limit and as appropriate prohibit light pollution incidents upon adjacent properties. As required by CALGreen requirements, the Applicant would be required to submit a lighting plan to the City for approval. The proposed project would not use building materials such as reflective glass that would cause a substantial new source of glare. Therefore, the proposed project would not create a new source of substantial light or glare, and impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.1.3 Conclusion

With regards to the issue area of aesthetics, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.2 AGRICULTURE AND FORESTRY RESOURCES

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) 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?	☐	☐	☒
2) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☒
3) Conflict with existing zoning for, or cause rezoning of, forestland (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))?	☐	☐	☒
4) Result in the loss of forestland or conversion of forestland to non-forest use?	☐	☐	☒
5) 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 forestland to non-forest use?	☐	☐	☒

3.2.1 Environmental Setting

According to the City's General Plan EIR, the Santa Clara Valley has historically grown a variety of crops, including vegetables, fruits, nuts, grain, floral, and nursery crops. Agricultural processing industries in the region have included canneries, dehydrators, dryers, packers, breeding, and the seed industry. The number of cultivated acres of farmland has decreased as the region has become increasingly urbanized, but a significant area of agricultural production remains in the southern Santa Clara Valley. According to the City's General Plan EIR, approximately 75 percent of land within the City's Planning Area/Sphere of Influence, but outside the Urban Growth Boundary is designated as Agriculture under the Santa Clara County General Plan. Active agricultural uses make up the largest share (60.7 percent; 20,964.2 acres) of existing land uses within the City's Planning Area/Sphere of Influence (City of Gilroy 2020b).

According to the California Department of Conservation (DOC) Important Farmland Map and City's General Plan EIR, the project site is designated as urban and built-up land (DOC 2023, City of Gilroy 2020b). The project site does not contain lands contracted under the Williamson Act, or lands zoned for forestland or timberland (City of Gilroy 2020b).

The City of Gilroy General Plan does not include any agricultural and forestry related goals or policies that would be applicable to the proposed project.

3.2.2 Discussion

Impact AG-1	**Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

The City's General Plan EIR determined that under buildout of the General Plan, development within the City's Urban Growth Boundary could result in the conversion of up to 1,119 acres of important farmland. The General Plan EIR determined that even with implementation of General Plan policies and agricultural land mitigation policy that includes purchase of replacement agricultural lands or permanent conservation easement requirements, the loss of important farmland would result in a significant and unavoidable impact.

According to the DOC's Important Farmland Map and City's General Plan EIR, the project site is designated as urban and built-up land (DOC 2024, City of Gilroy 2020b). The project site does not contain prime, unique, or farmland of statewide importance.

A Land Evaluation and Site Assessment (LESA) Report was prepared for the project site by First Carbon Solutions on October 15, 2021 (Appendix A). The report found that 90 percent of the project site contains Pleasanton loam soils, which is a prime agricultural soil. The LESA modeling conducted for the report determined that the project site yields a LESA model score of 62.8. For projects that score between 60 and 79 points, LESA model significance criteria indicates that this is a significant impact unless either the Land Evaluation or Site Assessment sub-scores is less than 20 points. In this case, the Site Assessment sub-score was 15 points. Therefore, the LESA report determined that the proposed project's conversion of agricultural land to non-agricultural uses is not considered significant for the purposes of CEQA.

As such, the proposed project would not result in the conversion of prime, unique, or farmland of statewide importance and no impact would occur. The proposed project would not result in new or substantially more severe impacts than identified in the City's General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact AG-2	**Conflict with existing zoning for agricultural use or a Williamson Act contract?**

According to the City's General Plan EIR, there are no parcels under a Williamson Act Contract within the City's Urban Growth Boundary and therefore, no impacts resulting from conflicts with parcels with Williamson Act Contracts would occur.

The project site does not contain lands contracted under the Williamson Act Contract (City of Gilroy 2020b). Additionally, as identified previously, the project site is zoned M1 Limited Industrial and is not zoned for agricultural uses. Therefore, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and no impact would occur. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact AG-3	**Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g])?**

The City's General Plan EIR did not analyze potential impacts related to forestland, timberland, or timberland zoned Timberland Production. As identified in the City's General Plan EIR, none of the natural plant communities present in the City's Planning Area and Sphere of Influence (SOI) are on lands located within an area zoned for forestland, timberland, or timberland production by either the City of the County of Santa Clara. The City does not include zoning designations for forestland, timberland, or timberland production.

The project site does not contain forestland (as defined in PRC Section 12220[g]), or timberland (as defined by PRC Section 4526). Furthermore, the project site is not zoned Timberland Production (as defined by Government Code section 51104[g]). Additionally, there are no forestland or timberland resources that exist onsite or in the surrounding areas. The project site is zoned Industrial Park and would not be rezoned to allow forestland or timberland production. As such, the proposed project would not convert forestland or timberland to a non-agricultural use and no impact would occur. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact AG-4	**Result in the loss of forestland or conversion of forestland to non-forest use?**

As discussed under Impact AG-3, the City's General Plan EIR did not analyze potential impacts to forestland. The project site is zoned Industrial Park and does not contain forestland resources. As such, the proposed project would not result in the loss of forestland or conversion of forestland to non-forest use and no impact would occur. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact AG-5	**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 forestland to non-forest use?**

The City's General Plan EIR identified that with implementation of General Plan policies and the City's Agricultural Mitigation Policy, buildout under the General Plan would not result in conversion of farmland to non-agricultural uses or conversion of forestland to non-forest uses and impacts were determined to be less than significant.

The project site does not contain prime, unique, or farmland of statewide importance and does not contain lands protected by a Williamson Act contract. The project site is not zoned for forestland or timberland production and would not be rezoned for agricultural use. The proposed project would develop three light industrial buildings that would become the Applicant's new main headquarters consisting of offices, product storage, and warehouse operations. The project site is located within a highly urbanized area and is not located adjacent to lands utilized for agricultural or forestry purposes. Therefore, the proposed project would not result in the conversion of farmland to non-agricultural use or forestland to a non-forestry use and no impact would occur. The proposed project would not result in new or

substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.2.3 Conclusion

With regards to the issue area of agriculture and forestry resources, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.3 AIR QUALITY

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒
2) 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?	☐	☐	☒
3) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒
4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒

3.3.1 Environmental Setting

The following discussion is based on the Air Quality, Greenhouse Gas, and Energy Technical Memorandum that was prepared for the proposed project by Stantec (Appendix B).

The project site lies within the Santa Clara Valley subregion of the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The SFBAAB encompasses all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, the southern portion of Sonoma, and the southwestern portion of Solano County. Air quality in this area is determined by natural factors including topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions (BAAQMD 2022).

Climate and Meteorology

The SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys, and bays, which distort normal wind flow patterns. The Coast Range splits resulting in a western coast gap (Golden Gate) and an eastern coast gap (Carquinez Strait), which allows air to flow in and out of the SFBAAB and the Central Valley.

The climate is dominated by the strength and location of a semi-permanent, subtropical high-pressure cell. During the summer, the Pacific high pressure cell is centered over the northeastern Pacific Ocean resulting in stable meteorological conditions and a steady northwesterly wind flow. Upwelling of cold ocean water from below to the surface because of the northwesterly flow produces a band of cold water off the California coast. The cool and moisture-laden air approaching the coast from the Pacific Ocean is further cooled by the presence of the cold water band resulting in condensation and the presence of fog and stratus clouds along the Northern California coast.

In the winter, the Pacific high-pressure cell weakens and shifts southward resulting in wind flow offshore, the absence of upwelling, and the occurrence of storms. Weak inversions coupled with moderate winds result in a low air pollution potential. During the summer, the large-scale meteorological condition that dominates the West Coast is a semi-permanent high pressure cell centered over the northeastern Pacific Ocean. This high pressure cell keeps storms from affecting the California coast. Hence, the SFBAAB experiences little precipitation in the summer months. Winds tend to blow on shore out of the north/northwest.

Criteria Pollutants and Ambient Air Quality Standards

Criteria air pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (measured both in units of smaller than 2.5 microns in diameter [$PM_{2.5}$] and in units of particulate matter smaller than 10 microns in diameter [PM_{10}]), and lead (Pb).

For the protection of public health and welfare, the Federal Clean Air Act (FCAA) required that the U.S. Environmental Protection Agency (USEPA) establish National Ambient Air Quality Standards (NAAQS) for various pollutants. These standards define the maximum amount of an air pollutant that can be present in ambient air. In California, under the California Clean Air Act (CCAA), the California Air Resources Board (CARB) established the California Ambient Air Quality Standards (CAAQS). The CAAQS are equal to or more stringent than the NAAQS and include pollutants for which national standards do not exist. Table 3-1 provides a summary of the applicable CAAQS and NAAQS.

Table 3-1: National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]	National Standards[2]	
			Primary	Secondary
Ozone (O_3)	8-hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	Same as Primary Standards
	1-hour	0.09 ppm (180 µg/m^3)	--	
Carbon monoxide (CO)	8-hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	--
	1-hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	
Nitrogen dioxide (NO_2)	Annual arithmetic mean	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary Standard
	1-hour	0.18 ppm (339 µg/m^3)	100 ppb (188 µg/m^3)	
Sulfur dioxide (SO_2)	Annual arithmetic mean	--	0.030 ppm (80 µg/m^3)	--
	24-hour	0.04 ppm (105 µg/m^3)	0.14 ppm (80 µg/m^3)	--
	3-hour	--	--	0.5 ppm (1300 µg/m^3)
	1-hour	0.25 ppm (655 µg/m^3)	--	--
Respirable Particulate Matter Smaller than 10 Microns in Diameter (PM_{10})	Annual arithmetic mean	20 µg/m^3	--	Same as Primary Standards
	24-hour	50 µg/m^3	150 µg/m^3	
Respirable Particulate Matter Smaller than 2.5 Microns in Diameter ($PM_{2.5}$)[3]	Annual arithmetic mean	12 µg/m^3	9.0 µg/m^3	15 µg/m^3
	24-hour	No separate standard	35 µg/m^3	Same as Primary Standards

Pollutant	Averaging Time	California Standards[1]	National Standards[2]	
			Primary	Secondary
Sulfates	24-hour	25 µg/m^3	--	--
Lead (Pb)	30-day average	1.5 µg/m^3	--	--
	Calendar quarter	--	1.5 µg/m^3	Same as Primary Standard
	Rolling 3-month average	--	0.15 µg/m^3	
Hydrogen sulfide (H_2S)	1-hour	0.03 ppm (42 µg/m^3)	--	--
Vinyl chloride (chloroethene)	24-hour	0.01 ppm (26 µg/m^3)	--	--
Visibility reducing particles	8-hour	In 1989, the Air Resources Board converted the general statewide 10-mile visibility standard to instrumental equivalents, which are extinction of 0.23 per kilometer.	--	--

Notes:
1. CO, SO_2 (1- and 24-hour), NO_2, O_3, PM_{10}, and visibility reducing particles standards are not to be exceeded.
2. Not to be exceeded more than once a year except for annual standards.
3. On February 7, 2024, the USEPA issued a pre-publication version of the Final Rule to lower the primary annual NAAQS for $PM_{2.5}$ from 12.0 µg/m^3 to 9.0 µg/m^3.
-- = no standard established
µg/m^3 = micrograms per cubic meter
mg/m^3 = milligrams per cubic meter
ppm = parts per million
Source: CARB. 2016. Ambient Air Quality Standards. https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf. Accessed February 7, 2024.

The USEPA and CARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. The SFBAAB is designated as nonattainment for state ozone, $PM_{2.5}$, and PM_{10} standards, as well as national ozone and $PM_{2.5}$ standards. The SFBAAB is in attainment or unclassified for all other CAAQS and NAAQS.

Sensitive Receptors

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, 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 sensitive receptors to the project site are the single-family residences to the east, across Murray Avenue.

Thresholds of Significance

In order to help public agencies evaluate air quality impacts, the BAAQMD adopted regional air quality thresholds in May 2010 to establish the level at which the Air District believed air pollution emissions would cause adverse air quality impacts to the region. The thresholds represent the levels at which a

project's individual emissions of criteria air pollutants (PM_{10} and $PM_{2.5}$) or ozone precursors (reactive organic gases [ROG] and nitrogen oxides [NOx]) would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. The BAAQMD thresholds are presented in Table 3-2.

Table 3-2: BAAQMD Construction and Operational Criteria Pollutant Thresholds

Pollutant	Construction	Operational	
	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tpy)	Average Daily Emissions (lbs/day)
ROG	54	10	54
NOx	54	10	54
PM_{10}	82	15	82
$PM_{2.5}$	54	10	54

Note: Construction particulate matter thresholds only account for exhaust particulate matter emissions.
Source: BAAQMD. 2022. CEQA Air Quality Guidelines. https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines?sc_lang=en. Accessed February 7, 2024.

According to the BAAQMD, a project would result in a significant impact if it would individually expose sensitive receptors to toxic air contaminants (TACs) resulting in an increased cancer risk greater than 10.0 in 1 million, an increased non-cancer risk of greater than 1.0 on the hazard index (chronic or acute), or an annual average ambient $PM_{2.5}$ increase greater than 0.3 micrograms per cubic meter ($\mu g/m^3$) (BAAQMD 2022).

In addition, BAAQMD has developed the following attainment plans and rules and regulations applicable to the proposed project:

- **2017 Clean Air Plan.** The BAAQMD adopted the 2017 Clean Air Plan in April 2017 that includes control strategies to reduce ozone precursors (ROG and NOx), particulate matter, TACs, and greenhouse gas (GHG) emissions. The 2017 Clean Air Plan included several measures for reducing PM emissions from stationary sources and wood burning (BAAQMD 2023a).
- **Regulation 2, Rule 1, General Permit Requirements.** This regulation includes criteria for issuance or denial of permits, exemptions, and appeals against decisions of the Air Pollution Control Officer and BAAQMD actions on applications.
- **Regulation 6, Rule 1, General Requirements.** The purpose of this regulation is to limit the quantity of particulate matter in the atmosphere through the establishment of limitations on emission rates, emission concentrations, visible emissions, and opacity.
- **Regulation 7, Odorous Substances.** Regulation 7 places general limitations on odorous substances and specific emission limitations on certain odorous compounds. The limitations of this regulation shall not be applicable until BAAQMD receives odor complaints from 10 or more complainants within a 90-day period alleging that a person has caused odors perceived at or beyond the property line of such person and deemed to be objectionable by the complainants in the normal course of their work, travel, or residence. BAAQMD staff shall investigate and track all odor complaints they receive and shall attempt to visit the site, identify the source of the objectionable odor, and assist the owner or facility in finding a way to reduce the odor.

- **Basic Construction Mitigation Measures.** All construction within BAAQMD's jurisdiction is required to implement the BAAQMD's Basic Construction Mitigation Measures (BCMMs), listed below:

    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 miles per hour (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. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of CCR). Clear signage shall be provided for construction workers at all access points.

    7. All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified visible emissions evaluator.

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

Listed below are goals and policies related to air quality from the City of Gilroy General Plan that may be applicable to the proposed project:

Goal NCR-3: Contribute to improvements in regional air quality and reductions in greenhouse gas emissions.

- **Policy NCR-3.15: Reduce Construction Emissions.** Require the use of low emissions construction equipment for public and private projects, consistent with the air district 2017 Clean Air Plan. Where construction-related emissions would exceed the applicable Thresholds of Significance, the City will consider, on a case-by-case basis, implementing Additional Construction Mitigation Measures (Table 8-3 in BAAQMD's CEQA Guidelines).

- **Policy NCR-3.16: Implement Dust-Control Measures.** Require the implementation of the air district's dust control measures during construction of individual projects, consistent with the air district 2017 Clean Air Plan.

- **Policy NCR-3.19: New Industrial Uses within 500 feet of Sensitive Receptors.** Require modeling, and include mitigation as may be appropriate, of toxic air contaminants prior to approval of new industrial development within 500 feet of residential uses, Neighborhood District designations, or the Downtown Specific Plan, to ensure significant health risks are mitigated.

3.3.2 Discussion

Impact AIR-1	Conflict with or obstruct implementation of the applicable air quality plan?

The General Plan EIR concluded that implementation of the General Plan would not conflict with or obstruct implementation of an adopted air quality plan and impacts would be less than significant with mitigation.

The BAAQMD thresholds of significance for criteria pollutants are applied to evaluate regional impacts of project-specific emissions of air pollutants and their impact on the BAAQMD's ability to reach attainment. Emissions that are above these thresholds have not been accounted for in the air quality plans and would not be consistent with the air quality plans. Air quality modeling was performed using project-specific details to determine whether the proposed project would result in criteria air pollutant emissions in excess of the applicable thresholds of significance. The proposed project's emissions are shown under Impact AIR-2. The results of the unmitigated emissions modeling were compared to the BAAQMD standards of significance to determine the associated level of impact. As shown under Impact AIR-2, the proposed project would not exceed the applicable BAAQMD thresholds. The proposed project would not conflict with or obstruct the implementation of applicable air quality plan and the proposed project would have a less than significant impact. Therefore, the proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR, and the criteria for requiring further CEQA review are not met.

Impact AIR-2	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The General Plan EIR determined that buildout of the Gilroy 2040 General Plan would result in a significant impact related to criteria air pollutants specifically resulting from the increase in VMT. Although the General Plan includes several policies that would reduce VMT, there is no guarantee that VMT could be reduced to a less than significant level. Therefore, the impact is assumed to remain significant and unavoidable.

In developing thresholds of significance for air pollutants, the BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Proposed project construction and operational emissions were calculated in the California Emissions Estimator Model (CalEEMod) version 2022.1.1.21.

Construction Emissions

Emissions from construction-related activities are generally short-term but may still cause adverse air quality impacts. The proposed project would generate emissions from construction equipment exhaust, worker travel, and fugitive dust. The proposed project's estimated construction emissions are provided in Table 3-3. As shown therein, construction of the proposed project would not result in emissions that exceed BAAQMD thresholds.

Table 3-3: Construction Criteria Pollutant Emissions

Phase	Year	Emissions (lbs/day)			
		ROG	NOx	PM_{10}	$PM_{2.5}$
I	2025	0.89	7.87	1.39	0.74
	2026	1.33	1.07	0.09	0.05
II	2030	0.83	7.10	1.52	0.76
	2031	1.23	0.43	0.04	0.02
III	2035	0.78	6.32	1.99	0.98
	2036	1.25	0.62	0.05	0.02
BAAQMD Thresholds		**54**	**54**	**82**	**54**
Exceed BAAQMD Thresholds?		***No***	***No***	***No***	***No***

Note: BAAQMD thresholds for PM_{10} and $PM_{2.5}$ are intended for exhaust emissions only. The emissions presented above include total particulate matter (exhaust emissions and fugitive emissions) and are therefore a conservative estimate.
Source: Appendix B.

Operational Emissions

Operational emissions would be generated from mobile, energy, area, and stationary source emissions. The proposed project's operational emissions are provided in Table 3-4. As shown herein, operations of the proposed project would not result in emissions that exceed the BAAQMD operational thresholds.

Table 3-4: Operational Criteria Pollutant Emissions

Source	Emissions (lbs/day)			
	ROG	NOx	PM_{10}	$PM_{2.5}$
Mobile	1.06	0.56	1.51	0.39
Area	3.37	0.02	0.00	0.00
Energy	0.08	1.42	0.11	0.11
Off-Road	0.32	3.04	0.07	0.06
Stationary	0.13	0.41	0.02	0.02
Total	*4.97*	*5.46*	*1.71*	*0.58*
BAAQMD Thresholds	**54**	**54**	**82**	**54**
Total (tons/year)	*0.91*	*1.00*	*0.31*	*0.11*
BAAQMD Thresholds (tons/year)	**10**	**10**	**15**	**10**
Exceed BAAQMD Thresholds?	***No***	***No***	***No***	***No***

Source	Emissions (lbs/day)			
	ROG	NOx	PM_{10}	$PM_{2.5}$

Note: Totals may not appear to sum due to rounding.
Source: Appendix B.

Conclusion

The proposed project would not result in a cumulatively considerable net increase of any criteria air pollutant for which the project region is in non-attainment and would have a less than significant impact. Therefore, the proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR, and the criteria for requiring further CEQA review are not met.

Impact AIR-3 Expose sensitive receptors to substantial pollutant concentrations?

A sensitive receptor is a person in a population who is particularly susceptible to health effects due to exposure to an air contaminant. The following are land uses where sensitive receptors are typically located:

- Long-term health care facilities
- Rehabilitation centers
- Convalescent centers
- Hospitals
- Retirement homes
- Residences
- Schools, playgrounds, and childcare centers

The nearest sensitive receptors to the project site are the single-family residences to the east, across Murray Avenue.

The following discussion addresses whether the proposed project would expose sensitive receptors to substantial pollutant concentrations. Proposed project construction and operational impacts are assessed separately below.

Construction Health Risk

Fugitive dust would be generated from site grading and other earth-moving activities. Most of this fugitive dust would remain localized and would be deposited near the project site, but the potential exists for impacts from fugitive dust to occur. However, all projects within the jurisdiction of the BAAQMD are required to implement all of the BAAQMD's BCMMs (BAAQMD 2023b). The proposed project's required implementation of the BAAQMD's BCMMs, as well as compliance with BAAQMD Regulation 6, Particulate Matter and Visible Emissions, would minimize construction-related fugitive dust emissions. Furthermore, the required implementation of General Plan Policy NCR 3.16: Implement Dust-Control Measures would ensure that a dust-control measures are implemented during construction.

Exposure to DPM from diesel vehicles and off-road construction equipment has the potential to result in health risks to nearby sensitive receptors. While construction of the proposed project would involve the use of diesel fueled vehicles and off-road equipment, construction would be temporary. In addition, proposed project emissions were determined not to exceed the BAAQMD thresholds for criteria pollutant

emissions, which includes particulate matter. General Plan Policy NCR 3.19: New Industrial Uses within 500 feet of Sensitive Receptors, modeling, and mitigation as appropriate, is required to ensure that health risks do not occur for industrial uses within 500 feet of sensitive receptors. The Project would be constructed in three phases. Phase I would construct Building 1 on the northwest corner of the site from 2025-2026; Phase II would construct Building 2 on the southwest corner of the site from 2030-2031; and Phase III would construction Building 3 on the northeast corner of the site from 2035-2036. Phases I and II would occur over 500 feet from the nearest receptor, therefore, consistent with General Plan Policy NCR 3.19, the Project would not be required to evaluate health risks. Furthermore, according to CARB, DPM emissions have also been shown to be highly dispersive in the atmosphere with the DPM concentration decreasing with distance from the source (CARB 2005). Therefore, the concentration of DPM at the nearest receptors would be substantially reduced at nearby receptors during Phase I and II. Phase III would occur within 500 feet of existing sensitive receptors. However, the exposure duration would be short-term and construction equipment and vehicles would be required to comply with the regulatory measures such as Advanced Clean Cars II that requires all new cars and light trucks sold in California by 2035 be zero-emission vehicles and Advanced Clean Fleet that phases in the use of zero emissions heavy duty trucks. The implementation of these measures would be in place by Phase III construction and that would reduce DPM emissions as compared to Phase I and Phase II emissions. Therefore, the risk posed to sensitive receptors would be less than significant.

Operational Health Risk

With regard to localized CO emissions, according to BAAQMD, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour in order to generate a significant CO impact. Based on the trip generation rate provided by CalEEMod, the proposed project is expected to generate up to 3,144 vehicle trips per day. The increase in trips per day attributable to the proposed project is not sufficient to increase traffic volumes at any nearby intersection by more than 44,000 vehicles per hour. As a result, vehicle trips associated with proposed project operations would not exceed the screening criteria of BAAQMD and 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.

The greatest potential for exposure to TACs during long-term operations is typically from the use of heavy-duty diesel trucks and stationary generators that use diesel fuel. As an industrial project, the proposed project would generate diesel truck trips and may include backup diesel generators. However, pursuant to General Plan Policy NCR 3.19: New Industrial Uses within 500 feet of Sensitive Receptors, modeling is required to ensure that health risks do not occur.

Conclusion

Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations and compliance with General Plan Policies NCR-3.16: Implement Dust-Control Measures and NCR-3.19: New Industrial Uses would ensure proposed project activities would result in a less than significant impact. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact AIR-4	**Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

The General Plan EIR concluded that implementation of the General Plan would not introduce new people into an area significantly impacted by existing odors nor would it create odors affecting a substantial number of people and impacts would be less than significant.

Potential sources that may emit odors during construction activities include exhaust from diesel construction equipment. However, because of the temporary nature of these emissions, intermittent nature of construction activities, and highly diffusive properties of diesel PM exhaust, nearby receptors would not be affected by diesel exhaust odors associated with project construction. Odors from these sources would be localized and generally confined to the immediate area surrounding the project site. The proposed project would utilize typical construction techniques, and odors would be typical of most construction sites and temporary in nature. Impacts would be less than significant.

Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, feed lots, coffee roasters, asphalt batch plants, and rendering plants. The proposed project would not engage in any of these activities and would not be considered an odor generator. Therefore, the proposed project would not be considered a generator of objectionable odors during operations. Impacts would be less than significant.

The proposed project's construction and operation impacts would be less than significant. Therefore, the proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.3.3 Conclusion

With regards to the issue area of air quality, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.4 BIOLOGICAL RESOURCES

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) 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?	☐	☐	☒
2) 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 or U.S. Fish and Wildlife Service?	☐	☐	☒
3) 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?	☐	☐	☒
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒

3.4.1 Environmental Setting

A Technical Biological Report was prepared by Live Oak Associates, Inc. (Live Oak) on January 3, 2023, for the proposed project (Appendix C). The Biological Report conducted a field survey of the project site in November 2022 and identified that at the time of the field survey, the project site consisted primarily of disked California annual grassland with some trees located around the border of the project site. The Biological Report identified that the project site has two land cover types, California annual grassland, and Developed: Urban-Suburban. The California annual grassland habitat is identified as ruderal in nature, had been disked, except for a small fences area at the time of the November 2022 site visit and is dominated by non-native plants. The Developed: Urban-Suburban area includes a graveled driveway

from Murray Avenue, a cement pad near the end of the driveway, a second graveled area in the northwest corner of the site, and a portion of a basketball court in the fenced adjacent parcel area.

Listed below are relevant policies from the City of Gilroy General Plan:

Goal NCR-1: Preserve and enhance Gilroy's natural resources for current and future residents.

- **Policy NCR-1.1: Habitat Plan Compliance.** For all covered activities throughout the city, comply fully with permit conditions of the Santa Clara Valley Habitat Plan. This will protect natural resources by minimizing impacts on sensitive natural communities and 18 covered species, facilitating wildlife movement, and establishing stream setbacks and buffers. Associated permit fees will be used for reserve system preservation, habitat enhancement and restoration, and adaptive management and monitoring.

- **Policy NCR-1.4: Plant and Wildlife Habitat.** In concert with Habitat Plan requirements, preserve important plant and wildlife habitats, including streams and riparian habitats, wildlife movement corridors, heavily vegetated hillside areas, unique ecosystems (such as oak woodlands and serpentine substrates), and significant nesting/denning sites for native wildlife.

- **Policy NCR-1.7: Special Status Species.** Special-status species are those listed as Endangered, Threatened, or Rare, or as Candidates for listing by the U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW), or as Rare Plant Rank 1B or 2B species by the California Native Plant Society (CNPS). This designation also includes CDFW Species of Special Concern and Fully Protected Species. For special-status species that are not among the 18 covered species in the Habitat Plan, minimize future development in areas that support such species. Conduct focused surveys per applicable regulatory agency protocols as appropriate to determine if such species occur on a given project site, as determined necessary by a qualified biologist. If development of occupied habitat must occur, species impacts shall be avoided or minimized, and if required by a regulatory agency or the CEQA process, loss of wildlife habitat or individual plants should be fully compensated on the site. If off-site mitigation is necessary, it should occur within the Gilroy Planning Area whenever possible with a priority given to existing habitat mitigation banks. Habitat mitigation shall be accompanied by a long-term management plan and monitoring program prepared by a qualified biologist and include provisions for protection of mitigation lands in perpetuity through the establishment of easements and adequate funding for maintenance and monitoring.

- **Policy NCR-1.8: Native Nesting Bird Protection.** Protect native nesting birds, which are protected by the Federal Migratory Bird Treaty Act and the California Fish and Game Code.

- **Policy NCR-1.9: Native Tree Protection.** Preserve and protect healthy oak trees and other native trees from harm or destruction during the development process.

3.4.2 Discussion

Impact BIO-1	**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?**

The City's General Plan EIR concluded that implementation of General Plan policies and implementation programs would reduce potential, significant impacts to special-status species and protected nesting birds, but not to a less than significant level. Therefore, the General Plan EIR identified Mitigation Measure BIO-1. Mitigation Measure BIO-1 identified in the City's General Plan EIR modified the proposed language for the General Plan Policy NCR-1.7: Special Status Species to require evaluation of impacts to all special-status species, as required by CEQA, not to just those that are considered rare, threatened, and endangered. With the implementation of the Mitigation Measure requiring an update to the General Plan policy, and implementation of other applicable General Plan policies and implementation programs, the General Plan EIR determined that impacts would be less than significant.

Special-Status Plant Species

According to the Biological Report, the grassland habitat of the project site does not provide habitat for special-status plants due to on-going and long-term disturbance and disking of the project site. Special-status plant species known to occur, or to once have occurred, in the project region was determined to be absent from the project site during the field survey due to an absence of potential habitat for these species (Live Oak 2023). As such the proposed project is anticipated to have no impact on special-status plant species.

Special-Status Wildlife Species

The Biological Report identified that 24 special-status animal species occur, or once occurred, in the region. Of these, 17 species were determined to be absent or unlikely to occur on the project site due to a lack of suitable habitat for these species. The species that would be absent or unlikely to occur include the western bumble bee, Crotch bumble bee, California tiger salamander, foothill yellow-legged frog, California red-legged frog, Santa Cruz black salamander, coast horned lizard, western pond turtle, Swainson's hawk, yellow-breasted chat, yellow warbler, least Bell's vireo, tricolored blackbird, grasshopper sparrow, San Francisco dusky-footed woodrat, American badger, and San Joaquin kit fox. The remaining seven special-status animals species include northern harrier, white-tailed kite, golden eagle, burrowing owl, loggerhead shrike, Townsend's big-eared bat, and pallid bat. These seven species potentially occur more frequently as potential foragers or transients, may be resident to the project site, or may occur within adjacent areas to the project site. Suitable roosting habitat for Townsend's big-eared bat and pallid bad was not observed during the field survey; however, these species are expected to forage within the project site from time to time.

The habitats of the project site comprise only a small portion of the regionally available habitat for plant and animal species that are expected to use the habitat. The proposed project would result in the loss of California annual grassland habitat; however, this is not expected to result in a significant loss of habitat for local wildlife. Therefore, impacts due to the loss of habitats for native wildlife resulting from the proposed project would be less than significant. The loss of grassland habitat, which does not contain

regionally important habitat for the northern harrier, white-tailed kite, golden eagle, burrowing owl, loggerhead shrike, Townsend's big-eared bat, and pallid bat, will not result in a significant loss of habitat for the species. However, the proposed project does have the potential to result in an impact to individuals such as construction related injury or mortality of nesting migratory birds and raptors, northern harrier, white-tailed kite, golden eagle, burrowing owl, and loggerhead shrike.

Nesting Birds

The Biological Report identified that the trees and grassland habitat of the project site may support nesting birds and raptors. If buildout of the proposed project is completed during the nesting period for migratory birds (typically between February 1 and August 31), the proposed construction activities, including initial site grading, soil excavation, and/or tree and vegetation removal, may pose a risk of nest abandonment and death of any live eggs of young that may be present in nests within or near the project site. The proposed project would be required to comply with Condition 1 of the Santa Clara Valley Habitat Plan (SCVHP) which requires avoidance of direct impacts to legally protected plant and wildlife species, including nesting and migratory birds. Additionally, as identified in Section 2.3.11 Construction and Operational Environmental Commitments of this document, the proposed project would include an environmental commitment to conduct a pre-construction nesting bird survey prior to the start of any construction activities, including tree removal activities, if construction activities begin during the nesting season. Therefore, the proposed project would include the preparation of a nesting bird survey if construction activities are to commence between the identified nesting period for migratory birds (February 1 through August 31) which would ensure that impacts to potential nesting birds onsite are avoided and therefore, would not result in substantial impacts to nesting birds.

The proposed project would comply with General Plan Policy NCR-1.7: Special Status Species which requires focused surveys be conducted to determine if special-status species occur on a project site and if development of occupied habitat must occur, species impacts shall be avoided or minimized. The proposed project would also comply with General Plan Policy NCR-1.8: Native Nesting Bird Protection which requires protection of native nesting birds which are protected by the Federal Migratory Treaty Act and the California Fish and Game Code.

Western Burrowing Owls

The project site is located outside of the burrowing owl fee area for the SCVHP; however, the project site provides overwintering habitat for burrowing owls in the form of California ground squirrel burrows and foraging habitat. Additionally, suitable habitat for the species is present in the field to the south of the project site. As required by General Plan Policy NCR-1.1: Habitat Plan Compliance, the proposed project would be required to comply with the permit conditions of the SCVHP. Burrowing owls are protected under Condition 1 of the SCVHP and compliance with Condition 15 of the SCVHP would be required. Condition 15 of the SCVHP requires pre-construction surveys for burrowing owls in appropriate habitat prior to construction activities, provides avoidance measures for owls and nests in the breeding season and owls in the non-breeding season, and requirements for construction monitoring. Implementation of SCVHP requirements would reduce potential impacts to western burrowing owls. Additionally, as identified in Section 2.3.11 Construction and Operational Environmental Commitments of this document, the proposed project would include an environmental commitment to conduct nesting bird surveys if construction activities commence within the breeding and nesting season for seasonal nesting birds, including burrowing owls. Therefore, the proposed project would not commence construction activities

within the identified breeding season for burrowing owls (February 1 through August 31) and therefore, would not result in substantial impacts to burrowing owls.

The General Plan EIR determined that future development would have a less than significant impact on special-status species with implementation of General Plan policies. Compliance with General Plan policies, City standard conditions of approval, and federal and state laws, compliance with requirements of the SCVHP, and implementation of environmental commitments identified in Section 2.3.11 Construction and Operational Environmental Commitments of this document would ensure impacts to protected species would be less than significant. Therefore, the proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact BIO-2	**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 U.S. Fish and Wildlife Service?**

The City's General Plan EIR concluded that implementation of the SCVHP and General Plan policies would reduce potential impacts to riparian habitat and other sensitive natural communities to a less than significant level.

The Biological Report prepared for the proposed project identified that riparian habitat and other sensitive natural communities are absent from the project site (Live Oak 2023). Therefore, the proposed project would have no impact on riparian habitat or other sensitive natural communities. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for requiring further CEQA review are not met.

Impact BIO-3	**Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

The City's General Plan EIR concluded that implementation of General Plan policies and implementation programs would reduce potential, significant impacts to jurisdictional wetlands and waterways, but not to a less than significant level. Therefore, the General Plan EIR identified Mitigation Measure BIO-2. Mitigation Measure BIO-2 identified in the City's General Plan EIR required the addition of a new General Plan policy in the Natural and Cultural Resources element that required assessment of potential wetlands impacts for new development project located on sites where potential jurisdictional wetlands or waterways are present. With the implementation of the Mitigation Measure requiring a new General Plan policy, and implementation of other applicable General Plan policies and implementation programs, the General Plan EIR determined that impacts would be less than significant.

As identified in the Biological Report prepared for the proposed project, the project site does not support any wetlands or jurisdictional waters (Live Oak 2023). Therefore, the proposed project would not have a substantial adverse effect of wetlands and there would be no impact. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for requiring further CEQA review are not met.

Impact BIO-4	**Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

The City's General Plan EIR identified that development under the General Plan could result in significant impacts as it would result in the loss of wildlife movement corridors within the Urban Growth Boundary. However, with the implementation of General Plan polices in addition to Mitigation Measure BIO-1 identified in the City's General Plan EIR, and compliance with SCVHP requirements, potential impacts to wildlife corridors would be reduced to a less than significant level.

Wildlife currently moves freely throughout the project site without barriers such as fences; however, the project site is surrounded by existing developments and likely support species common to urban living, such as racoons, skunks, opossums, feral cats, and other animals commonly occurring in urban environmental. Local animals can be expected to move through the project site even after development of the proposed project in their ordinary day-to-day movement and the project site is not likely to support regional movement. The project site is not located within a regional movement corridor or landscape linkage and therefore, native wildlife that currently move across the project site are expected to continue to move across the project site after the project site is built out. Additionally, due to the lack of habitat, the project site is not utilized as a wildlife nursery site. The proposed project would not interfere with the movement of wildlife species or impede the use of native wildlife nursery sites and impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact BIO-5	**Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

The City's General Plan EIR identified as the General Plan includes numerous policies to protect biological resources, and the City's municipal code regulates the removal of any protected trees, buildout of the General Plan would not result in conflicts with policies or ordinances protecting biological resources and impacts would be less than significant.

An Arborist Report was prepared for the proposed project by Live Oak on December 30, 2022 (Appendix D). The arborist report identified 29 trees inventoried onsite. Seven of the trees located onsite meet the definition of a Protected Tree per Gilroy Municipal Code Section 30.28.270. Three of the protected trees meet the definition of heritage trees and four meet the definition of indigenous trees. All seven of the protected trees are expected to be removed as a result or project activities. Additionally, the remaining 22 trees located onsite do not meet the City's criteria for protection and these trees are also anticipated for removal. The arborist report also identified trees along Murray Avenue which may meet eh definition of a street tree per City ordinance and may require additional permissions from the director for removal. Under Gilroy Municipal Code Section 30.28.270, projects requiring the removal of a protected tree must obtain a Tree Removal Permit from the City and is required to plant replacement trees onsite. In accordance with City's Protected Tree Ordinance, the proposed project would obtain a Tree Removal Permit from the City for the removal of onsite protected trees and would plant 14 trees onsite as replacement. With compliance with the City's Protected Tree Ordinance, the proposed project would not conflict with any local policies or ordinances protecting biological resources and impacts would be less than significant.

The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact BIO-6	**Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

The City's General Plan EIR identified that as the General Plan includes policies requiring adherence to the SCVHP, implementation of the General Plan would not conflict with implementation of an adopted habitat conservation plan and impacts would be less than significant.

The proposed project would be considered a covered project under the SCVHP and as such, would be subject to the conditions and fees of the SCVHP. The proposed project would be constructed and operated in accordance with requirements of the SCVHP. As outlined in the analysis in this section, the proposed project would not result in any significant impacts to biological resources and would not conflict with the SCVHP. The proposed project would include implementation of Condition 1 and Condition 15 of the SCVHP to ensure that construction does not result in impacts to western burrowing owls. As the proposed project would be developed in accordance with the SCVHP, the proposed project would not conflict with the provisions of an adopted HCP, natural community conservation plan or other approved plans and impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.4.3 Conclusion

With regards to the issue area of biological resources, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.5 CULTURAL RESOURCES

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) Cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?	☐	☐	☒
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒
3) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒

3.5.1 Environmental Setting

Stantec prepared a cultural resources technical memorandum to inform the baseline conditions for cultural resources at the project site. To identify cultural resources at the project site Stantec requested a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System and reviewed historical maps aerial photographs to assess the potential for buried precontact and historic-period archaeological deposits.

NWIC Records Search

On December 1, 2023, the staff at the NWIC conducted a records search for the project site and a 0.25-mile radius at the NWIC (NWIC File #23-0632). The NWIC, an affiliate of the California Office of Historic Preservation, is the official state repository of cultural resources records and reports for Santa Clara County. As part of the records search, the following state inventories were reviewed:

- *California Inventory of Historic Resources* (California Department of Parks and Recreation 1976);
- *California Points of Historical Interest* (California Office of Historic Preservation 1992); and
- *California Historical Landmarks* (California Office of Historic Preservation 1996).

No previously recorded cultural resources were identified in or within the project site. One railroad resource (P-43-000928/CA-SCL-898H) was located within 0.25 miles of the project site. Three previous cultural resources studies were conducted within the project site and 11 studies were conducted within 0.25 miles of the project site.

Historical Map and Aerial Photography Review

The project site is underlain by Older Quaternary alluvium and marine deposits, including lake, playa, and terrace deposits. The project site is approximately 0.5 mile east of the Western Branch of Llagas Creek. A review of available historical maps and aerial imagery suggests the project site has been subject to

minimal subsurface disturbance. Since the project site is relatively far from a freshwater source or any other significant landscape features (which are often associated with precontact habitation sites), the geology of the project site and lack of subsurface disturbance indicates the risk of encountering buried precontact-era deposits is moderate to low.

Archival maps and aerial photographs depict the project site as undeveloped agricultural land until the mid-20th century indicating the potential for buried historic-era deposits (i.e., features) is low. . Listed below are relevant goals and policies from the City of Gilroy General Plan that are applicable to the proposed project:

Goal NCR-5: Preserve significant historic buildings, sites, and resources to enrich the sense of place and appreciation of the city's history.

- **Policy NCR-5.2: Historic and Prehistoric Archaeological Resources and CEQA.** Discretionary projects subject to the California Environmental Quality Act (CEQA) which include disturbance of the existing ground surface of the project site will require an archaeological survey and records search if the project site is located in a moderate to high archaeological sensitivity zone as identified on Figure 3.5-1 of the General Plan EIR, or if other evidence suggests the project site to be archaeologically sensitive.
- **Policy NCR-5.3: Archaeological Resources Protection.** Ensure that all projects involving ground-disturbing activities include procedures to protect archaeological resources if discovered during excavation. Projects shall follow CEQA and other applicable State laws.

In addition, California Health and Safety Code Section 7050.5 states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification.

3.5.2 Discussion

Impact CUL-1	**Cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?**

The General Plan EIR identified that if construction and demolition activities were to occur at or near identified City historic resources, potentially significant impacts could occur. However, the General Plan EIR determined that with implementation of General Plan policies and Mitigation Measure CR-1 identified in the General Plan EIR, potential impacts would be reduced and implementation of the General Plan would not result in a significant impact to historic resources. General Plan EIR Mitigation Measure CR-1 modified the proposed language for General Plan Goal NCR-5, General Plan Policies NCR-5.5: Historic Resources Inventory and NCR-5.10: Historic Building Demolition, and Implementation Program 7 to ensure that historic resources are protected as it did not adequately address protection of historic resources as it was written. As the policies have been updated to reflect the modifications, the mitigation measure is no longer applicable.

Under CEQA, historical resources can include precontact (i.e., Native American) archaeological deposits, historic-period archaeological deposits, historic buildings, and historic districts. CEQA requires that agencies considering projects that are subject to discretionary action shall consider the potential impacts on cultural resources that may occur from project implementation. The project site neither contains nor is adjacent to any built environment resource that qualifies as a historical resource for the purposes of CEQA. Therefore, new development on the project site would not have the potential to cause a substantial adverse change to the significance of any built environment historical resource, as defined in Section 15064.5 of the CEQA Guidelines

Despite the negative results of the records search and map and aerial photograph review, it cannot entirely be ruled out that archaeological cultural resources could be encountered during project construction activities. Should such deposits be encountered during project ground disturbance, a substantial adverse change in the significance of a historical resource would occur from its demolition, destruction, relocation, or alteration such that the significance of the resource would be materially impaired (CEQA Guidelines Section 15064.5(b)(1)).

The General Plan Policy NCR-5.3: Archaeological Resources Protection provides for reducing or avoiding impacts related to archaeological resources encountered during project construction or grading activities which the project would need to comply; therefore, the proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact CUL-2	**Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

The General Plan EIR identified that construction activities resulting from implementation of the General Plan could result in impacts to undiscovered archaeological resources if construction were to unearth and damage these undiscovered resources. However, the General Plan EIR determined that implementation of General Plan EIR Mitigation Measure CR-2 and implementation of General Plan policies that are designed to protect archaeological resources would reduce potential impacts to a less than significant level. Therefore, the General Plan EIR determined that implementation of the General Plan would not result in significant impacts to archaeological resources. General Plan EIR Mitigation Measure CR-2 provided modifications to existing General Plan policies to specify protection of archaeological resources as the policies did not adequately protect unique archaeological resources as it was originally written. As the policies have been updated to reflect the modifications, the mitigation measure is no longer applicable.

According to the CEQA Guidelines, “When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource” (CEQA Guidelines Section 15064.5(c)(1)). Those archaeological sites that do not qualify as historical resources shall be assessed to determine if these qualify as “unique archaeological resources” (California PRC Section 21083.2). Despite the negative results of the records search and map and aerial photograph review, it cannot entirely be ruled out that archaeological cultural resources could be encountered during project construction activities. General Plan Policy NCR-5.3: Archaeological Resources Protection provides for reducing or avoiding impacts related to archaeological resources encountered during project construction or grading activities which the project would need to comply with; therefore, the proposed project would not result in new or

substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact CUL-3	**Disturb any human remains, including those interred outside of dedicated cemeteries?**

The General Plan EIR identified that human remains associated with pre-contact archaeological deposits could exist within the City. The General Plan EIR concluded that implementation of General Plan Policies NCR-5.2: Historic and Prehistoric Archaeological Resources and CEQA and NCR-5.3: Archaeological Resources Protection would reduce impacts by providing a process for identifying human remains, or those areas that are sensitive for containing such remains; stopping work to avoid damage to identified remains; consulting with appropriate descendant communities; and respectfully treating recovered remains in accordance with state law and the wishes of the descendant. Therefore, the General Plan EIR determined that with implementation of General Plan Policies NCR-5.2: Historic and Prehistoric Archaeological Resources and CEQA and NCR-5.3: Archaeological Resources Protection and adherence to federal and state laws, impacts to human remains would be less than significant.

There are no known human remains within the project site, and no indications that the project site has been used for burial purposes in the past. Therefore, it is unlikely that human remains would be encountered during construction. In the event that human remains are identified during project activities, these remains would be required to be treated in accordance with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code, as appropriate. Section 7050.5 of the California Health and Safety Code states that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification. The NAHC will identify a Native American Most Likely Descendent (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Compliance with the California Health and Safety Code, General Plan Policy NCR-5.3: Archaeological Resources Protection would ensure that impacts to human remains would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.5.3 Conclusion

With regards to the issue area of cultural resources, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.

4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.6 ENERGY

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒

3.6.1 Environmental Setting

The following discussion is based on the Air Quality, Greenhouse Gas, and Energy Technical Memorandum that was prepared for the proposed project by Stantec (Appendix B).

PG&E is the utility company that provides electricity and natural gas supplies to the City of Gilroy. Upon buildout of the project site, electricity would be provided by PG&E. All electricity infrastructure would be located underground and would tie-in to existing infrastructure.

In February 2018, PG&E announced that it had reached California's 2020 renewable energy goal three years ahead of schedule (PG&E 2018). In 2023, approximately 34 percent of PG&E's total electricity delivered to retail customers came from renewable resources including solar, wind, biomass and small hydroelectric sources. Additionally, 53 percent of electricity delivered came from nuclear and 13 percent came from hydroelectric plants. Therefore, PG&E customers received 100 percent GHG free electricity in 2023 (PG&E 2024).

Listed below are policies related to energy resources from the City of Gilroy General Plan that may be applicable to the proposed project:

Goal NCR-3: Contribute to improvements in regional air quality and reductions in greenhouse gas emissions.

- **Policy NCR-3.1: Energy Use Data and Analysis.** Increase building owner, tenant, and operator knowledge about how, when, and where building energy is used.
- **Policy NCR-3.4: Solar Development.** Encourage voluntary community-wide solar photovoltaic development through regulatory barrier reduction and public outreach campaigns.
- **Policy NCR-3.5: Community Choice Aggregation.** Partner with other Santa Clara County jurisdictions to determine the feasibility for development of a regional Community Choice Aggregation (CCA) program, including identification of the geographic scope, potential costs to participating jurisdictions and residents, and potential liabilities.

3.6.2 Discussion

Impact EN-1	**Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

This impact addresses the energy consumption from both short-term construction and long-term operations, and they are discussed separately below.

Construction Energy Demand

During construction of the proposed project, energy resources would be consumed in the form of diesel and gasoline fuel from the use of off-road equipment (i.e., tractors, excavators, cranes) and on-road vehicles (i.e., construction employee commutes, haul trucks).

Off-Road Equipment

Construction activities associated with buildout of Phase I, including site preparation, grading, building construction, and paving, were estimated to consume 28,507 gallons of diesel fuel from the use of off-road equipment. Assuming the same fuel demand for construction of Phase II and Phase III, all proposed project construction activities would consume approximately 85,521 gallons of diesel fuel from off-road equipment.

On-Road Vehicles

On-road vehicles for construction workers, vendors, and haulers would require fuel for travel to and from the project site during construction. Table 3-5 provides an estimate of the total on-road vehicle fuel usage during construction of Phase I.

Table 3-5: Construction of Phase I – On-Road Equipment Fuel Consumption

Project Component	Average Fuel Economy (miles/gallon)	Total VMT	Total Fuel Consumption (gallons)
Worker Trips	27.72	303,264	10,939
Vendor Trips	9.26	74,520	8,049
Haul Trips	5.94	23,200	3,907
Total Phase I On-Road Trips		**400,984**	**22,894**

Notes:
Totals may not appear to sum exactly due to rounding.
VMT = vehicle miles traveled
Source: Appendix B.

As shown in the table, construction of Phase I was estimated to consume 22,894 gallons of fuel from on-road vehicles. It follows that construction of all proposed project phases would consume approximately 68,682 gallons of fuel from on-road vehicles.

Overall, construction activities associated with the proposed project would result in the consumption of petroleum-based fuels. However, there are no unusual project characteristics that would necessitate the use of construction equipment or vehicles that would be less energy efficient than at comparable

construction sites in other parts of the state. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR, and the criteria for requiring further CEQA review are not met.

Operational Energy Demand

During operations of the proposed project, energy would be required to power the proposed buildings, to fuel any off-road equipment, and to fuel the vehicles travelling to and from the project site. Operational energy demand is calculated for full project buildout.

Building Energy

The proposed buildings and parking areas would require energy for normal operations, such as lighting and temperature controls. The proposed project would not consume any natural gas. Over the course of a year, operational electricity consumption would total 1,418,447 kWh. It is noted that the proposed buildings would comply with the energy efficiency standards set forth in the version of the California Building Standards Code in effect at the time of construction. Therefore, the proposed project's total energy consumption and would not result in the inefficient, wasteful, or unnecessary use of energy.

Operational Equipment Energy

During operations, it was assumed that each building would include three diesel-powered forklifts and one backup generator. In total, the proposed project's operational equipment was estimated to consume approximately 18,413 gallons of diesel fuel per year.

Transportation Energy

Employees of the proposed project would travel to and from the project site during normal operations. Table 3-6 provides an estimate of the daily and annual fuel consumed by vehicles traveling to and from the project site.

Table 3-6: Long-Term Operational Vehicle Fuel Consumption

Vehicle Type	Percent of Vehicle Trips	Average Fuel Economy (miles/gallon)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	0.4990	36.35	10,922
Light Trucks and Medium Duty Vehicles (LDT1, LDT2, MDV)	0.4322	28.12	12,229
Light-Heavy to Heavy-Heavy Diesel Trucks (LHD1, LHD2, MHDT, HHDT)	0.0617	10.02	4,898
Motorcycles (MCY)	0.0039	43.21	72
Other (OBUS, UBUS, SBUS, MH)	0.0032	8.02	319
Total	**1.0000**	**--**	**28,440**

Vehicle Type	Percent of Vehicle Trips	Average Fuel Economy (miles/gallon)	Total Annual Fuel Consumption (gallons)

Notes:
VMT = vehicle miles traveled
Percent of Vehicle Trips and Daily VMT provided by CalEEMod.
Other" consists of buses and motor homes.
Source: Appendix B.

As shown in the table, annual vehicular fuel consumption is estimated to be 28,440 gallons of a combination of gasoline and diesel fuel. The proposed project would not be any more inefficient, wasteful, or unnecessary than other vehicle uses in the region.

Based on the analysis above, during operations, the proposed project would not result in a potential significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources; therefore, the impact would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR, and the criteria for requiring further CEQA review are not met.

Impact EN-2 Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The following discussion evaluates project consistency with applicable plans for renewable energy or energy efficiency during construction and operations.

During construction activities, off-road equipment and on-road vehicles would comply with all applicable federal and state requirements governing fuel efficiency. For example, at a minimum, all off-road equipment would be subject to the most recent Off-Road Regulations adopted by the CARB, which establish engine efficiency requirements, among other requirements (CARB 2024). Off-road engines are categorized per engine tier, with Tier 0 being the least efficient and Tier 4 Final being the cleanest and most efficient. Compliance with the Off-Road Regulations would ensure that the proposed project's construction fleet would consist of energy-efficient engines. With respect to the on-road vehicle fleet operations, heavy-duty trucks would be required to comply with CARB's 5-minute idling limits which would reduce fuel consumption. Although the foregoing regulations were primarily designed to reduce air quality emissions, they would also result in an increase in energy efficiency during construction activities.

California adopted the Renewable Portfolio Standards (RPS) in order to increase the amount of renewable energy supplied by utilities within the state. Proposed project operations would primarily use electricity from the PG&E grid. PG&E would continue to be subject to state RPS requirements, and the proposed project would not preclude achievement of the RPS goals. In addition, any new structures developed as part of the proposed project would comply with federal, state, and local regulations aimed at reducing energy consumption, including the Building Energy Efficiency Standards (CCR Title 24, Part 6) and the CALGreen Code (CCR Title 24, Part 11). Overall, operations of the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Based on the discussion above, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant. The proposed

project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.6.3 Conclusion

With regards to the issue area of energy, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.7 GEOLOGY AND SOILS

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒
iv) Landslides?	☐	☐	☒
2) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒
3) 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?	☐	☐	☒
4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒
5) 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?	☐	☐	☒
6) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒

3.7.1 Environmental Setting

Regional Setting

The City is located in southern Santa Clara County at the southern end of the San Francisco Bay Area within the Coast Ranges Geomorphic Province of California. The central part of the county contains the Santa Clara Valley, which is oriented northwest-southeast and is flanked on the east by the Diablo

Mountain Range and on the west by the Santa Cruz Mountains. The eastern half of the county includes ridges and valleys of the Diablo Mountain Range, which is generally oriented northwest-southeast.

The United States Department of Agriculture Natural Resources Conservation Service Soils has mapped 53 soil types within the City's Urban Growth Boundary. All soils were identified to be of Quaternary age and characterized as clay loam, silty clay loam, silt loam, gravelly loam, fine sandy loam, silty clay, and loam (City of Gilroy 2020b).

The San Francisco Bay region is one of the most seismically active regions in the United States. The area is dominated by a complex system of faults associated with the motion between the Pacific and North American crustal plates. Three major active faults cross Santa Clara County: San Andreas, Calaveras, and Hayward faults. Each of these faults has generated significant earthquakes throughout recorded history. In addition, other active secondary faults and potentially active faults are located within the county's borders, including the eastern branch of the Carnadero Fault which crosses the Urban Growth Boundary (City of Gilroy 2020b). The closest active faults to the City are the San Andreas, Calaveras, and Sargent faults, located approximately 5.5 miles west-southwest, 4 miles east-northeast, and 4 miles southwest from the City, respectively.

Project Site Setting

The project site's topography is generally level and is vacant except for several trees that are generally located within the northeastern portion of the project site. A Geotechnical Investigation Report (Geotech report) was prepared for the proposed project by Steven, Ferrone and Bailey Engineering Company, Inc. (SFB) on September 19, 2022 (Appendix E). The Geotech report included a site reconnaissance to observe the current site conditions, subsurface exploration activities to log and sample exploratory borings, laboratory testing of samples retrieved from borings, and engineering analysis of the field and laboratory data. Additionally, the Geotech report included geotechnical design and construction criteria and recommendations to mitigate any potential impacts from onsite geologic conditions.

As part of the Geotech report, five exploratory borings were drilled and sampled at the project site a maximum depth of approximately 21.5 feet. Additionally, field infiltration tests were performed at four test pt location onsite. Based on the borings, the soil encountered at the project site generally consisted of stiff to hard clays that extended to depths of approximately 8 to 16 feet. However, the upper 2 to 3 feet of surficial soils were dry, soft or loose, and weak due to the annual disking and tilling. Below the surficial clay layers, medium dense to very dense sands and gravels with variable fines content were encountered to the maximum depth explored of approximately 21.5 feet. A shallower clayey and gravely sand layer was encountered at one boring at depths between approximately 2 to 8 feet. The laboratory testing determined that the near-surface more clayey soils have a high plasticity and high expansion and shrinkage potential. No groundwater was encountered in the borings to the maximum depth explored. (SFB 2022).

Listed below are goals and policies related to geology and soils from the City of Gilroy General Plan that are applicable to the proposed project:

Goal PH-2: Protect life and minimize property damage from potential seismic and geologic hazards.

- **Policy PH-2.2: Site Investigation and Mitigation.** Ensure proper soils and geologic site investigation and appropriate mitigation for development proposals in areas of unconsolidated fill, and areas subject to seasonal high groundwater tables or other potentially unstable soils.
- **Policy PH-2.5: Geologic Hazards Reports.** Require geologic hazards reports for all new development applications to assess potential geologic hazards and to determine if these hazards can be adequately mitigated.
- **Policy PH-2.6: Erosion and Deposition Control.** Require all new development proposals to include a site plan detailing appropriate methods of erosion and deposition control during site development and subsequent use.
- **Policy PH-3.6: Permeable Surfaces for Runoff Reduction and Absorption.** Require new development to include landscaped areas for reducing runoff and increasing runoff absorption capacities and encourage the use of permeable paving materials.

3.7.2 Discussion

Impact GEO-1	**Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:** **i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.** **ii) Strong seismic ground shaking?** **iii) Seismic-related ground failure, including liquefaction?** **iv) Landslides?**

The City's General Plan EIR identified that with the implementation of General Plan goals and policies, along with compliance with the California Building Code (CBC), impacts related to fault rupture, ground shaking, seismic related ground failure, and seismic induced landslides would be less than significant.

i) Rupture of a known earthquake fault

As identified on the City's General Plan EIR Figure 3.6-1, there are no earthquake faults that run through or near the proposed project site (City of Gilroy 2020b).

The Geotech report did not identify any mapped active or inactive faults at the project site and identified that according to Santa Clara County Geologic Hazard Zones Map No. 67, the project site is not located in a fault rupture hazard zone as designed by the County (SFB 2022). Therefore, the potential for damage to structures at the project site due to rupture of a known earthquake fault is low, and impacts would be

less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

ii) Strong seismic ground shaking

The project site is located in a seismically active region, and earthquake-related ground shaking is expected to occur during the design life of the proposed project.

The General Plan EIR determined that with the implementation of the General Plan goals and policies and compliance with the CBC, hazards associated with strong seismic ground shaking would be less than significant (City of Gilroy 2020b). In accordance with General Plan Goal PH-2.5, the proposed project has prepared a geologic hazard report to assess potential geologic hazards and to determine if these hazards can be adequately mitigated. The proposed project would incorporate the recommendations identified in the Geotech report to ensure structures constructed at the project site are designed to withstand anticipated ground acceleration. Additionally, construction of the proposed project would conform to the latest edition of the CBC, which includes engineering standards appropriate to withstand anticipated ground accelerations at the project site. Conformance with the earthquake design parameters of the CBC would be subject to City review as part of the building permit review process. Therefore, compliance with the CBC and applicable General Plan goals and policies would ensure impacts related to seismic ground shaking are less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

iii) Seismic-related ground failure, including liquefaction

As identified on the City's General Plan EIR Figure 3.6-2, the proposed project site is not located in an area identified as a high or very high liquefaction hazard zone (City of Gilroy 2020b). As described in the Geotech report, according to the Santa Clara County Geological Hazards Zones Map No. 67, the project site is not located in a liquefaction hazard zone as designated by the County and the project site and surrounding areas are mapped as being within an area having a low susceptibility to liquefaction hazards. The Geotech report determined that based on review of available geological literature and the results of the filed explorations at the project site, the potential for ground surface damage at the project site resulting from liquefaction is low (SFB 2022). As discussed in Impact GEO-1(ii), the proposed project would implement the design recommendations included in the Geotech report and would be constructed in accordance with the latest edition of the CBC. Therefore, with implementation of design recommendations included in the Geotech report and compliance with CBC guidance and standards, impacts related to liquefaction would be less than significant with compliance. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

iv) Landslides

As identified on the City's General Plan EIR Figure 3.6-3, the proposed project site is not located in an area identified as a landslide hazard zone (City of Gilroy 2020b). The project site's topography is generally level and does not include areas identified as landslide hazard zone. Therefore, the potential for seismically induced landslides is considered low and impacts from landslides would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact GEO-2	**Result in substantial soil erosion or the loss of topsoil?**

The City's General Plan EIR identified that compliance with the City's existing erosion control requirements, standard conditions of approval, and applicable General Plan goals and policies would reduce erosion impacts to a less than significant level.

The proposed project site is relatively level and located in an area of the City's Urban Growth Boundary where soil erosion potential ranges from none to slight and therefore, impacts from soil erosion in the area would likely be limited. However, construction activities required for development of the proposed project would include earth-moving activities that would result in temporary and permanent displacement of soils that could cause potential soil erosion. The proposed project would be required to comply with Chapter 27C.23 of the Gilroy Municipal Code which requires establishment of Best Management Practices (BMPs) to control erosion and sediment and discharge of pollutants into the storm drainage system, as specified in the State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) Permit. In addition to compliance with applicable Gilroy Municipal Code sections, the proposed project would comply with General Plan Policies PH-2.6: Erosion and Deposition Control and PH-3.6: Drainage Channel Design. General Plan Policy PH-2.6: Erosion and Deposition Control requires new development proposals to include site plan detailing appropriate methods or erosion and deposition control during site development and subsequent use. General Plan Policy PH-3.6: Permeable Surfaces for Runoff Reduction and Absorption requires new development to include landscaped areas to reduce runoff and increase runoff and increase runoff absorption capacities. The proposed project has prepared a Preliminary Post-Construction Stormwater Control Plan which identifies Low Impact Development (LID) techniques and incorporates Stormwater Control Measures and BMPs to the maximum extent practicable to minimize impacts of urban runoff. As identified in the Section 2.0 Project Description, the proposed project would construct an underground stormwater treatment facility to treat, retain, and/or detain stormwater runoff from the project site prior to it being discharged into the City's storm drainage system. Additionally, flow through planters would be utilized along the Murray Avenue project frontage to treat and detain runoff. The proposed project's stormwater system would treat runoff prior to it being discharged into the City's stormwater system and would ensure that there would be no operational impacts related to polluted runoff including erosion related impacts.

Compliance with applicable Gilroy Municipal Code sections and General Plan policies would ensure that the proposed project would not result in substantial erosion or loss of topsoil and impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact GEO-3	**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?**
Impact GEO-4	**Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

The City's General Plan EIR determined impacts associated with unstable geologic units and expansive soils would be less than significant with implementation of General Plan goals and policies.

The project site and surrounding area are relatively level and are not susceptible to landslides. As identified on the City's General Plan EIR Figure 3.6-2, the proposed project site is not located in an area identified as a high or very high liquefaction hazard zone (City of Gilroy 2020b). As described in the Geotech report, according to the Santa Clara County Geological Hazards Zones Map No. 67, the project site is not located in a liquefaction hazard zone as designated by the County and the project site and surrounding areas are mapped as being within an area having a low susceptibility to liquefaction hazards. The Geotech report determined that based on review of available geological literature and the results of the filed explorations at the project site, the potential for ground surface damage at the project site resulting from liquefaction is low (SFB 2022).

However, the Geotech report determined that according to the results of laboratory testing of soils samples collected from the project site, the near-surface more clayey soils have a high plasticity and high expansion and shrinkage potential (SFB 2022). Therefore, the Geotech report identifies specific recommendations for structure foundations and use of engineered fill to reduce potential impacts from the onsite soil's expansion potential. Additionally, the Geotech report includes additional recommendations for detailed site earthwork, underground utility, drainage, building foundation, retaining wall/soundwall, flatwork, and pavement recommendations for use in design and construction of the proposed project. In accordance with General Plan Goal PH-2.5, the proposed project has prepared a geologic hazard report to assess potential geologic hazards and to determine if these hazards can be adequately mitigated. The proposed project would implement the design recommendations included in the Geotech report and would comply with the CBC design criteria and standards to ensure that the proposed project is designed and engineered to withstand impacts of expansive and unstable soils. Therefore, impacts related to expansive and unstable soils would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact GEO-5	**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?**

The proposed project would connect directly to the City's sewer system and would not require the construction of septic tanks or any other alternative wastewater disposal system. Therefore, no impact would occur. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact GEO-6	**Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

The City's General Plan EIR did not analyze potential impacts related to paleontological resources and identified that no known paleontological resources have been discovered in the City, likely due to the presence of relatively recent Holocene deposits (City of Gilroy 2020b).

There are no known paleontological resource or unique geologic features located on the project site. As there are no known paleontological resources onsite and there being no known paleontological resources discovered anywhere in the City, the likelihood of the proposed project resulting in impacts to paleontological resources is extremely low. Therefore, the proposed project would not directly or indirectly

destroy a unique paleontological resource or site, or unique geologic feature and impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.7.3 Conclusion

With regards to the issue area of geology and soils, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.8 GREENHOUSE GASES

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒
2) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒

3.8.1 Environmental Setting

The following discussion is based on the Air Quality, Greenhouse Gas, and Energy Technical Memorandum that was prepared for the proposed project by Stantec (Appendix B).

To fully understand global climate change, it is important to recognize the naturally occurring "greenhouse effect" and to define the GHGs that contribute to this phenomenon. Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect.

Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3), and sulfur hexafluoride (SF_6).

Regulatory Requirements

California has adopted statewide legislation addressing various aspects of climate change and GHG emissions mitigation. Much of this legislation establishes a broad framework for the state's long-term GHG reduction and climate change adaptation program. The most relevant policies include Assembly Bill (AB) 32, Senate Bill (SB) 32, and AB 1279. AB 32, passed in 2006, required that GHGs emitted in California be reduced to 1990 levels by the year 2020; the state achieved this goal in 2018. SB 32, signed in 2016, requires that GHGs emitted in California be reduced to at least 40 percent below 1990 levels by 2030. Most recently, AB 1279 was signed into law in 2022 and establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045 and maintain net negative GHG emissions thereafter. The CARB's 2022 Scoping Plan was approved in December 2022 and assesses progress toward achieving the SB 32 2030 target and laying out a path to achieve carbon neutrality no later than 2045.

Listed below are goals and policies related to GHG emissions from the City of Gilroy General Plan that may be applicable to the proposed project:

Goal NCR 3: Contribute to improvements in regional air quality and reductions in greenhouse gas emissions.

- **Policy NCR-3.3: Shade Tree Program.** Increase community-wide use of shade trees to decrease energy use associated with building cooling.
- **Policy NCR-3.4: Solar Development.** Encourage voluntary community-wide solar photovoltaic development through regulatory barrier reduction and public outreach campaigns.
- **Policy NCR-3.7: Transportation Demand Management.** Provide informational resources to local businesses subject to SB 1339 transportation demand management program requirements and encourage additional voluntary participation in the program.
- **Policy NCR-3.9: Food Scrap and Yard Waste Diversion.** Promote the collection of food scraps and compostable paper in yard waste bins through public outreach campaigns.
- **Policy NCR-3.10: Water Use Reduction**. Continue to implement water conservation policies contained within Gilroy's Urban Water Management Plan to achieve 20 percent per capita water reductions by 2040.
- **Policy NCR-3.11: Urban Forest.** Support development and maintenance of a healthy, vibrant urban forest through outreach, incentives, and strategic leadership.

Thresholds

In April 2022, the BAAQMD Board of Directors adopted the CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans, which updated the BAAQMD's previous guidance related to evaluating GHG emissions to address the most recent climate legislation. Because construction emissions are temporary and variable, the BAAQMD has not developed a quantitative threshold of significance for construction-related GHG emissions. However, BAAQMD recommends that construction related GHG emissions should still be quantified and disclosed in environmental documents. For land use projects, the BAAQMD considers a project to have a less than significant impact related to GHG emissions if it either (1) meets the project design elements listed below, or (2) is consistent with a local GHG reductions strategy that meets the requirements of CEQA Guidelines Section 15183.5(b) (BAAQMD 2022).

However, CEQA Guidelines Section 15064.4(b)(2) states that the lead agency determines which threshold of significance applies to a project. As the lead agency, the City of Gilroy has determined that a quantitative threshold of significance would be most appropriate for this analysis. Specifically, the lead agency has elected to rely on the SCAQMD's interim GHG threshold of 3,000 MT CO_2e per year for residential and commercial land use projects, including industrial parks and warehouses. This screening level threshold is intended to capture 90 percent of projects subject to CEQA. Therefore, projects that do not exceed the screening-level threshold would have a nominal and less than cumulatively considerable impact on GHG emissions (SCAQMD 2008).

3.8.2 Discussion

Impact GHG-1	**Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

The City's General Plan EIR concluded that impacts related to GHGs would be significant and unavoidable until the City adopts and implements a qualified GHG reduction plan.

The proposed project may contribute to climate change impacts through its contribution of GHGs. The discussion below evaluates whether project GHG emissions are considered to have a significant impact on the environment. As noted above, the lead agency has elected to use 3,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year as the applicable threshold of significance for this analysis.

Construction Emissions

Construction emissions would be generated from the exhaust of on-road and off-road construction equipment as well as material delivery trips and worker commuter trips. Consistent with standard practice across the state, construction emissions were amortized by the life of the proposed project (assumed to be 30 years) and added to operational emissions, below. GHG emissions during construction of the proposed project are presented in Table 3-7.

Table 3-7: Construction Greenhouse Gas Emissions

Phase	Construction Year	Emissions ($MTCO_2e$)
I	2025	375.82
	2026	50.92
II	2030	403.63
	2031	21.10
III	2035	396.73
	2036	36.17
Total		**1,284.37**
Amortized Construction Emissions		**42.81**

Note: Totals may not appear to sum due to rounding.
Source: Appendix B.

Operational Emissions

Operational or long-term emissions occur over the life of the proposed project. The operational emissions for the proposed project are shown in Table 3-8.

Table 3-8: Operational Greenhouse Gas Emissions

Source	Emissions ($MTCO_2e$ per year)
Mobile	235.94
Area	1.77
Energy	414.05

Source	Emissions ($MTCO_2e$ per year)
Water	54.91
Waste	46.76
Refrigerants	5.21
Off-Road	162.37
Stationary	11.46
Amortized Construction	42.81
Total	**975.28**
Threshold of Significance	**3,000**
Exceed?	**No**

Note: Totals may not appear to sum due to rounding.
Source: Appendix B.

As shown in the table, the proposed project's GHG emissions would not exceed the threshold of significance applied in this analysis. As a result, the proposed project would not generate GHG emissions that may have a significant impact on the environment. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for further CEQA review are not met.

Impact GHG-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The proposed project would have a significant impact with respect to GHG emissions and global climate change if it substantially conflicts with the provisions of Section 15064.4(b) of the CEQA Guidelines. Pursuant to Appendix G of the *CEQA Guidelines*, a significant GHG impact is identified if the project could conflict with applicable GHG reduction plans, policies, or regulations. In order to demonstrate consistency with applicable plans, policies, and regulations, the proposed project was compared to the CARB's 2022 Scoping Plan.

CARB 2022 Scoping Plan

The CARB's 2022 Scoping Plan assesses progress toward achieving the SB 32 2030 target and laying out a path to achieve carbon neutrality no later than 2045. Project consistency with the 2022 Scoping Plan would demonstrate that the proposed project is consistent with the state's goal towards carbon neutrality. Table 3-9 identifies the Scoping Plan policies that may be applicable to the proposed project.

Table 3-9: Project Consistency with CARB 2022 Scoping Plan

Measure	Consistency Determination
Deploy ZEVs and reduce driving demand	**Consistent.** The proposed project would not directly deploy ZEVs; however, the proposed project would be consistent with the City building standards and include 29 electric vehicle (EV) capable parking spaces which would encourage site employees and visitors to use zero emissions vehicles. Moreover, the proposed project would be subject to CARB's ACT Rule that assures that a minimum amount of electric truck sales occurs every year between 2024 to 2035. The proposed project would also be subject to the ACF Regulation. The ACF Regulation

Measure	Consistency Determination
	requires fleets to transition to ZEVs and requires manufacturers to only produce ZEV trucks starting in the 2036 model year. Therefore, the proposed project would be required to adhere to more stringent CARB regulations as the proposed project comes online.
Coordinate supply of liquid fossil fuels with declining CA fuel demand	**Not Applicable.** This measure is aimed at the state to work with fuel manufacturers. However, the proposed project would not interfere with this measure, as the proposed project would comply with all state rules and regulations to reduce fossil fuels. Specifically, the proposed project would be subject to CARB's ACT Rule that assures that a minimum amount of electric truck sales occurs every year between 2024 to 2035. The proposed project would also be subject to the and ACF Regulation. The ACF Regulation requires fleets to transition to ZEV and requires manufacturers to only produce ZEV trucks starting in the 2036 model year. Therefore, the proposed project would be required to adhere to more stringent CARB regulations as the proposed project comes online.
Generate clean electricity	**Consistent.** The proposed project would construct solar ready areas on all proposed building roofs.
Decarbonize Buildings	**Consistent.** The proposed project be required to comply with all California Green Building Standards that sets design requirements including light-emitting diode (LED) lighting and EV charging spaces.
Decarbonize Industrial Energy Supply	**Consistent.** Electricity and natural gas would be provided to the project site by PG&E. In 2023, PG&E's electric power mix included 100 percent GHG free sources (PG&E 2024). PG&E would be subject to California's RPS and would be required to have a power mix from 100 percent GHG free sources by 2045.
Reduce non-combustion emissions (Methane)	**Not Applicable.** The proposed project would not produce any fossil fuels and would not include any livestock or agricultural practices that would produce methane.
Reduce non-combustion emissions (Hydrofluorocarbons [HFCs])	**Consistent.** CARB has issued a series of HFC prohibitions for aerosols, foams, refrigerants, cold storage warehouses, vending machines, and chillers. The proposed project would be required to adhere to all HFC prohibitions.
Compensate for remaining emissions	**Not Applicable.** This measure is aimed at the state to reduce the remainder of the GHG emissions.

Source: CARB 2022.

As shown above, the proposed project would be consistent with the applicable measures in the CARB's 2022 Scoping Plan. Accordingly, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for further CEQA review are not met.

3.8.3 Conclusion

With regards to the issue area of GHG, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.

3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.

4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒
4) 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?	☐	☐	☒
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☒

3.9.1 Environmental Setting

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed of, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic – Causes Human Health Effects

- Ignitable – Has the Ability to Burn
- Corrosive – Causes Severe Burns or Damage to Materials
- Reactive – Causes Explosions or Generates Toxic Gases

Hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that defines a material as hazardous also defines a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. California Government Code, Title 22, Sections 66261.20–24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

California Government Code, Section 65962.5 requires the California Environmental Protection Agency to compile, maintain, and update specified lists of hazardous material release sites. CEQA (California PRC Section 21092.6) requires the Lead Agency to consult the lists compiled pursuant to California Government Code, Section 65962.5, to determine whether a project and any alternatives are identified on a federal or state listing database of hazardous material release sites. The lists of hazardous material release sites are commonly referred to as the "Cortese List" after the legislator who authorized the legislation. Because the statute was enacted more than 20 years ago, some of the provisions refer to agency activities that were conducted many years ago and are no longer being implemented and, in some cases, the information required in the Cortese List does not exist. Those requesting a copy of the Cortese List are now referred directly to the appropriate information resources contained on internet websites hosted by the boards or departments referenced in the statute, including the online EnviroStor database from the Department of Toxic Substance Control (DTSC) and the online GeoTracker database offered by the SWRCB. These two databases show hazardous material release sites, along with other categories of sites or facilities specific to each agency's jurisdiction.

Based on a review of the DTSC's EnviroStor database and SWRCB's GeoTracker database, the project site nor its adjacent land uses are located on sites identified as a hazardous materials site (DTSC 2024, SWRCB 2024).

Listed below are goals and policies related to hazards and hazardous materials from the City of Gilroy General Plan that are applicable to the proposed project:

Goal PFS-10: Provide for public health and safety by offering high quality fire and emergency-response services.

- **Policy PFS-10.3: Development Review.** Under the direction and authority of the Fire Chief, the Fire Marshall shall review of development proposals to ensure that projects adequately address fire access and building standards.
- **Policy PFS-10.5: New Development.** Continue to require that new development provides all necessary water service, fire hydrants, and roads consistent with Fire Department standards.

- **Policy PFS-10.6**: **Sprinklers.** Continue to require installation of sprinklers in all new buildings in accordance with the California Fire Code.

- **Policy PFS-10.8**: **Fire Access Design and Building Materials.** Require all new development to include use of fire-resistant landscaping and building materials and adequate access for fire equipment.

Goal PH-4: Protect life and minimize potential property damage from wildfires in the wildland/urban interface area and hazardous fire areas.

- **Policy PH-4.2: Development Review.** Provide plan checks for new construction, remodels, tenant improvements, and demolitions to ensure compliance with applicable life safety and fire protection system requirements, including special requirements for fire safety in areas with wildfire risk.

Goal PH-5: Protect people and environmental resources from contaminated hazardous material sites and minimize risks associated with the use, storage, transport, and disposal of hazardous materials.

- **Policy PH-5.1: Hazardous Materials and Waste Inspections.** Provide inspections to ensure compliance with local, State, and Federal regulations and to reduce the risks associated with the use, handling, and storage of hazardous materials and wastes.

- **Policy PH-5.2: Hazardous Waste Reduction.** Minimize the potential hazards posed by the storage and transport of hazardous materials and waste by encouraging source reduction and waste minimization.

- **Policy PH-5.3: Industrial Wastewater Pretreatment Program.** Continue to implement the Pretreatment Program for industrial and commercial wastewater.

- **Policy PH-5.6: Hazardous Soils Conditions Clean-up.** Evaluate new development sites for potential hazardous soils conditions. In cases where contamination is identified, require that all necessary mitigation measures are incorporated into the project to ensure there is no public health danger. When appropriate, refer the project to the proper County or State agency for review.

3.9.2 Discussion

Impact HAZ-1	**Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**
AND	
Impact HAZ-2	**Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

The City's General Plan EIR determined that with implementation of General Plan goals and policies, in addition to compliance with applicable federal, state, and local regulatory requirements related to

hazardous materials and waste, would reduce impacts from future development related to the release of hazards through use, transport, and disposal as well as reasonably foreseeable accident conditions to be less than significant (City of Gilroy 2020b).

Construction

During construction, the proposed project would involve routine transport and handling of hazardous substances including, but not limited to, gasoline, diesel fuel, hydraulic fluids, paints, building materials, pesticides, and fertilizers that would be used during construction activities. The use of hazardous materials during construction would be limited to small quantities and would be temporary. The storage and handling of these materials would be managed in accordance with applicable federal, state, and local regulations. Accidental releases of small quantities of hazardous materials or toxic substances could contaminate soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard. However, contractors would be required to transport, store, and handle hazardous materials and toxic substances related to construction activities in a manner consistent with relevant regulations and guidelines, including California Health and Safety Codes and City requirements. Therefore, construction of the proposed project would result in a less than significant impact related to the routine transport, use, disposal of, or accidental release of hazardous materials or toxic substances.

Operation

Operation of the proposed project would include office, product storage, and warehouse operations such as assembly and distribution, and is not anticipated to require the transport, use, or disposal of hazardous materials. Hazardous materials used during operation is anticipated to be limited to those typical utilized for office and warehouse operations such as cleaning products, paints, oils, and pesticides for landscaping maintenance activities. These common hazardous materials would be used in limited quantities and would not create a substantial hazard to the public or the environment. If the proposed project's operation requires the use, storage, and transport of hazardous materials, the proposed project would be required to comply with General Plan Policy PH-5.1: Hazardous Materials and Waste Inspection which requires provision of inspections to ensure compliance with local, state, and federal regulations and to reduce the risks associated with the use, handling, and storage of hazardous materials and waste. The proposed project's operations would adhere to applicable federal, state, and local regulations and therefore, there would be a less than significant impact related to the routine transport, storage, use, disposal of, or accidental release of hazardous materials during proposed project operation. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact HAZ-3	**Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

The City's General Plan EIR determined that with implementation of existing regulations and compliance with General Plan policies, impacts to existing and future schools would be less than significant.

The project site is not located within one-quarter mile of an existing or proposed school. The closest schools to the project site include South Valley Middle School, GUSD Preschool, Gilroy Prep School, and St. Mary School, all located approximately 0.75 mile south/southwest of the project site. Therefore, the

proposed project's construction and operational activities would not emit hazardous substances of handle hazardous materials, substances, of waste within one-quarter mile of an existing or proposed school and impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact HAZ-4	**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?**

The City's General Plan EIR concluded that with implementation of General Plan goal and policies in addition to compliance with applicable federal, state and other local regulations to reduce the public health risks and potential environmental damage from exposures to known sites with hazardous materials, impacts would be less than significant.

Based on a review of the DTSC's EnviroStor database and SWRCB's GeoTracker database, the project site nor its adjacent land uses are located on sites identified as a hazardous materials site (DTSC 2024, SWRCB 2024). Therefore, 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 and there would be no impacts. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact HAZ-5	**For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**

As identified in the City's General Plan EIR, the closest airport to the City is the San Martin Airport, located approximately four miles northwest of the project site. The project site is not located within the airport influence area or noise contour of the San Martin Airport Land Use Plan (Santa Clara County 2020). Therefore, the proposed project would not result in a safety hazard for people working in the area and there would be no impacts. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact HAZ-6	**Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

The City's General Plan EIR identified that implementation of the City's General Plan and resulting buildout would result in no impact to the implementation of an adopted emergency plan or evacuation plan.

The City's General Plan EIR identifies that the Santa Clara County Operation Area Emergency Operations Plan is the adopted emergency plan for the City. The adopted emergency plan does not contain an evacuation map that outlines the routes or locations of emergency facility for the City. However, the Bay Area's Regional Catastrophic Earthquake Mass Transportation/Evacuation Plan contains regional evacuation maps for 12 counties, including Santa Clara County. U.S. 101 and SR 152

are identified as the priority transportation routes for the City in the event of an emergency evacuation. The proposed project is not located directly adjacent to either highway and would not result in changes to the existing roadway in a manner that would impair emergency evacuation. Any construction traffic, lane closures, or street staging would require a TCP and an encroachment permit from the City. The TCP would identify appropriate traffic controls and ensure adequate circulation and emergency access are provided during the construction phase.

The proposed project would construct three new driveways throughout the project site to provide access. In addition to the three formal driveways, a driveway to the existing northern property that would provide secondary EVA access would be provided. In accordance with General Plan Policy PFS-10.8: Fire Access Design and Building Materials, the proposed project would provide adequate access for fire equipment and emergency access as all new driveways would be constructed to be at least 35 feet wide and internal drive aisles would be constructed to be at least 26 feet wide to allow for truck and emergency vehicle access throughout the project site.

The proposed project would not impair an emergency response plan or emergency evacuation plan and the impact would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact HAZ-7	**Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?**

The City's General Plan EIR concluded that implementation of General Plan policies and existing development requirements would reduce potential significant impacts related to wildland fires and impacts related to wildfire were determined to be less than significant.

The project site is located in an urbanized area of the City and the project site is not in a State Responsibility Area (SRA) or a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE 2023). Furthermore, the risk of wildfire in this portion of the City is classified as low to non-burnable (USFS 2024). Therefore, the proposed project's potential impacts related to wildland fires would be less than significant.

The proposed project would develop three light industrial buildings with associated parking, landscaping, and onsite/offsite utility improvements. The proposed project would comply with General Plan Policy PFS-10.5: New Development, which requires that new development provides all necessary water service, fire hydrants, and roads consistent with Fire Department standards. Additionally, the proposed project would comply with General Plan Policy PFS-10.6: Sprinklers, which require installation of sprinklers in all new buildings in accordance with the California Fire Code, and General Plan Policy PFS-10.8: Fire Access Design and Building Materials which require all new development to include use of fire-resistant landscaping and building materials and adequate access for fire equipment. Implementation of these policies would further reduce potential impacts that could result from wildland fires. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires and the impact would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.9.3 Conclusion

With regards to the issue area of hazards and hazardous materials, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.10 HYDROLOGY AND WATER QUALITY

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒
3) 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 off-site;	☐	☐	☒
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	☐	☐	☒
iv) Impede or redirect flood flows	☐	☐	☒
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒

3.10.1 Environmental Setting

Watershed and Regional Drainage

The City is located within the greater Pajaro River Watershed and is bisected by two sub-watersheds that convey stormwater runoff to smaller creeks that ultimately drain to the Pajaro River and Monterey Bay:

the Uvas Creek Watershed and the Llagas Creek Watershed, also collectively referred to as the Uvas-Llagas Watershed. The Uvas-Llagas watershed is a 104 square mile region and the creeks in this watershed are the only waterways in the County that flows southward. Gilroy is at the downstream end of these watersheds, with approximately half of the area draining to Uvas Creek watershed and half to Llagas Creek watershed. The City lies within the Central Coast RWQCB's Watershed Management Zone 1, which includes almost two-thirds of the urban area of the Central Coast region.

Stormwater runoff in the City generally drains from the northwest to the southeast in the City, with storm drainage pipelines collecting runoff and discharging to canals or creeks within the City. The City's Urban Growth Area contains the lower parts of the Uvas-Llagas Creek watershed, Uvas Creek becomes Carnadero Creek east of U.S. 101. These creeks flow generally southward as tributaries to the Pajaro River, which empties into Monterey Bay near the City of Watsonville. In addition to these creeks, a number of drainage channels also under the jurisdiction of Valley Water are present within the City's Urban Growth Boundary (City of Gilroy 2020b).

Groundwater

The City currently uses groundwater as the sole source of water supply and the City relies on groundwater from the underlying Llagas Groundwater Basin. The basin consists of sedimentary material between the Santa Cruz Mountains to the west and the Diablo Range to the east. According to the City's 2023 Water System Master Plan, the City withdraws groundwater from underground aquifers through nine wells with a firm production capacity of approximately 15.5 million gallons per day (mgd) (City of Gilroy 2023). According to the Groundwater Management Plan for the Santa Clara and Llgas Subbasins, the project site is not located within a designated groundwater recharge zone (Valley Water 2021). The project site is located within the Llgas Subbasin's confined areas with are areas with clay layers that impede infiltration and water movement.

Flooding

Flood hazard zones are identified on official Flood Insurance Rate Maps (FIRM) issued by the Federal Emergency Management Agency (FEMA). The project site is designated as Zone X (shaded) with a 0.2 percent annual chance flood hazard according to FIRM #06085C0639H (FEMA 2009). Zone X (shaded) are areas identified as having moderate flood hazards, usually the area between the limits of the 100-year and 500-year floods. The project site is not located within a 100-year flood zone but is located within the 500-year flood zone.

Listed below are goals and policies related to hydrology and water quality from the City of Gilroy General Plan that are applicable to the proposed project:

Goal PFS-5: Maintain an effective storm drainage system to accommodate runoff, prevent property damage due to flooding, and improve environmental quality.

- **Policy PFS-5.2: Storm Collection System.** Provide and maintain a storm collection system to convey stormwater to creeks and channels and to reduce the potential for localized flooding.
- **Policy PFS-5.3: Green Infrastructure.** Require on-site stormwater management system (i.e. "green infrastructure") design and Low Impact Development (LID) techniques per the City's

adopted stormwater requirements to preserve and create open space, improve runoff water quality, and decrease runoff volume.

- **Policy PFS-5.4: Stormwater Inspection.** Require new development to be responsible for the funding of a postconstruction inspection of stormwater facilities.

Goal NCR-4: Maintain overall water quality by protecting surface and groundwater sources, restoring creeks and rivers to their natural state, and conserving water resources.

- **Policy NCR-4.5: Water Conservation and Reclamation.** Require water conservation measures and maximize the use of recycled water to reduce the overall demand on water resources. Ensure that recycled wastewater is treated in accordance with State and Federal standards.
- **Policy NCR-4.8: Low Impact Development.** Require new development to protect the quality of water resources and natural drainage systems through site design, source controls, runoff reduction measures, best management practices (BMPs), and Low Impact Development (LID).
- **Policy NCR-4.9: Native and Drought-Tolerant Landscaping.** Use native or drought-tolerant vegetation and water-efficient irrigation systems in the landscaping of all new public facilities, except in active recreation areas. Encourage the use of similar landscaping and irrigation in private development.

Goal PH-3: Protect life and minimize property damage from potential flood hazards.

- **Policy PH-3.1: Development Restrictions in Flood Areas.** Ensure all new development on publicly and privately owned land within flood prone, mudslide, or flood related erosion areas (as indicated by the Federal Emergency Management Agency in the flood hazards zones or in Ordinance no. 2017-01) incorporate uniform enforceable measures that reduce losses due to flood related hazards to an acceptable level of risk.
- **Policy PH-3.6: Permeable Surfaces for Runoff Reduction and Absorption.** Require new development to include landscaped areas for reducing runoff and increasing runoff absorption capacities and encourage the use of permeable paving materials.

3.10.2 Discussion

Impact HYD-1	**Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?**

The City's General Plan EIR determined that implementation of General Plan goals and policies, in addition to individual project compliance with the City municipal code chapters, the City's Storm Water Master Plan and Stormwater Management Guidance Manual, and NPDES and other Central Coast water board requirements, would ensure the impacts are less than significant.

Construction

Construction activities associated with the proposed project would occur in three phases and would consist of site clearing, grading, utility connections, building construction, paving, frontage improvements,

and landscaping on the project site. These activities have the potential to generate stormwater runoff and to discharge pollutants, such as fuel, solvents, oil, paints, and trash, into the City's storm drain system. The proposed project would be required to comply with the Central Coast RWQCB's NPDES permit program for storm water and construction site runoff as required by City Municipal Code Section 27C.23 NPDES General Permit No. CAS000002 for construction activities. Additionally, the proposed project would be required to comply with City Municipal Code Section 27C.24 which requires the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) and City Municipal Code Section 27C.25 which requires erosion and sediment control on construction sites to ensure water pollution control measures are implemented. Preparation of a SWPPP and incorporation of BMPs to control sedimentation, erosion, and hazardous materials from contacting stormwater, with the intent of keeping all products of erosion from moving offsite into receiving waters would ensure that project construction activities would not violate any water quality standards or waste discharge requirements. Therefore, with implementation of City Municipal Code requirements, project construction activities would have a less than significant impact on water quality. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Operation

The proposed project would create new impervious surfaces at the project site that would alter the type and level of pollutants in stormwater runoff from the project site. Stormwater runoff from building rooftops, parking lot areas, sidewalks, access roads, and landscaped areas could potentially contain pollutants resulting in polluted runoff. The proposed project would be required to comply with Municipal Code Chapter 27D and would incorporate post-construction BMPs to prevent, control, and reduce the volume of pollutants in stormwater runoff. Additionally, the proposed project would be required to comply with General Plan Policy PFS-5.3: Green Infrastructure, which require onsite stormwater management system design and LID techniques per the City's adopted stormwater requirements to preserve and create open space, improve runoff water quality, and decrease runoff volume. The proposed project would include the construction of an underground stormwater treatment facility to treat, retain, and/or detain stormwater runoff from the project site prior to it being discharged into the City's storm drainage system. The proposed project would construct and utilize storm drain catch basins, inlets, and a new storm drain line throughout the project site to convey captured runoff to the underground stormwater treatment facility. After stormwater runoff generated at the project site is treated in the proposed underground stormwater facility, the treated runoff would be conveyed to the existing 30-inch storm drain main located on Forest Street. With the treatment of stormwater runoff provided onsite and compliance with the City's Municipal Code requirements, the proposed project's operation would not violate any water quality standards or waste discharge requirements and would not substantially degrade water quality. Therefore, operational impacts to water quality would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact HYD-2	**Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

The City's General Plan EIR identified that buildout of the General Plan would increase population and increase demand for potable water, which would lead to increased groundwater extraction from the Llagas Subbasin. However, the supply is projected to exceed demand and therefore, the General Plan EIR concluded that buildout would not substantially deplete groundwater supplies. Additionally, compliance with local and state requirements for reductions in impervious surfaces, storm water retention and detention, infiltration, LID technologies and BMPs was determined to offset increases in impervious surface and impacts related to groundwater recharge was determined to be less than significant.

As identified in Section 2.0 Project Description, with a project site of 7.29 acres, the proposed project would be anticipated to result in a water demand of approximately 7,200 gpd at full buildout. However, it is anticipated that the proposed uses similar to the existing Applicant's facility would generate less demand than typical industrial uses. Buildout of the General Plan is anticipated to result in a potable water demand of approximately 3,687 million gallons per year or 11,425 acre-feet per year. The proposed project's 7,200 gpd or 2.6 million gallons per year would represent less than 0.1 percent of the total annual potable water demand at full buildout of the General Plan. Therefore, the proposed project would not substantially decrease groundwater supplies and impacts would be less than significant. Additionally, according to the Groundwater Management Plan for the Santa Clara and Llgas Subbasins, the project site is not located within a designated groundwater recharge zone (Valley Water 2021). The project site is located within the Llgas Subbasin's confined areas with are areas with clay layers that impede infiltration and water movement. Therefore, construction of the proposed project would not interfere with groundwater recharge. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact HYD-3	**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 off-site;** **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;** **iv) Impede or redirect flood flows**

The City's General Plan EIR concluded that with implementation of General Plan goals and policies and compliance with City requirements for post-construction stormwater runoff management, buildout of the General Plan would have a less than significant impact on drainage patterns.

i) Result in substantial erosion or siltation on- or off-site

As identified under Impact HYD-1, the proposed project would be required to comply with City Municipal Code Section 27C.24 which requires the preparation and implementation of a SWPPP and City Municipal Code Section 27C.25 which requires erosion and sediment control on construction sites to ensure water pollution control measures are implemented. Preparation of a SWPPP and incorporation of BMPs to control sedimentation, erosion, and hazardous materials from contacting stormwater, with the intent of keeping all products of erosion from moving offsite into receiving waters would ensure that project construction activities would not result in substantial erosion or siltation on or offsite.

The proposed project would alter the existing drainage pattern of the project site and would result in the construction of 278,160 square feet of impervious surfaces onsite. The proposed project would be required to comply with Municipal Code Chapter 27D and would incorporate post-construction BMPs to prevent, control, and reduce the volume of pollutants, including erosion and siltation, in stormwater runoff. Additionally, the proposed project would be required to comply with General Plan Policy PFS-5.3: Green Infrastructure, which require onsite stormwater management system design and LID techniques per the City's adopted stormwater requirements to preserve and create open space, improve runoff water quality, and decrease runoff volume. The proposed project would include the construction of an underground stormwater treatment facility to treat, retain, and/or detain stormwater runoff from the project site prior to it being discharged into the City's storm drainage system. Treatment of runoff onsite would ensure that polluted runoff does not discharge into the City's system. With the treatment of stormwater runoff provided onsite and compliance with the City's Municipal Code requirements, the proposed project's operation would not result in substantial erosion or siltation on or offsite. Therefore, the proposed project would not result in alteration of existing drainage patterns at the project site in a manner that would result in substantial erosion or siltation and impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for requiring further CEQA review are not met.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site

The project site is designated Zone X shaded within FEMA's Flood Hazard Zone, which are areas identified as having moderate flood hazard (FEMA 2022). However, the proposed project would include construction of impervious areas on undeveloped land, which could increase surface runoff and could potentially result in flooding. The proposed project would be required to comply with General Plan Policy PFS-5.2: Storm Collection System, which requires the provision of storm collection system to reduce the potential for localized flooding. Additionally, the proposed project would be required to comply with City Municipal Code Chapter 27D which requires minimization of increases in stormwater runoff in order to reduce flooding. The proposed project would include the construction of an underground stormwater treatment facility to treat, retain, and/or detain stormwater runoff from the project site prior to it being discharged into the City's storm drainage system. Construction of an underground stormwater treatment facility onsite would reduce the potential for flooding on or offsite as it would control the volume of runoff. With implementation of and compliance with applicable General Plan policies and City Municipal Code requirements, the proposed project would not result in substantial increase in the rate or amount of surface runoff in a manner which would result in flooding and impact would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for requiring further CEQA review are not met.

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

As described under Impact HYD-1, the proposed project would include the construction of an underground stormwater treatment facility to treat, retain, and/or detain stormwater runoff from the project site prior to it being discharged into the City's storm drainage system. The proposed project would comply with Municipal Code Chapter 27D and would incorporate post-construction BMPs to control and reduce the volume of stormwater runoff and would prepare a storm water control plan which would detail how runoff would be controlled and managed by the proposed project's post-construction BMPs. Additionally, the proposed project would comply with General Plan Policy PFS-5.3: Green Infrastructure, which require onsite stormwater management system design and LID techniques per the City's adopted stormwater requirements to preserve and create open space, improve runoff water quality, and decrease runoff volume. Therefore, with the implementation of and compliance with applicable General Plan policies and City Municipal Code requirements, the proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, and impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for requiring further CEQA review are not met.

iv) Impede or redirect flood flows

The project site is not located within 100-year flood zone and the project site is designated as an area with moderate flood hazard (FEMA 2009). In accordance with General Plan Policy PH-3.1: Development Restriction in Flood Areas, the proposed project would incorporate uniform enforceable measures that reduce losses due to flood related hazards to an acceptable level of risk. The proposed project would not result in modifications to the project site and surrounding areas in a way that would impede or redirect flood flows and the proposed onsite stormwater treatment facility would be designed and constructed to handle potential flood events. The proposed project would be designed, constructed, and operated in accordance with all applicable General Plan policies and therefore, the proposed project would not impede or redirect flood flows and impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for requiring further CEQA review are not met.

Impact HYD-4	**In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

The City's General Plan EIR determined that buildout of the General Plan would not result in tsunami or seiche impacts due to the City being located away from areas where tsunamis and seiches may occur and tsunami and seiche flows would not reach the City. Additionally, the General Plan EIR concluded though placing future developments within the 100-year flood zone could result in significant impact, impacts related to project inundation from flood hazards would be reduced to a less than significant level with the implementation of General Plan goals and policies, City Municipal Code requirements, and RWQCB and Valley Water requirements and standards.

The project site is not identified by the City's General Plan EIR as being located in a 100-year flood zone and FEMA's Flood Hazard Map designates the project site as Zone X (shaded), which is an area identified as having moderate flood hazards (City of Gilroy 2020b, FEMA 2009). In accordance with

General Plan Policy PH-3.1: Development Restriction in Flood Areas, the proposed project would incorporate uniform enforceable measures that reduce losses due to flood related hazards to an acceptable level of risk. The City is not at risk from seiches as there are no major landlocked bodies of water within or near the City. Additionally, the City would not be at risk of tsunamis since it is located more than 17 miles inland from the coast. The City's General Plan EIR identified that with the exceptions for the foothills, the entire City Planning Area/SOI is within one or more inundation areas for dam failure from the Uvas Dam, Chesbro Dam, or Anderson Dam (City of Gilroy 2020b). However, these dams were designed to meet special seismic design specifications and are regularly inspected and maintained by Valley Water. Furthermore, the USACE is responsible for conducting regular inspections of the dams. Through its inspection processes, the USACE would identify and communicate any risk of dam failure well in advance of any potential event that could trigger a potential failure. Therefore, the risk of inundation resulting from dam failure is low and impacts would be less than significant. Therefore, the proposed project would not result in a risk of release of pollutants due to project inundation and impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for requiring further CEQA review are not met.

Impact HYD-5	**Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

The proposed project would be constructed and operated in compliance with all water quality control plans and sustainable groundwater management plans that the City has adopted. The proposed project would be required to comply with Valley Water's Groundwater Management Plan which includes existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management.

The City is under the jurisdiction of the Central Coast RWQCB, and the proposed project would be required to comply with the policies and objectives of the Central Coast RWQCB's Water Quality Control Plan (Basin Plan). The Basin Plan described water quality objectives for surface water and groundwater. The proposed project would be required to obtain the NPDES Construction General Permit and implement a SWPPP which would incorporate BMPs that would meet the requirements of the Basin Plan to reduce potential impacts to water quality. Therefore, the proposed project would not conflict with or obstruct implementation of the water quality or groundwater management plan and impact would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for requiring further CEQA review are not met.

3.10.3 Conclusion

With regards to the issue area of hydrology and water quality, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.

4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.11 LAND USE AND PLANNING

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) Physically divide an established community?	☐	☐	☒
2) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒

3.11.1 Environmental Setting

The 7.29-acre project site is located in the City of Gilroy at 8875 Murray Avenue and consists of one parcel identified as APN 835-01-059. There are a few scattered trees throughout the project site.

The project site is within an urbanized area of the City and the surrounding areas include a variety of different uses and developments. The project site is located approximately 0.18 mile west of U.S. 101. The project site is surrounded by the following land uses:

- **North.** Commercial uses are located north of the project site.
- **South.** Vacant, undeveloped land borders the project site to the south, beyond which lies lands developed with commercial uses, followed by a church and residential developments.
- **West.** Forest Street borders the project site to the west, beyond which lies lands developed with commercial and industrial uses along with vacant undeveloped land.
- **East.** An existing social services development borders the project site along the southeast corner. Murray Avenue border the project site to the east, beyond which lies single-family developments.

The project site is designated Industrial Park by the City's General Plan and zoned as M1 Limited Industrial zoning district and is within the Murray Las Animas Overlay district.

Listed below are goals and policies related to land use from the City of Gilroy General Plan that are applicable to the proposed project:

Goal LU-1: Protect and enhance Gilroy's quality of life and unique identity while continuing to grow and change.

- **Policy LU-1.1: Pattern of Development.** Ensure an orderly, contiguous pattern of development that prioritizes infill development, phases new development, encourages compactness and efficiency, preserves surrounding open space and agricultural resources, and avoids land use incompatibilities.

Goal LU-5: Encourage, facilitate, and support the development of new employment and industrial uses and retention of existing industry to ensure compatibility with existing surrounding uses and planned uses.

- **Policy LU-5.1: Industrial Design Standards.** Ensure that new industrial developments contribute to the overall attractiveness of the community through appropriate site design, architectural design, and landscaping.
- **Policy LU-5.3: Screening in Industrial Areas.** Encourage the screening of loading areas and open storage areas so that they are not visible from major roads.

Goal LU-8: Support growth and development that preserves and strengthens the City's historic, small-town character; provides and maintains safe, livable, and affordable neighborhoods; and creates beautiful places.

- **Policy LU-8.4: Tree Preservation.** Encourage the preservation of trees on public and private property. Priority should be given to the preservation of trees considered significant due to their size, history, unusual species or unique quality. In particular this policy shall apply to the heritage cedar trees located on the south side of Hecker Pass Highway in the Hecker Pass Specific Plan area.
- **Policy LU-8.6: Utility Undergrounding.** Proceed with the undergrounding of existing overhead utility lines throughout the city, as funding allows, and require undergrounding of utilities in all new developments.
- **Policy LU-8.12: Outdoor Lighting Efficiency.** Select outdoor lighting fixtures to provide maximum energy efficiency as well as effective lighting.
- **Policy LU-8.13: Limit Light Pollution.** Encourage measures to limit light pollution from outdoor sources, and direct outdoor lighting downward and away from sensitive receptors.

3.11.2 Discussion

Impact LU-1	Physically divide an established community?

The City's General Plan EIR did not analyze specific impacts related to buildout of the General Plan on established communities. The project proposes to develop three light industrial building located on a site within a highly urbanized area of the City. The project site consists of one vacant parcel and is surrounded by existing developments. The proposed project would not involve the construction of new roadways, which would preclude access to adjacent development. Therefore, the proposed project would not physically divide an established community, and no impact would occur. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact LU-2	**Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?**

The project site is designated Industrial Park by the City's General Plan and zoned M1 Limited Industrial. According to the City's General Plan, the Industrial Park land use designation's purpose is to allow for low-intensity industrial developments that can locate in proximity to residential and light industrial uses with a minimum of environmental conflict. Although development in these areas still must meet strict landscaping, buffering, and design standards, it does not require a "campus" setting or integrated open space areas. Typical uses under this designation include office, light manufacturing operations, electronic assembly plants, and large warehouses. Additionally, the proposed project site located within the Murray Las Animas Avenue overlay combing district. The purpose of the Murray Las Animas Avenue overlay combining district is to provide development standards and regulations to soften the impact of industrial buildings fronting Murray Avenue, especially when they are across the street from existing homes.

The project proposes to develop three light industrial buildings that would become Highly Visual, LLC's new main headquarters consisting of offices, product storage, and warehouse operations such as assembly and distribution. These proposed uses would be consistent with the allowed uses under the land use and zoning designation of the project site. The proposed project's three buildings would be two stories tall and have a maximum height of 35 feet, consistent with the development standard of the project site. The proposed project would be designed and constructed in accordance with the development standards outlined by the City. Additionally, the proposed project would implement any applicable policies identified in the General Plan adopted for the purpose of avoiding or mitigating an environmental effect. The proposed project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant. Therefore, the proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.11.3 Conclusion

With regards to the issue area of land use and planning, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.12 MINERAL RESOURCES

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	☐	☐	☒
2) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☒

3.12.1 Environmental Setting

According to the City's General Plan EIR, the City is located within the Monterey Bay Production-Consumption Region identified and monitored by the DOC's Division of Mines and Geology. Mineral resources in the vicinity of the City include resources such as sand, clay, or gravel (City of Gilroy 2020b). As noted in General Plan EIR, significant mineral resources (specifically alluvial deposit) can be found in the Uvas Creek vicinity in southwestern Gilroy and west of Gilroy. There is one Mineral Resource Zones (MRZ)-2 mapped within the City. The MRZ-2 designation is used for areas where "adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence." Uvas Creek and adjoining margins within the City's Hecker Pass Special Use District have been designated by the DOC's State Mining and Geology Board as MRZ-2 (City of Gilroy 2020b). Additionally, a second MRZ-2 designation is located in rural Santa Clara County. The Verne D. Freeman Sr. Quarry is an active quarry located within this zone. However, the zone is located within the General Plan Planning Area/SOI but is located outside of the Urban Growth Boundary. The project site is located approximately two miles northeast of the City's Hecker Pass Special Use District and over five miles north of the Verne D. Freeman Sr. Quarry. The project site is located in an area identified by the DOC's Division of Mines and Geology as a mix of MRZ-1 and MRZ-3 designated lands (DOC 2021). MRZ-1 are areas where available geologic information indicates that little likelihood exists for the presence of significant constriction aggregate resources and MRZ-3 are areas containing known or inferred construction aggregate resources of undetermined mineral resource significance.

The City of Gilroy General Plan does not include any mineral resources related goals or policies that would be applicable to the proposed project.

3.12.2 Discussion

Impact MIN-1	**Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?**

The City's General Plan EIR determined that implementation of the General Plan would have no effect on the availability of mineral resources associated with the Verne D Freeman Sr. Quarry's quarry facility and

mineral resource zone as it is located outside of the City's Urban Growth Boundary. Additionally, due to implementation of the Hecker Pass Specific Plan, resources along Uvas Creek are no longer available for extraction. Therefore, the City's General Plan EIR determined that buildout under the General Plan would have no impact to the availability of mineral resources with local, regional, or statewide importance.

The project site is not located near the Verne D Freeman Sr. Quarry and is not located within the Hecker Pass Specific Plan area. The project site is undeveloped and there are no known mineral resources that exist on or near the project site. Therefore, the proposed project would not result in the loss of availability of a known mineral resource, and no impact would occur. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact MIN-2	**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?**

There are no mineral resource recovery sites located on or in the vicinity of the project site and the project site does not contain any known locally important mineral resources. Additionally, the project site is zoned Industrial Park and does not allow for mineral resource recovery uses. The proposed project would not result in the loss of availability of a locally important mineral resource recovery site, and no impact would occur. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.12.3 Conclusion

With regards to the issue area of mineral resources, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.13 NOISE

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) 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?	☐	☐	☒
2) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒
3) 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?	☐	☐	☒

3.13.1 Environmental Setting

Noise is generally defined as unwanted sound that annoys or disturbs people and potentially causes an adverse psychological or physiological effect on human health. Because noise is an environmental pollutant that can interfere with human activities, evaluation of noise is necessary when considering the environmental impacts of a proposed project.

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are considered to be more sensitive to noise intrusion than are commercial or industrial activities. Ambient noise levels can also affect the perceived desirability or livability of a development.

The project proposes to develop three light industrial buildings that would become Heat Wave Visual's new main headquarters consisting of offices, product storage, and warehouse operations such as assembly and distribution. The proposed project would be constructed in three phases on a vacant 7.29 acre site located in the City of Gilroy. Phase I involves the construction of Building 1 (42,266 square feet) and associated driveways along Forest Street, an internal driveway to the existing northern property that will provide secondary access during Phases I and II, parking areas, and infrastructure improvements. Phase II involves construction of Building 2 (48,600 square feet), parking areas, and infrastructure improvements. Phase III involves construction of Building 3 (29,920 square feet), a driveway connection to Murray Avenue, construction of associated parking areas, and infrastructure improvements.

The project site is within an urbanized area of the City and the surrounding areas include a variety of different uses and developments. The project site is located approximately 0.18 mile west of U.S. 101. The project site is surrounded by the following land uses:

- **North.** Light Industrial uses are located north of the project site.

- **South.** Vacant, undeveloped land borders the project site to the south, beyond which lies lands developed with light industrial uses, followed by a church and residential developments.
- **West.** Forest Street borders the project site to the west, beyond which lies lands developed with industrial uses and land that is under construction with light industrial uses.
- **East.** An existing social services development borders the project site along the southeast corner. Murray Avenue borders the project site to the east, beyond which lies single-family developments.

The nearest sensitive receptors to the project site are the single-family residences to the east, across Murray Avenue.

Listed below are goals and policies related to noise from the City of Gilroy General Plan that may be applicable to the proposed project:

Goal PH 6: Protect Gilroy residents from exposure to excessive noise and its effects through appropriate mitigation measures and responsive land use planning, especially in regard to noise-sensitive land uses such as schools, hospitals, and housing for seniors.

- **Policy PH-6.3: Maximum Permissible Noise Levels.** Ensure that outdoor and indoor noise levels are within the maximum permitted levels. Prohibit further development of sensitive uses in areas where the current or projected future noise levels exceed these standards and feasible mitigation is not available to reduce the noise level to meet the standards identified in Table 9-1.

TABLE 9-1
City of Gilroy Maximum Permitted Outdoor and Indoor Noise Levels

Land Use Category	Maximum Outdoor L_{DN} (dBA)	Maximum Indoor L_{DN} (dBA)
Residential	60[1]	45[1]
Commercial	65	61
Industrial	76	see note 2

L_{DN} - The Day/Night Average Sound Level. Day-night average sound level-the 24 hour A-weighted equivalent sound level, with a 10 decibel penalty applied to nighttime levels.

[1]The Outdoor sound levels for residential properties shall be held to 60-dBA L_{DN}, or a maximum of 70-dBA if ALL of the following FINDINGS can be made:

- That feasible sound attenuation measures have been incorporated in the project design;
- That potential noise levels are part of the developer's disclosure to future residents;
- That interior noise limits established by the General Plan are strictly maintained; and
- Potential noise levels will not jeopardize the health, safety, and general welfare of the public.

[2] The indoor standards for industrial land uses have been set by the Occupational Safety and Health Administration. The maximum level to be exceeded no more than 10 percent of the time (L10) is 65 dBA, while the maximum level to be exceeded no more than 50 percent of the time (L50) is 60 dBA.

- **Policy PH-6.4: Noise Study and Mitigation.** Require proposed development projects in areas where future residents or visitors may be exposed to major noise sources (e.g. roadways, rail lines, industrial activities) to conduct an environmental noise analysis. The noise analysis shall determine noise exposure and noise standard compatibility with respect to the noise standards identified in Table 9-1 and shall incorporate noise mitigation when located in noise environments that are not compatible with the proposed uses of the project.

- **Policy PH-6.5: Acoustical Design.** Consider the acoustical design of projects in the development review process to reduce noise to an acceptable level. Ensure that noise mitigation features are designed and implemented in an aesthetically pleasing and consistent manner.

- **Policy PH-6.8: Incremental Noise Impacts of Commercial and Industrial Development.** Review of proposed new or expanding commercial and industrial development shall consider potential noise impacts on nearby residential uses and, as necessary, shall require noise mitigation measures as a condition of project approval.

- **Policy PH-6.10: Construction Noise.** Require proposed development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on those uses, to the extent feasible.

- **Policy PH-6.11: Construction and Maintenance Noise Limits.** Limit the hours of construction and maintenance activities to the less sensitive hours of the day (7:00 am to 7:00 pm Monday through Friday and 9:00 am to 7:00 pm on Saturdays). Construction hours that vary from these timeframes may be approved by the Building Official, in conformance with Article XVI. Hours of Construction of the Gilroy City Code.

- **Policy PH-6.12: Vibration Impact Assessment.** Require a vibration impact assessment for proposed development projects in which heavy-duty construction equipment would be used (e.g. pile driving, bulldozing) within 200 feet of an existing structure or sensitive receptor. If applicable, require all feasible mitigation measures to be implemented to ensure that no damage or disturbance to structures or sensitive receptors would occur.

Listed below are applicable sections related to noise from the City of Gilroy's Zoning Ordinance (Chapter 30, Section 41.31).

Section 41.31 Specific Provisions – Noise

It shall be unlawful to generate noise within the City limits that exceeds the limits established in this section.

a) Definitions:

"Decibel (dBA)" means a unit measuring the amplitude of sound or noise, weighted to the range of human hearing (A-weighting scale on a sound level meter).

"L10" means the maximum noise level to be exceeded no more than ten percent (10%) of the time.

"Noise level" means measurement of sound in decibels (dBA) obtained by using a sound level meter at slow response.

"Sound level meter" means an instrument comprised of a microphone, an amplifier, an output meter and frequency weighing networks, used for measuring sound levels in decibel (dBA) units.

b) Maximum Outdoor Noise Levels:

1) Residential Noise Impacting Residential Properties. Fixed-source outdoor mechanical equipment installed after July 1, 2007 (e.g., pool, spa, air conditioning or similar equipment) is limited to a maximum of sixty (60) dBA Ldn measured at the property line or seventy (70) dBA (L10) measured at the property line.

2) Commercial and Industrial Noise Impacting Residentially Zoned Properties. Noise emanating from properties that are zoned for uses other than residential is limited to a maximum of 70 dBA (L10) measured at the residential property line. Such noise is limited to the hours of 7:00 a.m. to 10:00 p.m., and prohibited between the hours of 10:00 p.m. and 7:00 a.m.

Section 16.38 Hours of Construction

a) Unless otherwise provided for in a validly issued permit or approval, construction activities shall be limited to the hours of seven (7) a.m. and seven (7) p.m., Monday through Friday and nine (9) a.m. to seven (7) p.m. on Saturday. Construction activities shall not occur on Sundays or city holidays, which include: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas. "Construction activities" are defined as including but not limited to, excavation, grading, paving, demolitions, 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.

b) In the event the chief building official or his or her designee determines that the public health and safety will not be impaired by the construction activities between the hours of seven (7) p.m. and seven (7) a.m., and that loss or inconvenience would result to any party in interest, the chief building official may grant permission for such work to be done between the hours of seven (7) p.m. and seven (7) 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 activities 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 city holidays from nine (9) a.m. to six (6) p.m., provided that such activities are limited to the improvement or maintenance undertaken by the resident on a personal basis.

d) 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. The provisions prescribed herein may be enforced by the chief building official or his or

her designee or the police department. Violation of this section shall be a misdemeanor and each day such violation is committed or permitted to continue constitutes a separate offense and shall be punishable as such.

Existing Ambient Noise Levels

The existing noise environment in a project area is characterized by the area's general level of development. Areas that are not urbanized are relatively quiet, while areas that are more urbanized are noisier as a result of roadway traffic, industrial activities, and other human activities.

Gilroy is exposed to several sources of noise, including traffic on U.S. 101. To a lesser extent, noise is also generated along major arterial roads, such as Leavesley Road, and from industrial operations within the City. The Union Pacific Railroad (UPRR) roughly parallels Monterey Road and generates noise when passenger or freight trains pass through the City.

The ambient noise levels at the project site were determined using Figure 3.12-3 "2040 General Plan Buildout Traffic Noise Contours in Gilroy" in the Gilroy 2040 General Plan EIR. According to Figure 3.12-3, noise levels at the project site are shown within the 65-70 day-night sound level (Ldn) contour near Murray Avenue and within the 60-65 Ldn contour interior to the project site.

3.13.2 Discussion

Impact NOI-1	**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?**

The General Plan EIR identified that buildout of the General Plan would result in increased noise levels in the City. However, with the implementation of General Plan policies and adherence to the City's noise guidelines and standards, impacts would be less than significant.

Short-Term Construction Noise Impacts

The General Plan EIR states *"Buildout of the 2040 General Plan would facilitate the construction of new projects throughout the city. Residences, businesses, and other land uses located adjacent to development sites would be affected at times by construction noise…*

Major noise-generating construction activities associated with new projects would include removal of existing pavement and structures, site grading and excavation, installation of utilities, the construction of building foundations, cores, and shells, paving, and large-scale landscaping. The highest noise levels are typically generated during the demolition of existing structures when impact tools are used (e.g., jackhammers, hoe rams) and during the construction of building foundations when impact pile driving may be required to support the structure. Site grading and excavation activities would also generate high noise levels as these phases often require the simultaneous use of multiple pieces of heavy equipment, such as dozers, excavators, scrapers, and loaders. Lower noise levels result from building construction activities when these activities move indoors, and less heavy equipment is required to complete the tasks.

Construction equipment would typically include, but would not be limited to, earth-moving equipment and trucks, pile driving rigs, mobile cranes, compressors, pumps, generators paving equipment, and pneumatic, hydraulic, gas, and electric tools. Construction noise levels would vary by phase and vary within phases based on the amount of equipment in operation and location where the equipment is operating."

The construction of the proposed project will involve typical construction and demolition equipment, such as trucks, bulldozers, and loaders, as listed in the General Plan EIR section above. The construction of the proposed project will result in a substantial temporary noise increase at the adjacent noise-sensitive land uses and as a result, noise levels from this proposed project could exceed 60 dB(A) Leq and last over one year in duration.

As concluded in the General Plan EIR, the potentially significant short-term noise impacts associated with construction of future development facilitated by buildout of the Gilroy 2040 General Plan, including the proposed project, would be mitigated to a less than significant level with implementation of Municipal Code Section 16.38, as well as General Plan Policies PH-6.10: Construction Noise and PH-6.11: Construction and Maintenance Noise Limits. Therefore, the proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for further CEQA review are not met.

Exterior Traffic Noise Level Impacts

Traffic noise depends primarily on vehicle speed (tire noise increases with speed), proportion of medium and large truck traffic (trucks generate engine, exhaust, and wind noise in addition to tire noise), and number of speed control devices, such as traffic lights and stop signs (accelerating and decelerating vehicles and trucks can generate more noise).

Changes in traffic volumes can also have an impact on overall traffic noise levels. For example, it takes 25 percent more traffic volume to produce an increase of only 1 dB(A) in the ambient noise level. For roads already heavy with traffic volume, an increase in traffic numbers could even reduce noise because the heavier volumes could slow down the average speed of the vehicles. A doubling of traffic volume results in a 3 dB(A) increase in noise levels.

According to the General Plan EIR, "*the increased development allowed under the General Plan would result in an increase in vehicular traffic as development occurs and population increases. These projected increases in traffic would occur over time and would increase noise levels throughout Gilroy and the vicinity."*

As indicated in Table 3.12-2 "2040 General Plan Buildout Traffic Noise Contours" in the General Plan EIR, perceptible noise increases (3 dB(A) Ldn or greater) would occur along segments of Monterey Road as a result of 2040 General Plan buildout conditions. Less than 3 dB(A) Ldn noise increases are anticipated along Murray Avenue including the location of the project site. The General Plan EIR states "*The implementation of 2040 General Plan Policies PH-6.1 through 6.7 and PH-6.9 would reduce potentially significant impacts associated with new noise-sensitive land use exposure to traffic noise sources to a less-than-significant level."* Therefore, the proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for further CEQA review are not met.

Project Stationary and Operational Noise Sources

The proposed project would likely install exterior mechanical equipment to support the offices, product storage, and warehouse operations of the facility. Other potential operational noise sources generated by the proposed project include parking lot noise, trash operations, delivery activity, and loading dock activity. Loading dock activity noise would be generated by truck engines, exhaust systems, and brakes during low-speed gear shifting; braking activities; backing up toward the docks; dropping down the dock ramps; and maneuvering away from the docks. Noise levels generated from these sources have the potential to expose nearby noise-sensitive land uses to noise levels that exceed the City's noise standards.

As noted in the General Plan EIR, the implementation of 2040 General Plan Policy PH-6.1 through Policy PH-6.8 would reduce potentially significant impacts associated with new noise-sensitive land use exposure to stationary and operational noise sources to a less than significant level. Therefore, the proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for further CEQA review are not met.

Impact NOI-2 Generation of excessive groundborne vibration or groundborne noise levels?

The General Plan EIR identified that with implementation of General Plan policies, potential groundborne vibration and noise impacts from construction activities that could occur from development allowed by the General Plan would be minimized and impacts would be less than significant.

During construction of the proposed project, equipment, such as trucks and bulldozers will be used in close proximity to sensitive residential receptors. As noted in the General Plan EIR "*Project-specific demolition and construction activities required for future development associated with the Gilroy 2040 General Plan project may generate perceptible vibration levels when heavy equipment or impact tools (e.g. jackhammers, pile drivers, hoe rams) are used in the vicinity of nearby sensitive land uses. Heavy tracked vehicles (e.g., bulldozers or excavators) can generate distinctly perceptible groundborne vibration levels when this equipment operates within approximately 25 feet of sensitive land uses.*"

During construction of the proposed project, construction and demolition equipment, such as trucks and bulldozers will be used in close proximity to (within 200 feet of) sensitive residential receptors. The General Plan EIR states "*The implementation of 2040 General Plan policies PH 6.12 and PH 6.13 would reduce the potentially significant vibration impacts associated with demolition and construction activities to a less-than-significant level by requiring a vibration impact assessment for proposed development projects that require heavy-duty construction equipment within 200 feet of an existing structure or sensitive receptor.*" Therefore, the proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact NOI-3	**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?**

The nearest runway to the project site is the San Martin Airport, located approximately four miles northwest of the project site. The South Valley Hospital helipad is located about 0.6 miles northeast of the project site. Noise impacts from airports and aircraft are anticipated to be a major source of noise in the City or at the project site and are not addressed in the General Plan EIR. Therefore, the proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.13.3 Conclusion

With regards to the issue area of noise, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.14 POPULATION AND HOUSING

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒
2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒

3.14.1 Environmental Setting

As of January 1, 2024, the Department of Finance (DOF) estimates that the City had a population of 61,033 (DOF 2024). The General Plan accounts for development to its horizon year of 2040 (City of Gilroy 2020a). The 2040 horizon-year projection includes 6,477 new dwelling units, 19,756 new residents, and 21,434 new jobs (City of Gilroy 2020b). The Association of Bay Area Governments (ABAG) projects the City would have a population of approximately 70,735 residents by 2040.

Listed below are goals and policies related to population and housing from the City of Gilroy General Plan that are applicable to the proposed project:

Goal LU-1: Protect and enhance Gilroy's quality of life and unique identity while continuing to grow and change.

- **Policy LU-1.1: Pattern of Development.** Ensure an orderly, contiguous pattern of development that prioritizes infill development, phases new development, encourages compactness and efficiency, preserves surrounding open space and agricultural resources, and avoids land use incompatibilities.

3.14.2 Discussion

Impact POP-1	**Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

The City's General Plan EIR did not specifically analyze the impacts of substantial direct and indirect population growth. However, the City's General Plan EIR determined that the City's General Plan provided enough vacant and underutilized land to support housing for the additional 19,756 residents anticipated to occur under build out of the General Plan.

The proposed project involves the development of light industrial uses and does not include a residential component that would directly induce population growth. The proposed project would include office, product storage, and warehouse operation uses, consistent with the uses allowed for the Industrial Park land use designation and M1 Limited Industrial zoning district. The proposed project would not include the extension of roads and project utilities would connect to City infrastructure in the immediate vicinity of the project site.

As discussed above, buildout of the General Plan estimates 21,434 new jobs would be created by 2040. Full buildout of the proposed project is anticipated to generate approximately 95 to 190 total employees, which would represent less than one percent of the new jobs anticipated by 2040. The jobs created from the proposed project would be within the City's projections and would not indirectly result in substantial unplanned growth. Therefore, the proposed project would not result in substantial unplanned population growth or exceed what was previously evaluated in the General Plan EIR. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact POP-2	**Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

The City's General Plan EIR did not analyze potential impacts related to the displacement of existing people or housing. However, the project site is vacant and does not contain any existing residential or commercial developments. Therefore, the proposed project would not result in the displacement of substantial number of existing people or housing which would require the construction of replacement housing elsewhere and no impact would occur. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.14.3 Conclusion

With regards to the issue area of population and housing, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.15 PUBLIC SERVICES

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) 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:			
Fire protection?	☐	☐	☒
Police protection?	☐	☐	☒
Schools?	☐	☐	☒
Parks?	☐	☐	☒
Other public facilities?	☐	☐	☒

3.15.1 Environmental Setting

Fire Protection

The Gilroy Fire Department (GFD) provides fire protection services for the City and project site. The GFD operates out of three fire stations, with the closest station to the project site being Fire Station 2 – Las Animas Station, located at 8383 Wren Avenue, approximately 0.9 mile southwest of the project site.

Police Protection

The City of Gilroy Police Department provides police protection services throughout the City and at the project site. The Gilroy Police Department operated out of one station, located at 7301 Hanna Street, approximately 1.5 mile southwest of the project site. The Gilroy Police Department divides the City into four response areas and the project site is located in Police Response Area 4 (City of Gilroy 2020b).

Schools

The City is served by the Gilroy Unified School District (GUSD) for grades kindergarten through 12th grade, while a public charter school and private schools provide additional educational opportunities. The closest schools to the project site include South Valley Middle School, GUSD Preschool, Gilroy Prep School, and St. Mary School, all located approximately 0.75 mile south/southwest of the project site.

Parks

Within the City, open space and recreation areas range from passive open space areas to active parks that include a variety of amenities such as playgrounds, picnic areas, ball fields, horse shoe pits, special use facilities, and basketball, volleyball, handball, and tennis courts. According to the City's General Plan EIR, the City currently has 161.02 acres of developed parks and 138 acres of developed limited use parks for a total parkland area of 299.02 acres. Limited use parkland are areas that would not be formally developed into typical high-use urban parkland and would remain in substantially natural conditions. The closest park to the project site is the Las Animas Veterans Park, located approximately 0.4 mile west of the project site.

Other Facilities

The City is served by the Santa Clara County Library District which consists of eight branch libraries and one mobile bookstore. The nearest public library to the project site is the Gilroy Branch Library located at 350 W. Sixth Street, approximately 1.4 mile southwest of the project site.

Listed below are relevant goals and policies from the City of Gilroy General Plan that are applicable to the proposed project:

Goal PFS-1: Provide the highest level of public facilities and services feasible, consistent with the City's fiscal resources, to meet the needs of current and future residents and businesses.

- **Policy PFS-1.10: Facility and Service Funding.** Ensure that new development bears the cost for incremental public facilities and services costs it generates.
- **Policy PFS-1.11: Development Impact Fees.** Require applicants for new development to pay Development Impact Fees for traffic circulation, water, wastewater, storm water and public facilities to offset the costs of expanding these as detailed by the impact fee nexus study.

Goal PFS-9: Provide excellent public safety services in partnership with the community.

- **Policy PFS-9.3: Development Review.** Include the Police Department in the review of development proposals to ensure that crime and safety issues are consistently addressed in the review of new development. Such review shall promote the implementation of Crime Prevention Through Environmental Design principles.

Goal PFS-10: Provide for public health and safety by offering high quality fire and emergency-response services.

- **Policy PFS-10.3: Development Review.** Under the direction and authority of the Fire Chief, the Fire Marshall shall review of development proposals to ensure that projects adequately address fire access and building standards.
- **Policy PFS-10.5: New Development.** Continue to require that new development provides all necessary water service, fire hydrants, and roads consistent with Fire Department standards.
- **Policy PFS-10.6: Sprinklers.** Continue to require installation of sprinklers in all new buildings in accordance with the California Fire Code.

- **Policy PFS-10.8: Fire Access Design and Building Materials.** Require all new development to include use of fire-resistant landscaping and building materials and adequate access for fire equipment.

Goal PFS-11: Provide Gilroy residents with access to excellent educational facilities and programs that are well integrated into the surrounding neighborhoods.

- **Policy PFS-11.4: School Impact Fees.** Continue to collect new development fees as established by the GUSD, in accordance with State law.

3.15.2 Discussion

Impact PUB-1	**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:** **Fire protection?** **Police protection?** **Schools?** **Parks?** **Other public facilities?**

Fire Protection

The City's General Plan EIR determined that with implementation of General Plan goals and policies, including the payment of development impact fees, would reduce potential impacts related to fire protection services and facilities to a less than significant level.

The City requires that building spaces be designed to handle the intended uses, with sprinklers and fire hydrants in accordance with the guidelines laid out in the City's Fire Code. The proposed project would be designed and constructed to have sufficient firefighting flows to meet the City's requirements. Upon completion of the proposed project, a final inspection would be completed made by the City Fire Department for conformance of all building systems with the City's Fire Code and National Fire Protection Association requirements including requirements for adequate firefighting flows and pressure to serve the proposed project in accordance with General Plan Policy PFS-10.3: Development Review. The proposed project would comply with General Plan Policy PFS-10.5: New Development which require that new development provides all necessary water service, fire hydrants, and roads consistent with Fire Department standards, and Policy PFS-10.6: Sprinklers which require installation of sprinklers in all new buildings in accordance with the California Fire Code. Additionally, the proposed project would comply with Policy PFS-10.8: Fire Access Design and Building Materials. The proposed project would be designed and constructed to include use of fire-resistant landscaping and building materials and would provide adequate access for fire equipment throughout the project site. Compliance with these General Plan policies and City requirements and standards would reduce the potential for fire related incidents to occur at the project site and reduce potential demand to fire protection services and facilities.

The proposed project would comply with General Plan Policy PFS-1.11: Development Impact Fees, which require applicants for new development to pay Development Impact Fees for public facilities to offset the costs of expansion that may be required as a result of the development. Therefore, the impact to fire protection services would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Police Protection

The City's General Plan EIR determined that there would be no impact on police protection facilities under buildout of the General Plan as the current police station is adequately sized to accommodate the increase in staff required due to population increase.

The proposed project does not include a residential component and would not result in population increase resulting from development. At full buildout, the proposed project is anticipated to generate approximately 95 to 190 total employees. However, since the proposed project would be constructed in phases, the generation of employees would take place over time. The proposed project would comply with General Plan Policy PFS-9.3: Development Review, which requires new developments to include the Police Department in the review of development proposals to ensure that crime and safety issues are consistently addressed in the review of new development. Additionally, the proposed project would comply with General Plan Policy PFS-1.11: Development Impact Fees, which require applicants for new development to pay Development Impact Fees for public facilities to offset the costs of expansion that may be required as a result of the development. Payment of the Development Impact Fees would offset the cost of police service demands associated with the proposed project. Therefore, the impact to police protection services would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Schools

The City's General Plan EIR identified that payment of required fees and implementation of General Plan goals and policies would mitigate potential impacts to schools to a less than significant level.

The proposed project does not include a residential component that would induce population growth or increase student enrollment in the area. Pursuant to General Plan Policy PFS-11.4: School Impact Fees and SB 50, new development, including residential, commercial, and industrial projects, are required to pay a School Impact Fee. Payment of these fees would offset the costs of school service demands and contribute to the construction or expansion of school facilities. The General Plan EIR identified that under SB 50, the payment of such fees is deemed to fully mitigate the impacts of new development on school facilities (City of Gilroy 2020b). As the proposed project would not induce population growth, there would be no impact to schools. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Parks

The City's General Plan EIR determined that with compliance with the City's General Plan goals, policies, and implementation programs, as well as mitigation measures identified in the General Plan EIR, impacts to parks would be less than significant.

The proposed project does not include a residential component that would induce population growth in the project area. As the proposed project does not include a residential component, the proposed project would not result in increased demand to nearby parks and would not result in changes to the City's parkland standard. In accordance with General Plan Policy PFS-1.11: Development Impact Fees, the proposed project would be required to pay Development Impact Fees to offset any additional demand to public facilities that may occur as a result of the proposed new development. Payment of this fee would offset the costs of park and recreation demands and contribute to the City's meeting its recreation standards. The proposed project would have no impact to parks. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Other Public Facilities

The proposed project does not include a residential component and as such, the proposed project would not induce population growth Therefore, the proposed project would have no impact to other public facilities, such as public libraries. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.15.3 Conclusion

With regards to the issue area of public services, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.16 RECREATION

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) 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?	☐	☐	☒
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒

3.16.1 Environmental Setting

Within the City, open space and recreation areas range from passive open space areas to active parks that include a variety of amenities such as playgrounds, picnic areas, ball fields, horse shoe pits, special use facilities, and basketball, volleyball, handball, and tennis courts. According to the City's General Plan EIR, the City currently has 161.02 acres of developed parks and 138 acres of developed limited use parks for a total parkland area of 299.02 acres. Limited use parkland are areas that would not be formally developed into typical high-use urban parkland and would remain in substantially natural conditions. The closest park to the project site is the Las Animas Veterans Park, located approximately 0.4 mile west of the project site.

Listed below are relevant goals and policies from the City of Gilroy General Plan that are applicable to the proposed project:

Goal PFS-1: Provide the highest level of public facilities and services feasible, consistent with the City's fiscal resources, to meet the needs of current and future residents and businesses.

- **Policy PFS-1.10: Facility and Service Funding.** Ensure that new development bears the cost for incremental public facilities and services costs it generates.
- **Policy PFS-1.11: Development Impact Fees.** Require applicants for new development to pay Development Impact Fees for traffic circulation, water, wastewater, storm water and public facilities to offset the costs of expanding these as detailed by the impact fee nexus study.

3.16.2 Discussion

Impact REC-1	**Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

The General Plan EIR identified that buildout of the General Plan would result in increased use of existing parks and recreational facilities, which has the potential to result in significant impacts. However, the City's General Plan EIR determined that with compliance with the City's General Plan goals, policies, and implementation programs, as well as mitigation measures identified in the General Plan EIR, impacts to parks would be less than significant.

The proposed project would construct three light industrial buildings and does not include a residential component that would induce population growth in the project area. Though the proposed project is anticipated to generate 95 to 190 employees, the workforce is anticipated to come from nearby areas and would not result in increased population in the City. As the proposed project does not include a residential component and would not result in population growth, the proposed project would not result in increased demand to nearby parks in such a way that substantial physical deterioration of the facility would occur or be accelerated. In accordance with General Plan Policy PFS-1.11: Development Impact Fees, the proposed project would be required to pay Development Impact Fees to offset any additional demand to public facilities that may occur as a result of the proposed new development. Payment of this fee would offset the costs of park and recreation demands and contribute to the City's meeting its recreation standards. The proposed project would have no impact to parks. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact REC-2	**Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

The proposed project would include construction of three light industrial buildings with associated driveways, parking areas, and onsite/offsite utility and roadway improvements. The proposed project does not include the construction of a recreational facility. Additionally, the proposed project would not result in any population increase that would require the construction or expansion of recreational facilities to ensure the City would meet its parkland standards. In accordance with General Plan Policy PFS-1.11: Development Impact Fees, the proposed project would be required to pay Development Impact Fees to offset any additional demand to public facilities that may occur as a result of the proposed new development. Therefore, the proposed project would not result in an adverse physical effect on the environment related to recreation facilities and the impact would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.16.3 Conclusion

With regards to the issue area of recreation, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.

2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.

3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.

4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.17 TRANSPORTATION

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	I Impact Consistent with General Plan EIR
1) Conflict with program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒
2) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒
3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒
4) Result in inadequate emergency access?	☐	☐	☒

3.17.1 Environmental Setting

Regional access to the project site is provided via U.S. 101 and SR 152. Local access to the project site is provided by Monterey Road, Leavesley Road (SR 152), Forest Street, and Murray Avenue.

Key roadways in the area are described below:

- **U.S. 101** is a six-lane freeway north of the Monterey Road interchange (in south Gilroy) and transitions to a four-lane freeway south of that point. U.S. 101 extends northward through San Jose and southward into Salinas. This freeway serves as the primary roadway connection between Gilroy and Morgan Hill and other Santa Clara County communities to the north and between Gilroy and Salinas to the south. U.S. 101 includes full-access interchanges at Leavesley Road, Tenth Street/SR 152, and Monterey Road in Gilroy. A fourth interchange at Masten Avenue, north of Gilroy in unincorporated Santa Clara County, serves the north and northwestern areas of Gilroy. Regional access to the project site is provided via the U.S. 101 interchange at Leavesley Road.

- **SR 152** is a two- to four-lane east-west highway that extends to the east, where it is known as Pacheco Pass Highway, starting at the U.S. 101/Leavesley Road interchange south to the U.S. 101/Tenth Street interchange along U.S. 101, over the Pacheco Pass to Interstate 5 and through Los Banos. West of Gilroy, SR 152 is known as Hecker Pass Highway and extends westward from the U.S. 101/Leavesley Road interchange, with its alignment through Gilroy following Leavesley Road to Monterey Road to First Street where it changes designation to Hecker Pass Highway west of Santa Teresa Boulevard, over the Santa Cruz Mountains to Watsonville and Highway 1. SR 152 connects the communities of Watsonville and Gilroy to the Central Valley via Interstate 5. Access to the project site from SR 152 is provided via Leavesley Road, Forest Street, and Murray Avenue.

- **Leavesley Road** is an east-west arterial roadway that consists of six lanes between Monterey Road and Arroyo Circle and narrows down to two lanes east of Arroyo Circle. West of Monterey Road and east of New Avenue, Leavesley Road changes designation to Welburn Avenue and Ferguson Road, respectively. Leavesley Road has an interchange with U.S. 101 which serves as the primary access point for regional traffic associated with the Gilroy Premium Outlets and surrounding commercial areas. The segment of Leavesley Road between the U.S. 101 interchange and Monterey Road is also designated as SR 152.

- **Forest Street** is a two-lane north-south roadway that begins at Swanston Lane, south of Leavesley Road, and extends northward to Yamane Drive where it terminates. North of Leavesley Road, Forest Street provides direct access to the various industrial and commercial sites lining the street. Forest Street would provide direct access to the project site via two proposed full-access driveways.

- **Murray Avenue** is a two-lane north-south arterial roadway that begins at Chestnut Street, south of Leavesley Road, and extends northward to Las Animas Avenue where it currently terminates. North of Leavesley Road, Murray Avenue provides direct access to the various industrial and commercial sites lining the street, as well as local residential streets. Murray Avenue would provide direct access to the project site via one proposed full-access driveway.

Transit Services

Transit services in Gilroy consist of local, regional, and intercity bus services, rail service, and paratransit services. Existing transit service in Gilroy is provided primarily by Santa Clara County Valley Transportation Authority (VTA) buses. Caltrain commuter rail service, San Benito County express bus service, and Greyhound bus service also serve the City.

Existing bus stops located in the project vicinity include a VTA bus stops serving Route 85 located along Leavesley Road, between Forest Street and Murray Avenue, approximately 0.3-mile walking distance from the project site. In addition, two existing VTA bus stop serving Route 68 is located along Monterey Road, north and south of Leavesley Road/Welburn Avenue, approximately 0.5-mile walking distance from the project site.

Bicycle and Pedestrian Facilities

The nearest bike path to the project sites is the Western Ronan Channel Trail. This trail is a Class I Bikeway and is located on the western side of the Ronan Channel between Leavesley Road and Sixth Street. The nearest trailhead is located approximately 0.5-mile from the project site at the southwest corner of the U.S. 101 and Leavesley Road interchange. Class II Bikeways are located within the vicinity of the project site and are provided along the following roadways:

- Murray Avenue, between Las Animas Avenue and IOOF Avenue (including along the project site frontage)

- Leavesley Road, between Monterey Road and Arroyo Circle

- Monterey Road, between Farrell Avenue and First Street

- Church Street, between Farrell Avenue and Tenth Street
- Farrell Avenue, between Wren Avenue and Monterey Road
- Mantelli Drive, west of Church Street

In addition, Class III Bikeways in the vicinity of the project site are provided along Welburn Avenue, between Church Street and Wren Avenue.

Pedestrian facilities in the project area consist primarily of sidewalks along developed residential areas. Crosswalks and pedestrian push buttons are available along three or more legs of all signalized intersections in the vicinity of the project site. However, most undeveloped and industrial use parcels in northern Gilroy have missing sidewalks, including in the immediate project site vicinity and along the project site frontage.

Listed below are relevant goals and policies from the City of Gilroy General Plan that are applicable to the proposed project:

Goal M-1: Provide for a safe and efficient transportation system that serves all users.

- **Policy M-1.6: Street Safety and Accessibility.** Design streets and transportation facilities that are safe and accessible to people of all abilities, including those with limited mobility.
- **Policy M-1.7: Reduce Vehicle Miles Traveled.** Reduce vehicle miles traveled (VMT) and greenhouse gas emissions by developing a transportation network that makes it convenient to use transit, ride a bicycle, walk, or use other non-automobile modes of transportation.
- **Policy M-1.12: Transportation Demand Management.** Encourage existing and proposed development to incorporate TDM measures such as car-sharing, transit passes, and unbundling of parking (requiring separate purchase or lease of a parking space) where such measures will result in a reduction in vehicle miles travelled, reduction of required amount of parking or an increase in the use of alternate transportation modes.
- **Policy M-1.13: Transportation Funding.** Ensure new development fully funds the construction of transportation facilities required to meet the City's LOS policy and other required transportation mitigation, including roadways, trails, and transit stops.

Goal M-3: Support bicycling and walking by providing a safe and extensive bicycle and pedestrian network.

- **Policy M-3.1: Roadway Design.** Encourage the design of all future roads, bridges, and facilities to accommodate bicycle and pedestrian travel.
- **Policy M-3.2: New Development.** Require new development to include a system of sidewalks, trails, and bikeways that link all land uses, provide accessibility to parks and schools, and connect to all existing or planned external street and trail facilities in accordance with the Mobility Diagrams.

- **Policy M-3.3: Sidewalk Network Gaps.** Fill gaps in the city's existing sidewalk network as funds become available. New development in the vicinity of such gaps shall contribute to such projects when there is a nexus to do so, as a community benefit, or as an off-setting measure for a transportation impact, such as one identified in a transportation analysis or environmental review process.

- **Policy M-3.9: Bicycle Parking.** Require adequate short- and long-term bicycle parking for all land uses except for single-family residential uses.

Goal M-4: Plan for efficient and convenient local and regional transit systems that respond to the changing needs of Gilroy.

- **Policy M-4.2: Transit and Development.** Require new development to fully accommodate, enhance, and facilitate public transit, including pedestrian and bicycle access to transit.

Goal M-5: Provide a safe and efficient network of streets for cars and trucks, as well as provide vehicle parking to meet the city's needs.

- **Policy M-5.1: Standard Level of Service.** Maintain traffic conditions at LOS C or better at Gilroy intersections and roadways, allowing some commercial and industrial areas (e.g., downtown Gilroy, First Street corridor) to operate at LOS D or better. Existing LOS D areas within City include the Gilroy Premium outlets, Gilroy Crossings, and Regency Commercial areas. Exceptions to this standard will be allowed only where the City Council determines that the improvements needed to maintain the City' s standard level of service at specific locations are infeasible.

- **Policy M-5.3: Promote Non-Auto Modes of Transportation.** Consider offering incentives as part of a multimodal system approach, for projects that incorporate travel demand management techniques and promote transit ridership, biking, and walking in order to reduce air pollution, energy consumption, and greenhouse gas emissions.

- **Policy M-5.17: Transportation Fee Ordinance.** Require proposed new development to pay for on-site improvements to meet the needs of the development and its proportionate share of the costs for mitigating cumulative traffic impacts within the City of Gilroy. Use the Transportation Fee Ordinance to finance necessary off-site improvements equitably, including intersection and street improvements to maintain intersection levels of service, traffic safety improvements and improvements to reduce single occupant vehicle trips such as bicycle system enhancements, pedestrian improvements, and trip reduction measures.

- **Policy M-5.18: Traffic Studies.** Require site-specific traffic studies for proposed new development that may result in a cumulative intersection level of service exceeding the acceptable level established in Policy M 5.1, create safety hazards, or other substantial impacts on the circulation system.

- **Policy M-5.26: Pedestrian Facilities Adjacent to New Development.** Require proposed new development to provide new or repair existing pedestrian facilities along project street frontages, including sidewalks, wheelchair ramps. Require that utility poles, signs, street lights, and street

landscaping on sidewalks along project frontages be placed and maintained to permit wheelchair access and pedestrian use.

3.17.2 Discussion

Impact TRANS-1	Conflict with program, plan, ordinance or policy addressing the circulation system, including transit roadway, bicycle and pedestrian facilities?

The General Plan EIR found that the General Plan includes goals, policies, and programs that provide for an integrated transportation network. Additionally, the City has a traffic fee program that would provide funding for circulation system improvements and would allow for the City to address any circulation system impacts. Therefore, impacts related to potential conflicts with a program, plan, ordinance or policy addressing transit, bicycle or pedestrian facilities would be less than significant.

All construction materials and equipment would be stored onsite. Offsite staging, if necessary for construction of Phase III, would occur on the Applicant-owned parcel located immediately south of the project site. Construction activities would generally occur within the project site; however, work would extend into Forest Street and Murray Avenue to connect to existing utility lines and other necessary improvements. Any construction traffic, lane closures, or street staging would require an approved TCP and an encroachment permit from the City. Since construction traffic would be temporary and would be spread across the duration of the construction phases, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system.

Operation of the proposed project does not include any modifications to the existing roadway network, transit routes, or bicycle network as identified in the General Plan. A Transportation Analysis Report was prepared for the proposed project by Hexagon Transportation Consultants, Inc. on February 21, 2025 (Appendix F), which recommended improvements at the Forest Street and Leavesley Road intersection and Murray Avenue and Leavesley Road intersection to address potential queuing deficiencies that could occur as a result of the proposed project. A Queueing Evaluation was prepared by Hexagon on October 3, 2024 to further investigate the potential queueing deficiencies that could occur as a result of the proposed project (Appendix G).

The February 2025 Transportation Analysis Report identified that with the addition of the proposed project traffic, the existing queue storage capacity for the southbound left-turn movement at the intersection of Murray Avenue and Leavesley would be deficient by approximately 25 feet (one vehicle). This deficiency could be improved by extending the existing southbound left-turn lanes an additional 25 feet each. Additionally, the February 2025 Transportation Analysis Report evaluated queueing storage capacity at the westbound through- and right-turn movement at Murray Avenue and Leavesley Road, eastbound left-turn movement at Forest Street and Leavesley Road, and the westbound left-turn movement at Swanston and Leavesley Road. The February 2025 Transportation Analysis Report concluded that the intersections would continue to have adequate queuing storage capacity with the addition of the proposed project traffic.

The City's General Plan Policy M-5.17: Transportation Fee Ordinance requires new development to pay for onsite improvements to meet the needs of the development and requires that new developments pay their proportionate share of the cost of mitigating offsite traffic impacts through the Transportation Fee Ordinance. As these intersections where the queuing deficiencies would occur are located offsite, the

proposed project would be required to pay its proportionate share of the costs for mitigating the cumulative traffic impacts. The proportionate share paid by the project applicants under the Transportation Fee Ordinance would help to finance the necessary offsite improvements that would be required as a result of the proposed project in combination with other new developments in the area. As the proposed project would pay for its proportionate share of required offsite improvements, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system.

Internal circulation within the project site would be designed in conformance with the City's design standards. The proposed project would construct three new driveways throughout the project site to provide access. Two driveways would be constructed along Forest Street and one driveway would be constructed along Murray Avenue. New driveway approaches along Forest Street would be constructed to be 40 feet wide and the driveway approach along Murray Avenue would be constructed to be 35 feet wide, with onsite drive aisles constructed to be at least 26 feet wide to allow for truck and emergency vehicle access throughout the project site. Additionally, the proposed project would construct a secondary EVA access to the existing northern property during Phase I that would serve the project site during Phase I and Phase II buildout. Two-way interior drive aisles would be constructed throughout the project site to allow access to all buildings, parking areas, and loading docks at buildout of the proposed project. Additionally, the proposed project would construct sidewalks along the project frontages and throughout the project site to provide pedestrian access. The proposed project would also provide bicycle parking spaces onsite as required by General Plan Policy M-3.9: Bicycle Parking.

As such, the proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities, the impact would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact TRANS-2	**Conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision(b)?**

The General Plan EIR determined that VMT generated under buildout of the General Plan would exceed the applicable thresholds and result in a significant impact. The General Plan EIR identified that implementation of General Plan goals, policies, and programs would reduce potential impacts slightly, but not to the extent where it would reduce the potentially significant impact to a less than significant level. Therefore, the General Plan EIR identified Mitigation Measure TRANS-1 which required the City to review and update Gilroy's 1999 Transportation Demand Management program to be consistent with the Gilroy 2040 General Plan and Valley Transportation Authority Congestion Management Plan. The General Plan EIR determined that implementation of the identified mitigation measure in addition to implementation of Gilroy 2040 General Plan goals, policies and programs would reduce VMT; however, there would be no guarantee that these measures would reduce the significant impact to a less than significant level. Therefore, the General Plan EIR determined that the impact of VMT resulting from implementation of the Gilroy 2040 General Plan would be significant and unavoidable.

The February 2025 Transportation Analysis Report prepared for the proposed project included an analysis of potential VMT impacts that could result from development of the proposed project (Appendix F). As identified in the report, for the purposes of the analysis and for consistency with the City's General

Plan, the VMT analysis considered OPR's recommended impact threshold of 15 percent below the existing citywide average VMT per job, which equates to 15.97 VMT per job. The results of the VMT analysis using the VTA's VMT Evaluation Tool indicates that the existing average daily VMT for employment uses in the vicinity of the project site is 16.97 VMT per job, which is less than the existing citywide average of 18.79 VMT per job (Hexagon 2024).

The report identified that the proposed project is projected to generate average daily per-job VMT of 16.92, which although is lower than the citywide average VMT per job, would exceed the identified impact threshold of 15.97 VMT per job. Therefore, the proposed project could result in an impact on the transportation system based on OPR's 15 percent below existing average VMT impact threshold if the proposed project did not include any reduction programs. However, as indicated in Section 2.3.11 Construction and Operational Environmental Commitments of this Section 15183 Consistency Evaluation, the proposed project includes two TDM strategies to be implemented as components of the proposed project. The project applicant is proposing to implement a TDM program that will include telecommuting and alternative work schedule (TP08) and a ride-sharing program (TP13). Implementation of these two TDM measures with a minimum 10 percent participation rate each would reduce the proposed project's VMT to 15.75 which would be below the identified impact threshold of 15.97 VMT per job (Hexagon 2024). Therefore, as the project applicant has committed to implementing these two TDM measures, the proposed project's projected VMT would be below the identified impact threshold and the proposed project would result in a less than significant impact related to VMT. As such, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision(b) and the proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for requiring further CEQA review are not met.

Impact TRANS-3	**Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

The General Plan EIR did not analyze potential impacts related to potential increase in hazards due to geometric design features or incompatible uses as impacts from incompatible uses are analyzed on a project by project basis. As proposed, the project driveways would satisfy the 35 foot minimum width requirement for commercial driveways and would not result in hazards due to the design of the proposed driveways. Additionally, all drive aisles within the project site would meet the requirements for emergency vehicle access and circulation. The site distance for all project site driveways would be beyond the 250 feet minimum distance requirement for Forest Street and 360 feet minimum distance requirement for Murray Avenue. All drive aisles within the project site and any driveways and sidewalk improvements constructed for the proposed project would be designed and constructed in accordance with the City's design standards. Additionally, there would be no incompatible uses introduced to the project area which could cause vehicle conflicts (e.g., farm equipment). Therefore, the proposed project would not substantially increase hazard due to geometric design feature or incompatible uses and no impact would occur. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for requiring further CEQA review are not met.

Impact TRANS-4 Result in inadequate emergency access?

As identified in the City's General Plan EIR, the City's Municipal Code Chapter 10, Article 10 (19 – 28) identifies regulations for providing emergency access and for review of projects for adequacy regarding emergency access (City of Gilroy 2020b). The proposed project would be required to comply with and implement the existing City regulations related to emergency access. In regard to site emergency access, the proposed project driveways would be designed to comply with turning radius requirements for emergency vehicles. The proposed project would construct three new driveways throughout the project site to provide access. Two driveways would be constructed along Forest Street and one driveway would be constructed along Murray Avenue. All new driveway approaches would be constructed to be at least 35 feet wide with onsite drive aisles constructed to be at least 26 feet wide to allow for truck and emergency vehicle access throughout the project site. Additionally, the proposed project would construct an additional internal driveway from the project site to the existing northern property that would provide secondary EVA access during Phase I and Phase II buildout. Two-way interior drive aisles would be constructed throughout the project site to allow access to all buildings, parking areas, and loading docks at buildout of the proposed project. Additionally, the proposed project's site design would be reviewed by the City to ensure that the proposed emergency access provided onsite would be adequate to meet the City standards and regulations. Therefore, impacts to emergency access would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for requiring further CEQA review are not met.

3.17.3 Conclusion

With regards to the issue area of transportation, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.18 TRIBAL CULTURAL RESOURCES

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined by Public Resources Code section 21047 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:			
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒

3.18.1 Environmental Setting

Native American cultural resources are not limited to physical archaeological resources with scientific significance, but could also include cultural landscapes, tribal cultural resources, and non-unique archaeological resources. As discussed in the General Plan EIR, the Gilroy area was part of the ancestral territory of Native Americans, and there is the potential for unrecorded tribal cultural resources to be present in the area.

On October 30, 2023, Stantec submitted a request on behalf of the City to the Native American Heritage Commission (NAHC) to review its Sacred Land Files (SLF) for the project site and surrounding area. The NAHC is the official state repository of Native American sacred site records in California. Stantec received a response on November 16, 2023 from the NAHC stating “A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information submitted for the above referenced project. The results were positive.” A list of fifteen tribal contacts was provided with the response.

On December 18, 2023 letters were sent and on January 8, 2024, follow up phone call were made to each of the fifteen contacts on the list provided by the NAHC informing them of the proposed project and invited the contacts “to meet with you to discuss the project in more detail, and specifically about any

tribal or cultural resource concerns" were sent to the representatives from the following eight tribal groups.

- Amah MutsunTribal Band
- Amah MutsunTribal Band of Mission San Juan Bautista
- Indian Canyon Mutsun Band of Costanoan
- Muwekma Ohlone Indian Tribe of the SF Bay Area
- North Valley Yokuts Tribe
- Tamien Nation
- The Ohlone Indian Tribe
- Wuksachi Indian Tribe/Eshom Valley Band

A response was received from two of the above tribal groups. On December 30, 2023, the Amah Mutsun Tribal Band requested that a monitor be present onsite during construction activities. On February 28, 2024 the Ohlone tribe requested the NAHC SLF search results, the NWIC results, and a copy of the technical report.

Listed below are relevant goals and policies from the City of Gilroy General Plan that are applicable to the proposed project:

Goal NCR-5: Preserve significant historic buildings, sites, and resources to enrich the sense of place and appreciation of the city's history.

- **Policy NCR-5.2: Historic and Prehistoric Archaeological Resources and CEQA.** Discretionary projects subject to the California Environmental Quality Act (CEQA) which include disturbance of the existing ground surface of the project site will require an archaeological survey and records search if the project site is located in a moderate to high archaeological sensitivity zone as identified on Figure 3.5-1 of the General Plan EIR, or if other evidence suggests the project site to be archaeologically sensitive.
- **Policy NCR-5.3: Archaeological Resources Protection.** Ensure that all projects involving ground-disturbing activities include procedures to protect archaeological resources if discovered during excavation. Projects shall follow CEQA and other applicable State laws.

In addition, California Health and Safety Code Section 7050.5 states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification.

3.18.2 Discussion

Impact TRIB-1	**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 California Native American tribe, and that is:** **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or** **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Archaeological deposits that qualify as tribal cultural resources could be encountered during proposed project excavation. Such resources would be eligible for listing in the CRHR or a local register of historical resources, or the lead agency, in its discretion and supported by substantial evidence, could determine the resources to be significant pursuant to the criteria set forth in subdivision (c) of PRC Section 5024.1. Should deposits be encountered during project excavation, this could result in an adverse change to a tribal cultural resource. Thus, significant impacts related to tribal cultural resources could result from construction of the proposed project.

General Plan Policy NCR-5.3: Archaeological Resources Protection provides for reducing or avoiding impacts related to archaeological resources encountered during project construction or grading activities which the proposed project would need to comply with. Compliance with existing General Plan policies related to protection of archaeological resource would also protect tribal cultural resources and would reduce potential impacts. Therefore, the proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR.

3.18.3 Conclusion

With regards to the issue area of tribal cultural resources, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.19 UTILITIES AND SERVICE SYSTEMS

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) 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?	☐	☐	☒
2) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒
3) 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?	☐	☐	☒
4) 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?	☐	☐	☒
5) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒

3.19.1 Environmental Setting

Water Supply

The City provides potable water service to the City within the City service area. Local groundwater is the sole source of water supply for the City and the City does not purchase or import water from any other water suppliers or entities. The municipal water system extracts groundwater from underground aquifers within the Llagas Subbasin. The City's water system facilities include 10 water storage reservoirs with a combined total capacity of approximately 14 million gallons, six active booster stations, and over 134 miles of pressurized pipes. The wells have a total pumping capacity of approximately 18 million gallons per day.

According to the City's 2020 Urban Water Management Plan (UWMP), in 2020, the volume of water supplied to the City was 8,271 acre-feet (AF), with an average daily demand of 6.7 mgd (City of Gilroy 2021). The City's 2020 UWMP includes projected potable water demand through the UWMP planning horizon of 2024. The City's 2020 urban water use target of 133 gallons per capita per day (gpcd) was applied to the projected population, with projected demands also accounting for future water use reduction of up to five percent due to active water savings. The UWMP determined that the annual

projected water demand for the year 2045 would be 11,645 AF of potable water and 2,572 AF of recycled water, for a total demand of 14,217 AF. The UWMP's total projected water supply available in the year 2045 include 22,000 AF of groundwater and 2,464 AF of recycled water, with a total projected supply of 24,464 AF. Therefore, the 2020 UWMP determined the City's water supply would be adequate to offset future water demands projected for buildout of the General Plan (City of Gilroy 2021).

Wastewater Collection/Treatment

The City provides sewer collection services to the City and the system includes approximately 110 miles of pipelines. Collected sewer flows are generally conveyed south and to the east to the South County Regional Wastewater Treatment Plant, which is owned and operated by the South County Regional Wastewater Authority (SCRWA). SCRWA is a joint powers authority established to manage the treatment of wastewater from the cities of Gilroy and Morgan Hill (City of Gilroy 2020b).

The SCRWA joint powers cost distribution agreement designates 41.9 percent of the influent flow capacity to Morgan Hill and the remaining 58.1 percent to Gilroy, which corresponds to a Gilroy average dry weather flow of approximately 4.9 mgd. The wastewater treatment plant consists of secondary and tertiary treatment systems. The secondary facilities have an average dry weather flow of 8.5 mgd. The tertiary treatment system has a capacity of 9.0 mgd and provides recycled water to area users. SCRWA will provide future treatment capacity to support growth as planned in the Morgan Hill and Gilroy General Plans.

Stormwater Management

The City provides storm water collection and drainage services the City and includes approximately 96 miles of pipelines and one retention basin located at Las Animas Park. Additionally, the City maintains over 150 outfalls to local channels and creeks. The City's storm drainage system, including on public roadways within the Urban Growth Boundary, consists of a combination of curb and gutter facilities, curb inlets, and underground pipelines draining to the nearest creek or to a manmade channel (City of Gilroy 2020b).

Solid Waste

The City contracts with Recology South Valley (Recology) for collection of solid waste and recyclables throughout the City. Solid waste from the City is dropped at the San Martin Transfer Station. Recyclables such as paper, cardboard, cans, bottles, and metal are sent to a Material Recovery Facility, where they are sorted, baled, and sold to be recycled and made into new products. Recycling diverts much of City's solid waste from landfills to other uses. Clean yard waste is transported to South Valley Organics, a compost facility located at Pacheco Pass Landfill, which processes the waste into compost. Solid waste generated by the City is taken to the John Smith Road Landfill, a county-owned facility located approximately five miles southeast of the City of Hollister on John Smith Road (City of Gilroy 2020b).

According to the California Department of Resources Recycling and Recovery (CalRecycle), as of 2022, the City's employment-based disposal rate was 22.7 pounds per person per day (CalRecycle 2024a). According to CalRecycle, the maximum permitted throughput at John Smith Road Landfill is 1,000 tons per day. The total capacity of the landfill is 9.8 million cubic yards. As of 2021, it was projected that the landfill would reach capacity in 2025 (CalRecycle 2024b). The City and County has established waste

reduction programs and policies to reduce the volume of solid waste entering landfills (City of Gilroy 2020b).

Listed below are relevant goals and policies from the City of Gilroy General Plan that are applicable to the proposed project:

Goal PFS-1: Provide the highest level of public facilities and services feasible, consistent with the City's fiscal resources, to meet the needs of current and future residents and businesses.

- **Policy PFS-1.11: Development Impact Fees.** Require applicants for new development to pay Development Impact Fees for traffic circulation, water, wastewater, storm water and public facilities to offset the costs of expanding these as detailed by the impact fee nexus study.

Goal PFS-3: Maintain the City's water system to meet the needs of the existing and future development while improving water system efficiency.

- **Policy PFS-3.6: Water Infrastructure.** Ensure that water infrastructure is in place or required in conditions of approval prior to approving new development.

Goal PFS-5: Maintain an effective storm drainage system to accommodate runoff, prevent property damage due to flooding, and improve environmental quality.

- **Policy PFS-5.3: Green Infrastructure.** Require on-site stormwater management system (i.e. "green infrastructure") design and Low Impact Development (LID) techniques per the City's adopted stormwater requirements to preserve and create open space, improve runoff water quality, and decrease runoff volume.

- **Policy PFS-5.4: Stormwater Inspection.** Require new development to be responsible for the funding of a postconstruction inspection of stormwater facilities.

Goal PFS-6: Reduce the amount of waste entering regional landfills through an effective waste management program.

- **Policy PFS-6.1: Mandatory Collection.** Continue to require weekly solid wase collection throughout the city.

- **Policy PFS-6.3: Solid Waste Diversion.** Comply with State goals regarding reduction of solid waste disposal, including calculated disposal rate standards.

- **Policy PFS-6.9: Construction and Demolition Waste Recycling.** Continue to require demolition, remodeling, and major new development projects to salvage or recycle asphalt and concrete and all other nonhazardous construction and demolition materials to the maximum extent practicable.

Goal PFS-8: Provide for the current and future energy and telecommunications needs of Gilroy.

- **Policy PFS-8.4: Energy Conservation.** Reduce energy consumption by encouraging the use of green building technologies, supporting the use of alternative energy sources, and disseminating public information regarding energy conservation techniques.

- **Policy PFS-8.5: Undergrounding.** Require the undergrounding of utilities in areas of the City undergoing redevelopment or significant construction. Continue to require the undergrounding of utilities in areas of new development.

- **Policy PFS-5.10: Outdoor Lighting and Energy Efficiency.** Select outdoor lamps and light fixtures that maximize energy efficiency, provide effective lighting, and are compatible with the neighborhood context.

- **Policy PFS-8.11: Light Pollution and Glare.** Require that light sources and fixtures be selected, designed, and located to minimize light pollution and glare.

Goal NCR-4: Maintain overall water quality by protecting surface and groundwater sources, restoring creeks and rivers to their natural state, and conserving water resources.

- **Policy NCR-4.5: Water Conservation and Reclamation.** Require water conservation measures and maximize the use of recycled water to reduce the overall demand on water resources. Ensure that recycled wastewater is treated in accordance with State and Federal standards.

- **Policy NCR-4.8: Low Impact Development.** Require new development to protect the quality of water resources and natural drainage systems through site design, source controls, runoff reduction measures, best management practices (BMPs), and Low Impact Development (LID).

- **Policy NCR-4.9: Native and Drought-Tolerant Landscaping.** Use native or drought-tolerant vegetation and water-efficient irrigation systems in the landscaping of all new public facilities, except in active recreation areas. Encourage the use of similar landscaping and irrigation in private development.

Goal PH-3: Protect life and minimize property damage from potential flood hazards.

- **Policy PH-3.6: Permeable Surfaces for Runoff Reduction and Absorption.** Require new development to include landscaped areas for reducing runoff and increasing runoff absorption capacities and encourage the use of permeable paving materials.

3.19.2 Discussion

Impact UTIL-1	**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?**

Water

The City's General Plan EIR determined that buildout of the General Plan would not require new or expanded water facilities beyond those identified in the City's 2004 Water System Master Plan and there would be no impacts.

The proposed project would connect to the existing 12-inch water main located on Forest Street and the existing 12-inch water main located on Murray Avenue. Buildings 1 and 2 would connect to the existing

water main located on Forest Street via a new water lateral and back flow preventor. Building 3 would connect to the existing water main located on Murray Avenue via a new water lateral and back flow preventor. Additionally, the proposed project would install a new 8-inch water line to come off of the existing 12-inch water mains on Forest Street and Murray Avenue. The new 8-inch water line would connect to a back flow preventor which would then connect to a new 8-inch fire water loop that would serve the project site. All water distribution improvements would be designed and constructed in accordance with City requirements and standards.

Additionally, the proposed project would comply with General Plan Policy PFS-1.11: Development Impact Fees, which requires applicants for new development to pay Development Impact Fees for traffic circulation, water, wastewater, storm water and public facilities to offset the costs of expanding these. With the construction of water system improvements and payment of required fees, impacts to water treatment facilities would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Wastewater

The General Plan EIR identified that the 2004 Sewer Master Plan projected the need for 7.3 mgd of treatment capacity for a population of about 76,000. The projected 2040 population of City is 75,684 and the City's share of the current treatment plant capacity is 4.9 mgd. Future planned expansion would increase this to 6.39 mgd. Therefore, future development consistent with the General Plan land use designations could result in an increase in the demand for wastewater services that exceeds the capacity of the existing and planned sanitary sewer system and treatment plant, and result in the need for new infrastructure, the construction of which could result in significant environmental impacts. However, the General Plan EIR identified that it can be expected that construction and operation of new sanitary sewer and wastewater treatment facilities would have similar impacts as would construction and operation of other types of new development within Gilroy. Consequently, General Plan policies and mitigation measures referenced in other sections of this document that serve to avoid or reduce potential impacts from new development would also avoid or reduce impacts of expanded or new sewer system and wastewater treatment facilities. Therefore, impacts would be less than significant, and no additional mitigation is required. The City's General Plan EIR determined that implementation of the General Plan would require new or expanded wastewater facilities, but not beyond those identified in the City's Sewer System Master Plan and therefore, impacts associated with the provision of wastewater service would be less than significant and no mitigation would be required.

The proposed project would construct a new 8-inch sanitary sewer line throughout the project site that would connect to individual buildings via a new sanitary sewer lateral. The proposed 8-inch sanitary sewer lines would connect to an existing 12-inch sanitary sewer main located on Forest Street. All proposed improvements would be designed and constructed in accordance with City standards and requirements. The City of Gilroy Sewer System Master Plan includes recommended water unit factors for calculating wastewater generation based on proposed land use classifications. For industrial land use classifications, the recommended wastewater generation factor is 780 gpd per net acre. With a project site of 7.29 acres, the proposed project would be anticipated to result in a wastewater generation of approximately 5,700 gpd at full buildout. However, it is anticipated that the proposed uses similar to the existing Applicant's facility would generate less wastewater than typical industrial uses.

The SCRWA joint powers cost distribution agreement designates 41.9 percent of the influent flow capacity to Morgan Hill and the remaining 58.1 percent to Gilroy, which corresponds to a Gilroy average dry weather flow of approximately 4.9 mgd. The City's 2020 UWMP identified that the City generated 4,998 AF of wastewater in 2020 (City of Gilroy 2021). This translates to approximately 4.5 mgd. The proposed project is anticipated to generate approximately 5,700 gpd, which would represent a 0.1 percent increase in the City's annual wastewater generation and the City's wastewater generation would remain below the City's allocated capacity of 4.9 mgd. Additionally, as stated previously, it is anticipated that the proposed uses similar to the existing Applicant's facility would generate less wastewater than typical industrial uses. Therefore, SCRWA has sufficient capacity to handle the volume of wastewater generated by the proposed project. Additionally, the proposed project would comply with General Plan Policy PFS-1.11: Development Impact Fees, which requires applicants for new development to pay Development Impact Fees for traffic circulation, water, wastewater, storm water and public facilities to offset the costs of expanding these. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities and impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Stormwater

The City's General Plan EIR determined that implementation of General Plan goals and policies in addition to project-specific compliance with the City's Storm Water Master Plan and Stormwater Management Guidance Manual would ensure the existing and future municipal and down-stream stormwater facilities have sufficient capacity to serve the City's stormwater runoff and impacts would be less than significant.

The proposed project would comply with Municipal Code Chapter 27D and would incorporate post-construction BMPs to control and reduce the volume of stormwater runoff and would prepare a storm water control plan which would detail how runoff would be controlled and managed by the proposed project's post-construction BMPs. Additionally, the proposed project would comply with General Plan Policy PFS-5.3: Green Infrastructure, which require onsite stormwater management system design and LID techniques per the City's adopted stormwater requirements to preserve and create open space, improve runoff water quality, and decrease runoff volume. The proposed project would construct an underground stormwater treatment facility to treat, retain, and/or detain stormwater runoff from the project site prior to it being discharged into the City's storm drainage system. After stormwater runoff generated at the project site is treated in the proposed underground stormwater facility, the treated runoff would be conveyed to the existing 30-inch storm drain main located on Forest Street. Additionally, the proposed project would include the extension of the existing 27-inch storm drain main located along Murray Avenue. The proposed project would extend the existing storm drain main from its current stubbed location on Murray Avenue to the project site frontage. The proposed project would extend the storm drain main and would construct a new 18-inch storm drain line on Murray Avenue. Two existing storm drain inlets located on the northeast and southeast corner of the project site along Murray Avenue would connect to the extended Murray Avenue storm drain main via a new 15-inch storm drain line. Additionally, the offsite public sidewalk along Murray Avenue would direct runoff into the proposed landscape strip.

The proposed storm drainage improvements would be designed and constructed in accordance with City requirements and standards. the proposed project would comply with General Plan Policy PFS-1.11:

Development Impact Fees, which requires applicants for new development to pay Development Impact Fees for traffic circulation, water, wastewater, storm water and public facilities to offset the costs of expanding these. Payment of this fee would offset the costs of the project's demand on City stormwater drainage facilities. Therefore, impacts to stormwater facilities would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Electricity and Natural Gas

The proposed project would tie into existing electrical and telecommunication facilities that serve the surrounding area. The proposed project would not require the use of natural gas during operation. The proposed project would not require the construction or relocation of electric power, natural gas, or telecommunications facilities. As the proposed project would not require or result in the relocation or construction of new or expanded electrical power, natural gas, or telecommunications facilities or require the expansion of existing facilities, the impact would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact UTIL-2	**Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

The City's General Plan EIR determined the City has sufficient water supply available to meet the average daily potable water demand without requiring additional water supply and the impact would be less than significant.

As identified under Section 3.19.1 Environmental Setting, the City's 2020 UWMP determined that the annual projected water demand for the year 2045 would be 11,645 AF of potable water and 2,572 AF of recycled water, for a total demand of 14,217 AF. The UWMP's total projected water supply available in the year 2045 include 22,000 AF of groundwater and 2,464 AF of recycled water, with a total projected supply of 24,464 AF. Additionally, the UWMP determined that during normal, dry, and multiple dry years, there would be a surplus of supply available compared to the projected demand and therefore, there would be sufficient water supplies available to serve the City's projected demands during normal, dry, and multiple dry years.

The City of Gilroy Water System Master Plan includes recommended water unit factors for calculating water demand based on proposed land use classifications. For industrial land use classifications, the recommended water demand factor is 990 gpd per net acre. With a project site of 7.29 acres, the proposed project would be anticipated to result in a water demand of approximately 7,200 gpd at full buildout. However, it is anticipated that the proposed uses similar to the existing Applicant's facility would generate less demand than typical industrial uses. Additionally, as the proposed project is anticipated to be constructed in phases taking place over the span of 11 years, water demand at the project site would increase incrementally as the proposed project is built out.

The proposed project would result in a potable water demand of 8.1 AF per year. This would represent less than 0.07 percent of the City's total projected potable water demand for 2045 and 0.04 percent of the projected available potable water supply for 2045. Therefore, adequate water supplies would be provided to meet the proposed project's estimated demand and impacts would be less than significant. The

proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact UTIL-3	**Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

The proposed project would construct a new 8-inch sanitary sewer line throughout the project site that would connect to individual buildings via a new sanitary sewer lateral. The proposed 8-inch sanitary sewer lines would connect to an existing 12-inch sanitary sewer main located on Forest Street. All proposed improvements would be designed and constructed in accordance with City standards and requirements.

The SCRWA joint powers cost distribution agreement designates 41.9 percent of the influent flow capacity to Morgan Hill and the remaining 58.1 percent to Gilroy, which corresponds to a Gilroy average dry weather flow of approximately 4.9 mgd. The City's 2020 UWMP identified that the City generated 4,998 AF of wastewater in 2020 (City of Gilroy 2021). This translates to approximately 4.5 mgd. Full buildout of proposed project is anticipated to generate approximately 5,700 gpd, which would represent a 0.1 percent increase in the City's annual wastewater generation and the City's wastewater generation would remain below the City's allocated capacity of 4.9 mgd. Therefore, SCRWA has sufficient capacity to handle the volume of wastewater generated by the proposed project.

Additionally, as stated previously, it is anticipated that the proposed uses similar to the existing Applicant's facility would generate less wastewater than typical industrial uses. As the proposed project is anticipated to be constructed in phases taking place over the span of 11 years, wastewater generated at the project site would increase incrementally as the proposed project is built out.

The proposed project would comply with General Plan Policy PFS-1.11: Development Impact Fees, which requires applicants for new development to pay Development Impact Fees for traffic circulation, water, wastewater, storm water and public facilities to offset the costs of expanding these. Compliance with General Plan policies and City requirements would ensure sufficient capacity is available to serve the projected demand in addition to the existing demand. Therefore, impacts to wastewater treatment facilities would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR and the criteria for requiring further CEQA review are not met.

Impact UTIL-4	**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?**

The City's General Plan EIR determined implementation of General Plan goals and policies along with implementation of federal, state, and local mandates for solid waste source reduction, recycling, and diversion would reduce potential impacts related to increase in demand for solid waste disposal facilities to a less than significant level.

Buildout of the proposed project is anticipated to generate approximately 95 to 190 total employees. Based on CalRecycle's employment-based disposal rate of 22.7 pounds per person per day and the

maximum anticipated 190 employees, buildout of the proposed project would generate up to 4,313 pounds of waste per day or 2.2 tons per day. As identified under Section 3.19.1 Environmental Setting, the maximum daily permitted throughput at John Smith Road Landfill is 1,000 tons per day. The proposed project's maximum daily waste generation of 2.2 tons per day would represent approximately 0.2 percent of the landfill's maximum daily capacity. As the proposed project is anticipated to be constructed in phases taking place over the span of 11 years, solid waste generated at the project site would increase incrementally as the proposed project is built out. Additionally, the proposed project would also include recycling and green waste services as required by federal, state, and local objectives to reduce solid waste. The proposed project would comply with the City's waste reduction programs and policies to reduce the volume of solid waste generated. Therefore, the proposed project would not generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure and impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact UTIL-5	**Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

The City's General Plan EIR identified that the General Plan includes goals, policies, and program that comply with federal, state, and local mandates for solid waste source reduction, recycling, and diversion and therefore, implementation of developments under the General Plan would comply with federal, state, and local regulations related to solid waste.

Construction and operation of the proposed project would be required to comply with all statues and regulations related to solid waste. Any waste produced as a result of construction activities would be required to comply with General Plan Policy PFS-6.9: Construction and Demolition Waste Recycling and City Municipal Code Chapter 12.66 which requires recycling of nonhazardous construction materials to the maximum extent practicable. Additionally, operation of the proposed project would be required to comply with all solid waste and recycling requirements and regulations regarding waste produced from industrial uses. As the proposed project would be constructed and operated in accordance with federal, state, and local management and reduction statues and regulations related to solid waste, impacts related to solid waste would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.19.3 Conclusion

With regards to the issue area of utilities and service systems, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.

4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.20 WILDFIRE

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:			
1) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒
2) 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?	☐	☐	☒
3) 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?	☐	☐	☒
4) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒

3.20.1 Environmental Setting

The City's General Plan EIR identified that Fire Hazard Severity Zones in the City are confined to the hilly areas in the south and western portion of the area within the Urban Growth Boundary and the foothills outside of and west of the City's Planning Area/SOI, with only a very small overlap with City boundaries (City of Gilroy 2020b).

Based on review of California Department of Forestry and Fire Protection's (CAL FIRE's) Fire Hazard Severity Map Viewer, the project site is not located within an SRA or a VHFHSZ (CAL FIRE 2023). The City's General Plan EIR identifies the project site within the City's Local Responsibility Areas (LRA) classified as "Urban Unzoned" (City of Gilroy 2020b). Additionally, based on review of the United States Forest Service (USFS) Wildfire Hazard Potential Map, the project site is classified as having a low wildland fire risk (USFS 2024).

Listed below are relevant goals and policies from the City of Gilroy General Plan that are applicable to the proposed project:

Goal PFS-10: Provide for public health and safety by offering high quality fire and emergency-response services.

- **Policy PFS-10.3: Development Review.** Under the direction and authority of the Fire Chief, the Fire Marshall shall review of development proposals to ensure that projects adequately address fire access and building standards.
- **Policy PFS-10.5: New Development.** Continue to require that new development provides all necessary water service, fire hydrants, and roads consistent with Fire Department standards.
- **Policy PFS-10.6: Sprinklers.** Continue to require installation of sprinklers in all new buildings in accordance with the California Fire Code.
- **Policy PFS-10.8: Fire Access Design and Building Materials.** Require all new development to include use of fire-resistant landscaping and building materials and adequate access for fire equipment.

Goal PH-4: Protect life and minimize potential property damage from wildfires in the wildland/urban interface area and hazardous fire areas.

- **Policy PH-4.2: Development Review.** Provide plan checks for new construction, remodels, tenant improvements, and demolitions to ensure compliance with applicable life safety and fire protection system requirements, including special requirements for fire safety in areas with wildfire risk.

3.20.2 Discussion

Impact WF-1	**Substantially impair an adopted emergency response plan or emergency evacuation plan?**

The City's General Plan EIR identified that implementation of the City's General Plan and resulting buildout would result in no impact to the implementation of an adopted emergency plan or evacuation plan.

The City's General Plan EIR identifies that the Santa Clara County Operation Area Emergency Operations Plan is the adopted emergency plan for the City. The adopted emergency plan does not contain an evacuation map that outlines the routes or locations of emergency facility for the City. However, the Bay Area's Regional Catastrophic Earthquake Mass Transportation/Evacuation Plan contains regional evacuation maps for 12 counties, including Santa Clara County. U.S. 101 and SR 152 are identified as the priority transportation routes for the City in the event of an emergency evacuation. The proposed project is not located directly adjacent to either highway and would not result in changes to the existing roadway in a manner that would impair emergency evacuation. Any construction traffic, lane closures, or street staging would require a TCP and an encroachment permit from the City. The TCP would identify appropriate traffic controls and ensure adequate circulation and emergency access are provided during the construction phase.

The proposed project would construct three new driveways throughout the project site to provide access. In addition to the three formal driveways, an additional secondary EVA access to the existing northern

property would be provided. In accordance with General Plan Policy PFS-10.8: Fire Access Design and Building Materials, the proposed project would provide adequate access for fire equipment as all new driveways would be constructed to be at least 35 feet wide with internal drive aisles constructed to be at least 26 feet wide to allow for truck and emergency vehicle access throughout the project site.

The proposed project would not impair an emergency response plan or emergency evacuation plan and the impact would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact WF-2	**Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

The City's General Plan EIR concluded that implementation of General Plan policies and existing development requirements would reduce potential significant impacts related to wildland fires and impacts related to wildfire were determined to be less than significant.

The project site is located in an urbanized area of the City and is not located within the City's western or southern portion of the Urban Growth Boundary that contain hilly terrain. The project site and the surrounding area are relatively flat and in an urbanized area. The project site is not in an SRA and does not contain lands classified within a VHFHSZ (CAL FIRE 2023). Furthermore, the risk of wildfire in this portion of the City is classified as low to non-burnable (USFS 2024). As such, development of the proposed project would not exacerbate wildfire risks or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, and the impact would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the City's General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact WF-3	**Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

The project site is not in an SRA or a VHFHSZ (CAL FIRE 2023). The project site is in an urbanized area and is surrounded by existing developments including buildings, roadways, and associated infrastructure. The proposed project would develop three light industrial buildings with associated parking, landscaping, and onsite/offsite utility improvements. The proposed project would comply with General Plan Policy PFS-10.5: New Development, which requires that new development provides all necessary water service, fire hydrants, and roads consistent with Fire Department standards. Additionally, the proposed project would comply with General Plan Policy PFS-10.6: Sprinklers, which require installation of sprinklers in all new buildings in accordance with the California Fire Code, and General Plan Policy PFS-10.8: Fire Access Design and Building Materials which require all new development to include use of fire-resistant landscaping and building materials and adequate access for fire equipment.

Construction of the proposed project would be required to comply with all applicable building and safety codes, including the CBC and California Fire Code, and all applicable fire safety standards set forth by the City to protect the proposed structures from possible wildfires. Therefore, the proposed project would

not require the installation or maintenance of associated infrastructure that would exacerbate fire risk or that may result in temporary or ongoing impacts to the environment, and the impact would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the City's General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact WF-4	**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?**

The project site is not in an SRA or a VHFHSZ (CAL FIRE 2023). The project site and surrounding area are relatively flat and not in an area subject to landslides or flooding. As such, the proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes, and the impact would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the City's General Plan EIR. The criteria for requiring further CEQA review are not met.

3.20.3 Conclusion

With regards to the issue area of wildfire, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR. Project-specific impacts would be less than significant.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

Would the Project:	Significant Impact Peculiar to the Project or Project Site	Significant Impact due to New Information	Impact Consistent with General Plan EIR
1) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒
2) Does the project have impacts that are individually limited, but cumulative considerable? ("Cumulative considerable" means that the incremental impacts of a project are considerable when viewed in connection with the impacts of past projects, the impacts of other current projects, and the effects of probable future projects)?	☐	☐	☒
3) Does the project have environmental impacts which will cause substantial adverse impacts on human beings, either directly or indirectly?	☐	☐	☒

Impact MFS-1	**Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

The proposed project would have a less than significant impact related to biological resources. The proposed project's potential to impact biological resources would be less than significant with implementation of General Plan Policies NCR-1.1: Habitat Plan Compliance, NCR-1.7: Special Status Species, and NCR-1.8: Native Nesting Bird Protection and environmental commitments identified in Section 2.3.11 Construction and Operational Environmental Commitments of this document, through adherence to City standard conditions of approval and federal and state laws, and compliance with requirements of the SCVHP. The proposed project would also adhere to General Plan Policy NCR-5.3: Archaeological Resources Protection and the California Health and Safety Code to reduce impacts related to the inadvertent discovery of cultural resources to a less than significant level. Therefore, impacts associated with these resources have been adequately addressed and would not change from what was identified in the General Plan EIR and, the criteria for requiring further CEQA review are not met.

Impact MFS-2	**Does the project have impacts that are individually limited, but cumulative considerable? ("Cumulative considerable" means that the incremental impacts of a project are considerable when viewed in connection with the effects of past projects, the impacts of other current projects, and the impacts of probable future projects)?**

The proposed project would incrementally contribute to cumulative impacts in combination with other projects occurring within the City. However, all reasonably foreseeable future development in the City would be subject to environmental review and regulations similar to the proposed project. As discussed, the proposed project would not result in significant impacts to resources evaluated in this Section 15183 Consistency Evaluation. Compliance with General Plan policies, as well as compliance with applicable federal and state laws, would ensure that the proposed project's impacts would be less than significant and would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

Impact MFS-3	**Does the project have environmental impacts which will cause substantial adverse impacts on human beings, either directly or indirectly?**

As discussed, all environmental impacts which could cause substantial adverse impacts on human beings, either directly or indirectly would be mitigated with compliance with General Plan policies, as well as compliance with applicable federal, state, and local regulations and standards. Therefore, the proposed project would not cause environmental impacts that would cause substantial adverse impacts on human beings and the impacts would be less than significant. The proposed project would not result in new or substantially more severe impacts than identified in the General Plan EIR. The criteria for requiring further CEQA review are not met.

3.21.1 Conclusion

With regards to the issue area of mandatory findings of significance, the following findings can be made:

1. No peculiar impacts to the proposed project or its site have been identified.
2. There are no potentially significant offsite and/or cumulative impacts which were not discussed by the General Plan EIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the General Plan EIR.
4. The proposed project would undertake feasible policies and actions specified in the General Plan EIR.

4.0 REFERENCES

Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Air Quality Guidelines. https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines?sc_lang=en. Accessed February 2024.

_____. 2023a. Air Quality Plans. https://www.baaqmd.gov/plans-and-climate/air-quality-plans. Accessed February 2024.

_____. 2023b. Current Rules. https://www.baaqmd.gov/rules-and-compliance/current-rules. Accessed February 2024.

California Department of Conservation (DOC). 2024. California Important Farmland Finder. https://maps.conservation.ca.gov/dlrp/ciff/. Accessed January 2024.

_____. 2021. California Geologic Survey – Mineral Resource Zone Map for Construction Aggregate in Monterey Bay Production-Consumption Region. PDF. Accessed October 2023.

California Department of Resources Recycling and Recovery (CalRecycle). 2024a. Disposal Rate Calculator – Gilroy 2022. https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator. Accessed January 2024.

_____. 2024b. SWIS Facility/Site Activity Details – John Smith Road Landfill (35-AA-0001). https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2151?siteID=2583. Accessed January 2024.

California Department of Transportation (Caltrans). 2023. California State Scenic Highway System Map. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed October 2023.

California Air Resources Board (CARB). 2005. Air Quality and Land Use Handbook: A Community Health Perspective. https://files.ceqanet.opr.ca.gov/221458-6/attachment/UNr-g159CW-r0G4DR8q6daNdAKT3RJTd8gGQCfz4wqFfl-eNdZNQEqjf8tfls1x6Gsae7YqpXwtFIZBd0. Accessed February 2024.

_____. 2016. Ambient Air Quality Standards. https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf. Accessed February 2024.

_____. 2024. In-Use Off-Road Diesel-Fueled Fleets Regulation. https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation/about. Accessed July 2024.

City of Gilroy. 2020a. City of Gilroy 2040 General Plan, Adopted November 2, 2020. https://www.cityofgilroy.org/DocumentCenter/View/11309/Gilroy-2040-General-Plan-39-MB?bidId=. Accessed October 2023.

_____. 2020b. Public Review Draft Gilroy 2040 General Plan EIR, SCH #3015082014, June 22, 2020. https://www.cityofgilroy.org/DocumentCenter/View/11308/Draft-EIR---Gilroy-2040-General-Plan-?bidId=. Accessed October 2023.

_____. 2021. Final 2020 Urban Water Management Plan – October 2021. https://www.cityofgilroy.org/DocumentCenter/View/12538/FINAL-2020-Urban-Water-Management-Plan?bidId=. Accessed January 2024.

_____. 2023. 2023 Water System Master Plan, Adopted April 2023. https://www.cityofgilroy.org/DocumentCenter/View/5257/Water-System-Master-Plan---April-2023. Accessed October 2023.

California Department of Forestry and Fire Protection. 2023. State Responsibility Area Fire Hazard Severity Zones, Santa Clara County – June 15, 2023. https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map-2022/fire-hazard-severity-zones-maps-2022-files/fhsz_county_sra_11x17_2022_santaclara_2.pdf. Accessed January 2024.

Department of Finance (DOF). 2024. E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2023 and 2024 (May 2024 Version). https://dof.ca.gov/forecasting/demographics/estimates-e1/. Accessed October 2024.

Department of Toxic Substances Control (DTSC). 2024. EnviroStor database. https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=8875+murray+avenue%2C+gilroy%2C+ca. Accessed January 2024.

Federal Emergency Management Agency (FEMA). 2009. Flood Insurance Rate Map 06085C0639H, effective 5/18/2009. https://msc.fema.gov/arcgis/rest/directories/arcgisjobs/nfhl_print/mscprintb_gpserver/jfa389870cfce457d91e9338ede4be3d2/scratch/FIRMETTE_a6c98b24-7ea4-4b0a-bcdb-4247363b75c3.pdf. Accessed October 2023.

Hexagon Transportation Consultants, Inc. (Hexagon). 2025. Heatwave Industrial Development Transportation Analysis, February 21, 2025. PDF.

Live Oak Associates, Inc (Live Oak). 2023. Heat Wave Visual Project Site Technical Biological Report City of Gilroy, Santa Clara County, California – January 3, 2023. PDF.

Pacific Gas and Electric Company (PG&E). 2018. Where your electricity comes from. https://www.pge.com/pge_global/common/pdfs/your-account/your-bill/understand-your-bill/bill-inserts/2018/10-18_PowerContent.pdf. Accessed February 2024.

_____. 2024. PG&E Customers' Electricity 100% Greenhouse Gas-Free in 2023. https://investor.pgecorp.com/news-events/press-releases/press-release-details/2024/PGE-Customers-Electricity-100-Greenhouse-Gas-Free-in-2023/default.aspx. Accessed August 2024.

Santa Clara County. 2020. San Martin Airport Comprehensive Land Use Plan Santa Clara County. https://stgenpln.blob.core.windows.net/document/ALUC_E16_CLUP.pdf. Accessed January 2024.

Santa Clara Valley Water District (Valley Water). 2021. 2021 Groundwater Management Plan for the Santa Clara and Llgas Subbasins. https://s3.us-west-1.amazonaws.com/valleywater.org.us-west-1/s3fs-public/2021_GWMP.pdf. Accessed October 2023.

South Coast Air Quality Management District (SCAQMD). 2008. Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans. https://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2. Accessed August 2024.

State Water Resources Control Board (SWRCB). 2024. GeoTracker database. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=8875+murray+avenue%2C+gilroy%2C+ca#. Accessed January 2024.

Stevens, Ferrone & Bailey Engineering Company, Inc (SFB). 2022. Geotechnical Investigation 8875 Murray Avenue Gilroy, California SFB Project No. 989-1, September 19, 2022. PDF

United States Forest Service (USFS). 2024. Wildfire Hazard Potential. https://usfs.maps.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=55226e8547f84aae8965210a9801c357. Accessed January 2024.

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Appendix A Land Evaluation and Site Assessment Report

FIRSTCARBON
SOLUTIONS
FCS INTERNATIONAL, INC.

Cover Letter

October 15, 2021

Justin Hertel
Heat Wave Visual
8840 Forrest Street
Gilroy, CA 95020

Subject: **Land Evaluation and Site Assessment Model Letter Report for the Murray Avenue Industrial Project, Santa Clara County, California**

Dear Mr. Hertel:

The attached letter report and exhibits summarize the findings of the Land Evaluation and Site Assessment (LESA) Model for the Murray Avenue Industrial Project in the City of Gilroy, in Santa Clara County, California. The results indicated that the development of the proposed industrial building would not have a significant impact on loss of Important Farmland. Please let us know if you have any questions or would like additional information.

Sincerely,

Jason Brandman, Vice President
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597

Grant Gruber, Senior Technical Writer
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Enc: Attachment A: Exhibits
Attachment B: Land Evaluation and Site Assessment Model Scoring Table

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PHILIPPINES

CHINA

MALAYSIA

SINGAPORE

MURRAY AVENUE INDUSTRIAL PROJECT LAND EVALUATION AND SITE ASSESSMENT MODEL

Project Location

The 9.38-acre project site is located in the City of Gilroy, in Santa Clara County, California. The site is bounded by Forrest Street (west), industrial/commercial uses (north), Murray Avenue and large-parcel residential uses (east), and undeveloped land (south). The project site is located on the *Gilroy, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map, Township 10 South, Range 4 East, Unsectioned (Latitude 37° 1' 30" North; Longitude 121° 24' 23" West).

Project Summary

The project applicant, Heat Wave Visual, is proposing to develop an approximately 40,000-square-foot industrial building on the project site.

Existing Conditions

The project site is undeveloped and is designated 'Industrial Park' by the City of Gilroy 2040 General Plan. Approximately 90 percent of the project site contains Pleasanton loam soils, which is a prime agricultural soil. The California Department of Conservation Farmland Mapping and Monitoring Program maps the entire 9.38-acre project site as Urban and Built-Up Land; refer to Exhibit 1.

Pursuant to the California Environmental Quality Act (CEQA), Appendix G Checklist, a LESA Model was prepared to determine the significance of the conversion of the project site to permanent non-agricultural use.

LESA Model Findings

The LESA Model is divided into two components: Land Evaluation and Site Assessment. The following narrative describes the model inputs. The weighting factor for each input is shown in parenthesis.

Land Evaluation (50 percent)

Land Capability Classification (LCC) (25 percent)

The project site contains 8.46 acres of Pleasanton loam, 0 to 2 percent slopes (LCC I) and 0.92 acre of San Ysidro loam, 0 to 2 percent slopes (LCC IIIs). Pleasanton loam is considered prime agricultural soils while San Ysidro loam is considered marginal agricultural soils. Because Pleasanton loam constitutes 90 percent of the project site and has a high LCC, the overall LCC score is **96**.

Storie Index Rating (25 percent)

The Storie Index is a quantitative rating of the agricultural value of the soils (0 to 100). The higher the score, the better the soil. Pleasanton loam, 0 to 2 percent slopes has a Storie Index of 100; San Ysidro

loam, 0 to 2 percent slopes has a Storie Index of 51. Pleasanton loam is considered prime agricultural soils while San Ysidro loam is considered marginal agricultural soils. Because Pleasanton loam constitutes 90 percent of the project site and has a high Storie Index, the overall Storie Index score is **95**.

Site Assessment (50 percent)

Project Size (15 percent)

The project site consists of 8.46 acres of LCC I soils and 0.92 acre of LCC IIIs soils (Exhibit 2). The LESA Model assigns no points for project size for any project site less than 10 acres regardless of soil quality. The overall project size score is **0**.

Water Availability (15 percent)

The project site is located within the Gilroy city limits and, thus, is served by a municipal water system. As such, it does not have access to irrigation district water. It was conservatively assumed that the project site had access to groundwater with no physical or economic restrictions during non-drought and drought years. The water availability score is **100**.

Surrounding Agricultural Lands (15 percent)

Properties within 0.25-mile of the project site total 256.61 acres. There are 20.21 acres of Farmland Land of Local Importance; refer to Exhibit 3. However, Farmland Land of Local Importance does not fall under the Important Farmland umbrella. Because more than 85 percent of the land within 0.25-mile of the project site is classified as Urban and Built-Up, the surrounding agricultural land score is **0**.

Protected Resource Lands (5 percent)

Protected resource lands are those with active Williamson Act contracts for which Notices of Non-Renewal have not been filed. There are no active Williamson Act contracts within the Zone of Influence. The Protected Resource Lands score is **0**.

Conclusions

When the weighting factors are applied, the project site yields a LESA Model score of **62.8**. For projects that score between 60 and 79 points, LESA Model significance criteria indicates that this is a significant impact unless either the Land Evaluation or Site Assessment sub-scores is less than 20 points. In this case, the Site Assessment sub-score is **15** points. Therefore, the proposed project's conversion of agricultural land to non-agricultural use is *not considered significant* for the purposes of CEQA.

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Letter Report

Attachment A:
Exhibits



Source: ESRI Aerial Imagery. CA Department of Conservation Santa Clara County FMMP, 2018..

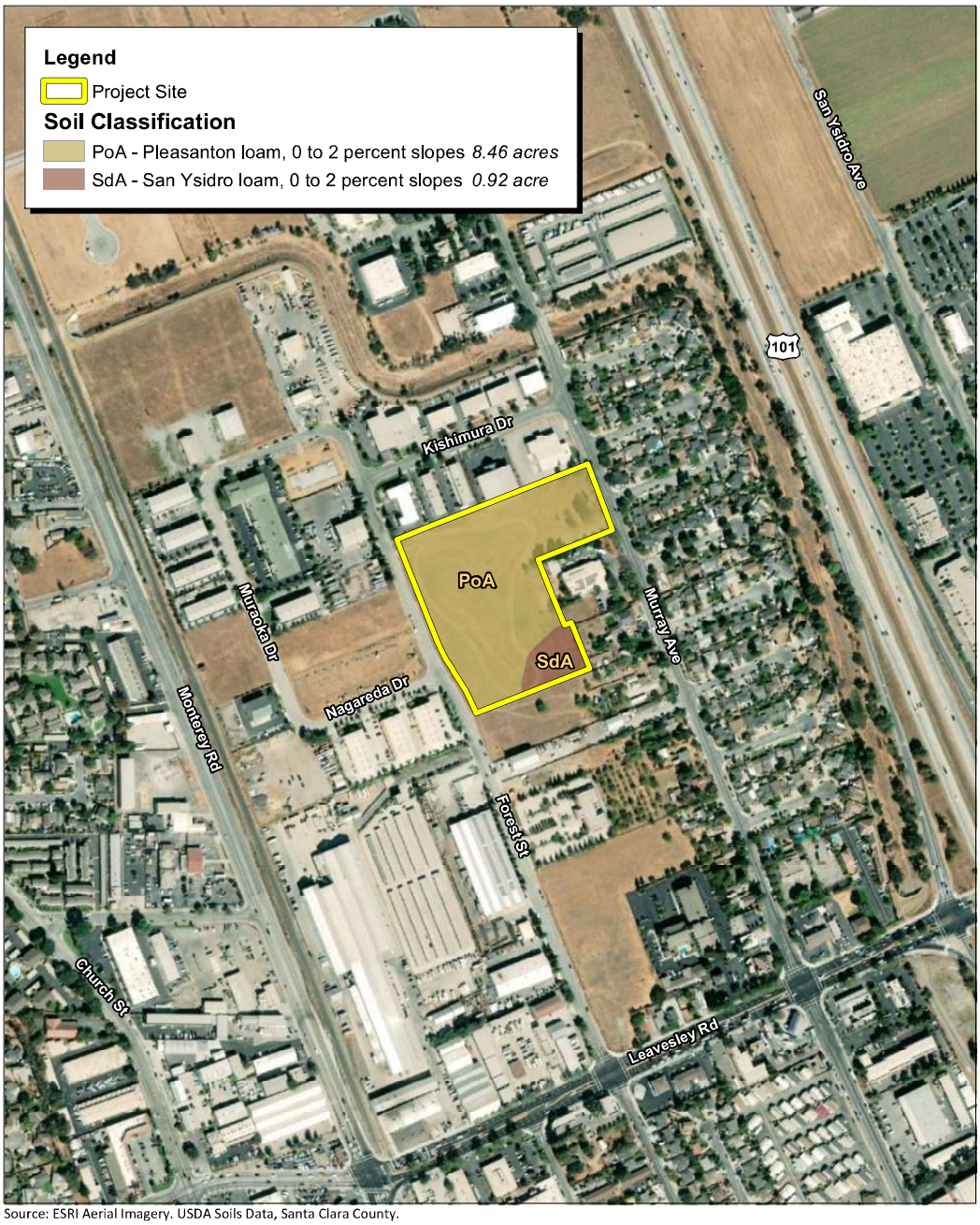
FIRSTCARBON SOLUTIONS™

500 250 0 500 Feet

Exhibit 1
Important Farmland Map

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HEAT WAVE VISUAL
MURRAY AVENUE INDUSTRIAL PROJECT
LAND EVALUATION AND SITE ASSESSMENT MODEL



Source: ESRI Aerial Imagery. USDA Soils Data, Santa Clara County.

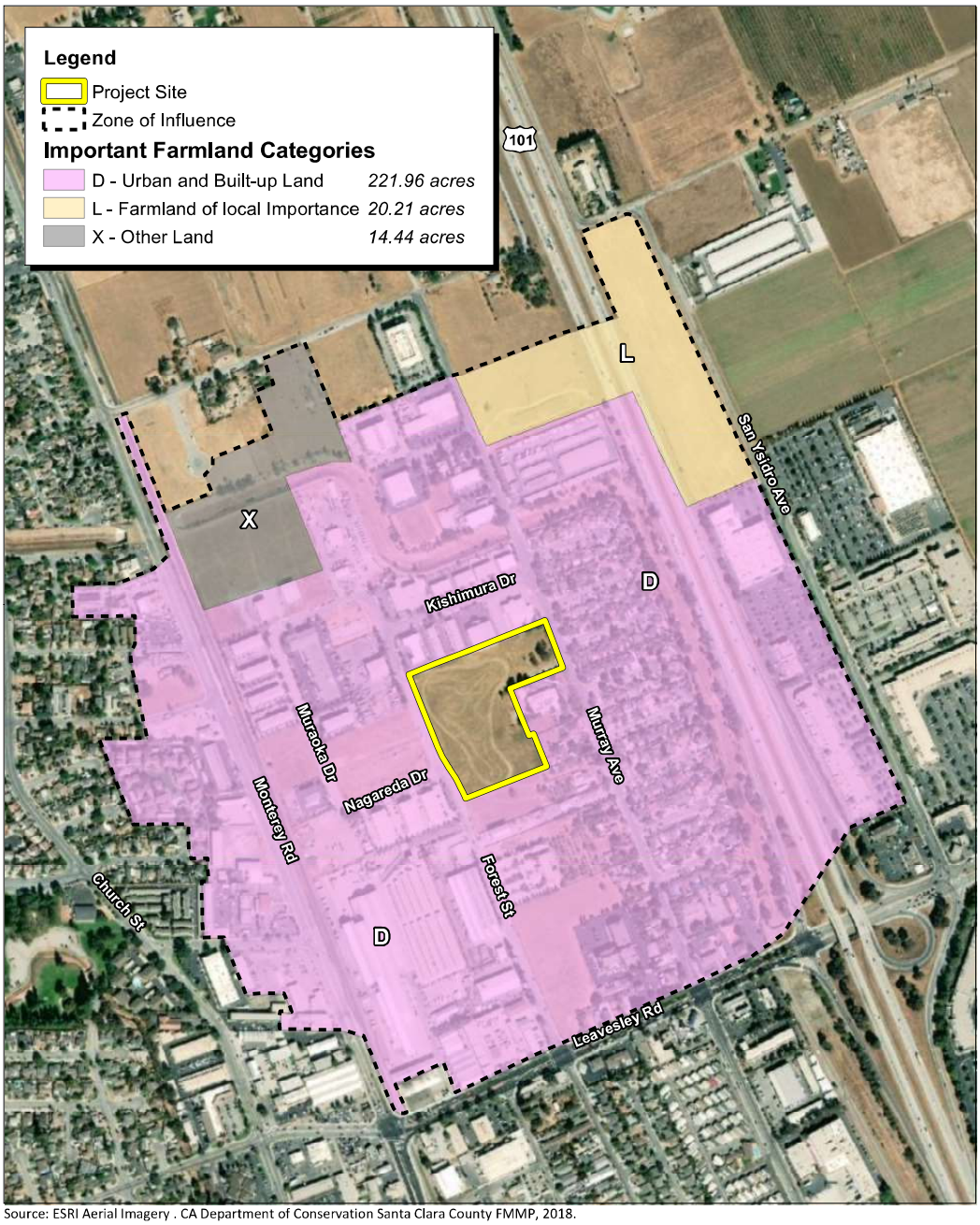
FIRSTCARBON SOLUTIONS™

500 250 0 500 Feet

Exhibit 2
Soils Map

56560001 • 10/2021 | 2_soils.mxd

HEAT WAVE VISUAL
MURRAY AVENUE INDUSTRIAL PROJECT
LAND EVALUATION AND SITE ASSESSMENT MODEL



Source: ESRI Aerial Imagery . CA Department of Conservation Santa Clara County FMMP, 2018.

FIRSTCARBON SOLUTIONS™

700 350 0 700 Feet

Exhibit 3
Zone of Influence Map

56560001 • 10/2021 | 3_ZOI.mxd

HEAT WAVE VISUAL
MURRAY AVENUE INDUSTRIAL PROJECT
LAND EVALUATION AND SITE ASSESSMENT MODEL

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FCS INTERNATIONAL, INC.

Letter Report

Attachment B:
Land Evaluation and Site Assessment Model Scoring Table

Factor Name	Factor Rating (0-100 points)	X	Factor Weighting (Total=1.0)	=	Weighted Factor Rating
Land Evaluation					
1. Land Capability Classification	96		0.25		24.0
2. Storie Index Rating	95		0.25		23.8
	Subtotal		0.5		47.8
Site Assessment					
1. Project Size	0		0.15		0.0
2. Water Resource Availability	100		0.15		15.0
3. Surrounding Agricultural Lands	0		0.15		0.0
4. Protected Resource Lands	0		0.05		0.0
	Subtotal		0.5		15.0
				TOTAL	62.8

Appendix B Air Quality, Greenhouse Gas, and Energy Technical Memora

Stantec

Memo

To:	Erin Freitas, Planner II City of Gilroy, Community Development Department	From:	Kaitlyn Heck, Air Quality Specialist Briette Shea, Air Quality and Climate Change Consultant Stantec Consulting Inc.
Project:	Heat Wave Project	Date:	February 24, 2025

Reference: Air Quality, Greenhouse Gas, and Energy Technical Memorandum for the Heat Wave Project

Introduction

PURPOSE

The purpose of this Air Quality, Greenhouse Gas, and Energy Technical Memorandum (Memo) is to analyze potential air quality, greenhouse gas (GHG), and energy impacts that could occur from implementation of the Heat Wave Project (Project) located in the City of Gilroy, California. This assessment was conducted within the context of the California Environmental Quality Act (CEQA) to support a Modified Initial Study/Mitigated Negative Declaration relying in part on the approved City of Gilroy 2040 General Plan Environmental Impact Report (State Clearinghouse #2015082014).[1]

PROJECT LOCATION

The Project site is located in the City of Gilroy, in Santa Clara County, California. The 7.29-acre site, identified by Assessor's Parcel Number (APN) 835-01-059, is located along Forest Street, on the northeast corner of the Forest Street and Nagareda Drive intersection. The Project site is currently undeveloped and is designated as Industrial Park in the City of Gilroy 2040 General Plan. The Zoning Map designation for the site is Limited Industrial (M1) and the site is located within the Murray Las Animas Avenue overlay combining district.

PROPOSED PROJECT

The Project would involve development of the site with a total of 120,786 square feet of industrial space within three separate buildings, constructed in three phases (see Phase I involves the construction of Building 1 (42,266 square feet) that would be utilized as the main headquarters and would include office, warehousing, and light industrial uses, and construction of associated driveways, parking, and infrastructure

[1] City of Gilroy. 2020. Gilroy 2040 General Plan EIR, SCH# 2015082014. Website: https://cityofgilroy.org/DocumentCenter/View/11308/Draft-EIR---Gilroy-2040-General-Plan-?bidId=. Accessed February 7, 2024.

improvements. In addition to Building 1, Phase I would include the construction of driveways, parking, and infrastructure improvements to serve Building 1. Phase I would include the construction of 64 parking spaces to meet City standards and requirements for parking.

Phase I involves the construction of Building 1 (42,266 square feet) that would be utilized as the main headquarters and would include office, warehousing, and light industrial uses, and construction of associated driveways, parking, and infrastructure improvements. In addition to Building 1, Phase I would include the construction of driveways, parking, and infrastructure improvements to serve Building 1. Phase I would include the construction of 65 parking spaces to meet City standards and requirements for parking.

Phase II involves construction of Building 2 (48,600 square feet), emergency vehicle access (EVA) to Murray Avenue, parking areas, and infrastructure improvements. In addition to Building 2, Phase II would include the construction of a driveway, parking areas, and infrastructure improvements to serve Building 2. Phase II would include the construction of 155 parking spaces to meet City standards and requirements for parking.

Phase III involves construction of Building 3 (29,920 square feet), upgrade of the EVA to Murray Avenue to a formal driveway, construction of associated parking areas, and infrastructure improvements. Phase III would include the construction of 73 parking spaces to meet City standards and requirements for parking. See Table 1 for a summary of the Project's phases and buildings.

Table 1. Project Building Summary

Phase / Building	Building Square Footage	Parking Spaces
I / 1	42,266	65
II / 2	48,600	155
III / 3	29,920	73
Project Total	*120,786*	*293*

The proposed project would not utilize natural gas service and would not construct new lines to connect to the existing gas lines located on Murray Avenue or the existing gas line located on the project site along the Forest Street project frontage.

Facility operation would require truck shipments to receive and send out products. At full Project buildout, it is assumed three truck shipments would be required per week. Additionally, the Project is anticipated to require 9 total daily truck trips per day for daily shipping and receiving of products from the United States Postal Service, FedEx, and UPS.

Construction activities associated with the Project would occur in three phases and would consist of site clearing, grading, utility connections, building construction, paving, frontage improvements, and landscaping on the site. As detailed in Table 2, it is anticipated that construction of Phase I would take approximately 13 months. The CalEEMod modeling assumes a start date in February 2025 and ending in March 2026. Due to increased efficiency of vehicle fleets and increased availability of cleaner construction equipment, emissions decrease as time progresses. Therefore, in the event that Phase I begins at a later date, then the emissions estimates presented within this Memo would be conservative. The timing of development of Phase II and III and occupancy of Buildings 2 and 3 would depend upon several factors, including the rate

of business growth and economic conditions. For this analysis, it is expected that construction of Phase II and Phase III would be similar to Phase I (see Table 2).

Table 2. Project Construction Schedule

Construction Task	Start Date	End Date	Construction Working Days
Phase I			
Site Preparation	2/3/2025	2/14/2025	10
Grading	2/17/2025	3/14/2025	10
Land Development/Building Construction	3/17/2025	1/30/2026	230
Paving	2/2/2026	2/27/2026	20
Architectural Coatings	3/2/2026	3/27/2026	20
Phase II			
Site Preparation	1/7/2030	1/18/2030	10
Grading	1/21/2030	2/15/2030	20
Land Development/Building Construction	2/18/2030	1/3/2031	230
Paving	1/6/2031	1/31/2031	20
Architectural Coatings	2/3/2031	2/28/2031	20
Phase III			
Site Preparation	1/8/2035	2/2/2035	20
Grading	2/5/2035	3/2/2035	20
Land Development/Building Construction	3/5/2035	1/18/2036	230
Paving	1/21/2036	2/15/2036	20
Architectural Coatings	2/18/2036	3/14/2036	20

The estimated amount of cut and fill for each phase is provided in Table 3. It is estimated that the total amount of earth movement for the Project would require approximately 8,374 cubic yards (CY) of cut and approximately 3,010 CY of fill, resulting in a net export of 5,364 CY. Construction of the Project would require approximately seven feet of excavation for construction of the underground stormwater control system but could require excavation of up to 9.5 feet for construction of utility improvements.

Table 3. Estimated Cut and Fill

Activity	Phase I	Phase II	Phase III	Total
Cut (CY)	3,130	2,821	2,423	8,374
Fill (CY)	1,488	1,112	410	3,010
Net (CY)	**1,642**	**1,709**	**2,013**	**5,364 (export)**

Note: CY = cubic yards

Air Quality Background and Setting

The Project site lies within the Santa Clara Valley subregion of the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The SFBAAB encompasses all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, the southern portion of Sonoma, and the southwestern portion of Solano County. Air quality in this area is determined by natural factors including topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions.[2]

CLIMATE AND METEOROLOGY

The SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys, and bays, which distort normal wind flow patterns. The Coast Range splits resulting in a western coast gap (Golden Gate) and an eastern coast gap (Carquinez Strait), which allows air to flow in and out of the SFBAAB and the Central Valley.

The climate is dominated by the strength and location of a semi-permanent, subtropical high-pressure cell. During the summer, the Pacific high pressure cell is centered over the northeastern Pacific Ocean resulting in stable meteorological conditions and a steady northwesterly wind flow. Upwelling of cold ocean water from below to the surface because of the northwesterly flow produces a band of cold water off the California coast. The cool and moisture-laden air approaching the coast from the Pacific Ocean is further cooled by the presence of the cold water band resulting in condensation and the presence of fog and stratus clouds along the Northern California coast.

In the winter, the Pacific high-pressure cell weakens and shifts southward resulting in wind flow offshore, the absence of upwelling, and the occurrence of storms. Weak inversions coupled with moderate winds result in a low air pollution potential. During the summer, the large-scale meteorological condition that dominates the West Coast is a semi-permanent high pressure cell centered over the northeastern Pacific Ocean. This high pressure cell keeps storms from affecting the California coast. Hence, the SFBAAB experiences little precipitation in the summer months. Winds tend to blow on shore out of the north/northwest.

CRITERIA AIR POLLUTANTS

Criteria air pollutants includes ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (measured both in units of smaller than 2.5 microns in diameter [$PM_{2.5}$] and in units of particulate matter smaller than 10 microns in diameter [PM_{10}]), and lead (Pb).

Ozone (O_3). The majority of ground-level ozone is formed as a result of complex photochemical reactions in the atmosphere between reactive organic gases (ROGs), nitrogen oxides (NOx), and oxygen. ROGs and NOx are considered precursors to the formation of ozone, a highly reactive gas that can damage lung tissue and affect respiratory function. While ozone in the lower atmosphere is considered a damaging air

[2] BAAQMD. 2022. CEQA Air Quality Guidelines. Website: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines?sc_lang=en. Accessed February 7, 2024.

pollutant, ozone in the upper atmosphere is beneficial, as it protects the Earth from harmful ultraviolet radiation. However, atmospheric processes preclude ground-level ozone from reaching the upper atmosphere.[3]

Carbon Monoxide (CO). CO is a colorless, odorless, poisonous gas produced by the incomplete combustion of fossil fuels. Elevated levels of CO can result in harmful health effects, especially for the young and elderly, and can also contribute to global climate change.[4]

Nitrogen Dioxide (NO_2). NO_2 is a brownish, highly reactive gas primarily produced as a result of the burning of fossil fuels. NO_2 can also lead to the formation of ozone in the lower atmosphere. NO_2 can cause respiratory ailments, especially in the young and elderly, and can lead to degradations in the health of aquatic and terrestrial ecosystems.[5]

Sulfur Dioxide (SO_2). SO_2 is primarily emitted from the combustion of coal and oil by steel mills, pulp and paper mills, and non-ferrous smelters. High concentrations of SO_2 can aggravate existing respiratory and cardiovascular diseases in asthmatics and others who suffer from emphysema or bronchitis. SO_2 also contributes to acid rain, which in turn, can lead to the acidification of lakes and streams.[6]

Particulate Matter (PM). Airborne PM is not a single pollutant, but rather is a mixture of many chemical species. PM is a complex mixture of solids and aerosols composed of small droplets of liquid, dry solid fragments, and solid cores with liquid coatings. Particles vary widely in size, shape, and chemical composition, and may contain inorganic ions, metallic compounds, elemental carbon, organic compounds, and compounds from the earth's crust. Particles are defined by their diameter for air quality regulatory purposes. Those with a diameter of 10 microns or less (PM_{10}) are inhalable into the lungs and can induce adverse health effects. Fine particulate matter is defined as particles that are 2.5 microns or less in diameter ($PM_{2.5}$). Therefore, $PM_{2.5}$ compromises a portion of PM_{10}. Emissions from combustion of gasoline, oil, diesel fuel or wood produce much of the $PM_{2.5}$ pollution found in outdoor air, as well as significant proportion of PM_{10}. PM_{10} also includes dust from construction sites, landfills and agriculture, wildfires and brush/waste burning, industrial sources, wind-blown dust from open lands, pollen, and fragments of bacteria.[7]

PM may be either directly emitted from sources (primarily particles) or formed in the atmosphere through chemical reactions of gases (secondary particles) such as SO_2, NOx, and certain organic compounds.

Lead (Pb). Sources of Pb include pipes, fuel, and paint, although the use of Pb in these materials has declined dramatically in recent years. Historically, a main source of Pb was automobile emissions. Pb can be inhaled directly or ingested by consuming Pb-contaminated food, water, or dust. Fetuses and children are most susceptible to Pb poisoning, which can result in heart disease and nervous system damage.[8] Through regulations, the U.S. Environmental Protection Agency (USEPA) has gradually reduced the Pb

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[3] U.S. Environmental Protection Agency. 2023. Criteria Air Pollutants. Website: https://www.epa.gov/criteria-air-pollutants?msclkid=402121eaa62811ec9f3a5e32e281714a. Accessed February 8, 2024.
[4] *Ibid.*
[5] *Ibid.*
[6] *Ibid.*
[7] *Ibid.*
[8] U.S. Environmental Protection Agency. 2023. Lead. Website: https://www.epa.gov/lead. Accessed February 7, 2024.

content of gasoline. This program has essentially eliminated violations of the Pb standard in urban areas except those areas with Pb point sources.

AMBIENT AIR QUALITY STANDARDS

For the protection of public health and welfare, the Federal Clean Air Act (FCAA) required that the USEPA establish National Ambient Air Quality Standards (NAAQS) for various pollutants. These pollutants are referred to as "criteria" pollutants because the USEPA publishes criteria documents to justify the choice of standards. These standards define the maximum amount of an air pollutant that can be present in ambient air. Standards established for the protection of human health are referred to as primary standards; whereas standards established for the prevention of environmental and property damage are called secondary standards. The FCAA allows states to adopt additional or more health-protective standards. In California, under the California Clean Air Act (CCAA), the California Air Resources Board (CARB) established the California Ambient Air Quality Standards (CAAQS). The CAAQS are equal to or more stringent than the NAAQS and include pollutants for which national standards do not exist. Table 4 provides a summary of the applicable CAAQS and NAAQS.

Table 4. National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]	National Standards[2]	
			Primary	Secondary
Ozone (O_3)	8-hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	Same as Primary Standards
	1-hour	0.09 ppm (180 µg/m^3)	--	
Carbon monoxide (CO)	8-hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	--
	1-hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	
Nitrogen dioxide (NO_2)	Annual arithmetic mean	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary Standard
	1-hour	0.18 ppm (339 µg/m^3)	100 ppb (188 µg/m^3)	
Sulfur dioxide (SO_2)	Annual arithmetic mean	--	0.030 ppm (80 µg/m^3)	--
	24-hour	0.04 ppm (105 µg/m^3)	0.14 ppm (80 µg/m^3)	--
	3-hour	--	--	0.5 ppm (1300 µg/m^3)
	1-hour	0.25 ppm (655 µg/m^3)	--	--
Respirable Particulate Matter Smaller than 10 Microns in Diameter (PM_{10})	Annual arithmetic mean	20 µg/m^3	--	Same as Primary Standards
	24-hour	50 µg/m^3	150 µg/m^3	
Respirable Particulate Matter Smaller than 2.5 Microns in Diameter ($PM_{2.5}$)[3]	Annual arithmetic mean	12 µg/m^3	9.0 µg/m^3	15 µg/m^3
	24-hour	No separate standard	35 µg/m^3	Same as Primary Standards
Sulfates	24-hour	25 µg/m^3	--	--

Pollutant	Averaging Time	California Standards[1]	National Standards[2]	
			Primary	Secondary
Lead (Pb)	30-day average	1.5 µg/m^3	--	--
	Calendar quarter	--	1.5 µg/m^3	Same as Primary Standard
	Rolling 3-month average	--	0.15 µg/m^3	
Hydrogen sulfide (H_2S)	1-hour	0.03 ppm (42 µg/m^3)	--	--
Vinyl chloride (chloroethene)	24-hour	0.01 ppm (26 µg/m^3)	--	--
Visibility reducing particles	8-hour	In 1989, the Air Resources Board converted the general statewide 10-mile visibility standard to instrumental equivalents, which are extinction of 0.23 per kilometer.	--	--

Notes:
1. CO, SO_2 (1- and 24-hour), NO_2, O_3, PM_{10}, and visibility reducing particles standards are not to be exceeded.
2. Not to be exceeded more than once a year except for annual standards.
3. On February 7, 2024, the USEPA issued a pre-publication version of the Final Rule to lower the primary annual NAAQS for $PM_{2.5}$ from 12.0 µg/m^3 to 9.0 µg/m^3.
-- = no standard established
µg/m^3 = micrograms per cubic meter
mg/m^3 = milligrams per cubic meter
ppm = parts per million
Source: CARB. 2016. Ambient Air Quality Standards. Available online at: https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf. Accessed February 7, 2024.

The USEPA and CARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. The SFBAAB is designated as nonattainment for state ozone, $PM_{2.5}$, and PM_{10} standards, as well as national ozone and $PM_{2.5}$ standards. The SFBAAB is in attainment or unclassified for all other CAAQS and NAAQS.

AMBIENT AIR QUALITY

Each year, BAAQMD summarizes data collected from the Bay Area air quality monitoring stations. The nearest air quality monitoring station to the Project site is the Gilroy Monitoring Station located at 9th Street and Princeville**. Table 5** includes a summary of the air quality monitoring data at the Gilroy Monitoring Station for the years 2021 through 2023. The table shows the number of times the station recorded pollutant concentrations above federal and state air quality standards and the highest annual reading for each pollutant. The monitoring station monitors O_3 and $PM_{2.5}$.

Table 5. Gilroy Monitoring Station Data

Pollutant	Air Pollutant, Averaging Time (Units)	2021	2022	2023
Ozone (ppm)	Maximum 1-hour Concentration	0.084	0.079	0.083
	Number of days over California 1-hour standard	0	0	0
	Maximum 8-hour Concentration	0.072	0.071	0.071
	Number of days over National 8-hour standard	1	1	1
	Number of days over California 8-hour standard	1	1	1
$PM_{2.5}$ ($\mu g/m^3$)	Maximum 24-hour Concentration	34.7	23.4	41.2
	Number of days over National 24-hour standard[1]	0	0	1
	Annual average	5.5	*	4.7

Notes:
1. The applicable national 24-hour standard for $PM_{2.5}$ from 2020 through 2022 was 12.0 $\mu g/m^3$.
ppm = parts per million
$\mu g/m^3$ = micrograms per liter
$PM_{2.5}$ = particulate matter less than 2.5 microns in aerodynamic diameter
* indicates that there was insufficient data available to determine the value.
Source: California Air Resources Board. 2024. Air Quality Data Statistics. https://www.arb.ca.gov/adam/index.html. Accessed February 6, 2024.

TOXIC AIR CONTAMINANTS

Toxic air contaminants (TACs) are air pollutants that may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air, but due to their high toxicity, they may pose a threat to public health even at very low concentrations.

Diesel Particulate Matter

In 1998, the CARB identified diesel particulate matter (DPM) as a toxic air contaminant (TAC) based on published evidence of a relationship between diesel exhaust exposure and lung cancer induction, as well as death from lung cancer. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Mobile sources, such as trucks and buses, are among the primary sources of diesel emissions, and concentrations of DPM are higher near heavily traveled highways.

BAAQMD staff has estimated incremental cancer risk due to measured TAC in the Bay Area. According to the most recent analysis, the average regional cancer risk was about 300 per million.[9] That is, for every million residents exposed to current levels of TAC over a 70-year period of exposure, 300 residents would be expected to develop cancer. According to the analysis, more than 70 percent of the cancer risk related to air pollution in the Bay Area is due to DPM.

[9] BAAQMD. 2014. Community Air Risk Evaluation Program Retrospective & Path Forward. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/care-program/documents/care_retrospective_april2014.pdf. Accessed February 7, 2024.

SENSITIVE RECEPTORS

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, 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 sensitive receptors to the Project site are the single-family residences to the east, across Murray Avenue.

REGULATORY SETTING

Federal Clean Air Act. The FCAA of 1970 and the FCAA Amendments of 1971 required the USEPA to establish NAAQS, and also set deadlines for their attainment. On April 2, 2007, the Supreme Court found that carbon dioxide is an air pollutant covered by the FCAA; however, no NAAQS have been established for carbon dioxide. The NAAQS are summarized in Table 4.

California Clean Air Act. The CCAA requires that all air districts in the state endeavor to achieve and maintain CAAQS for O_3, CO, SO_2, and NO_2 by the earliest practical date. The CAAQS are summarized in Table 4. The CCAA also specifies that districts focus attention on reducing the emissions from transportation and area-wide emission sources, and the act provides districts with authority to regulate indirect sources.

Bay Area Air Quality Management District. BAAQMD is the local air quality management district responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SFBAAB. BAAQMD has developed the following attainment plans and rules and regulations applicable to the Project:

- **2017 Clean Air Plan.** The BAAQMD adopted the 2017 Clean Air Plan in April 2017 that includes control strategies to reduce ozone precursors (ROG and NOx), particulate matter, TACs, and GHG emissions. The 2017 Clean Air Plan included several measures for reducing PM emissions from stationary sources and wood burning.[10]
- **Regulation 2, Rule 1, General Permit Requirements.** This regulation includes criteria for issuance or denial of permits, exemptions, and appeals against decisions of the Air Pollution Control Officer and BAAQMD actions on applications.
- **Regulation 6, Rule 1, General Requirements.** The purpose of this regulation is to limit the quantity of particulate matter in the atmosphere through the establishment of limitations on emission rates, emission concentrations, visible emissions, and opacity.
- **Regulation 7, Odorous Substances.** Regulation 7 places general limitations on odorous substances and specific emission limitations on certain odorous compounds. The limitations of this

[10] BAAQMD. 2023. Air Quality Plans. Website: https://www.baaqmd.gov/plans-and-climate/air-quality-plans. Accessed February 7, 2024.

regulation shall not be applicable until BAAQMD receives odor complaints from 10 or more complainants within a 90-day period alleging that a person has caused odors perceived at or beyond the property line of such person and deemed to be objectionable by the complainants in the normal course of their work, travel, or residence. BAAQMD staff shall investigate and track all odor complaints they receive and shall attempt to visit the site, identify the source of the objectionable odor, and assist the owner or facility in finding a way to reduce the odor.

- **Basic Construction Mitigation Measures.** All construction within BAAQMD's jurisdiction is required to implement the BAAQMD's Basic Construction Mitigation Measures (BCMMs), listed below:

    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 miles per hour (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. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
    7. All construction equipment shall be maintained and properly tuned in accordance with manufacturers' specifications. All equipment shall be checked by a certified visible emissions evaluator.
    8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Greenhouse Gas Background and Setting

To fully understand global climate change, it is important to recognize the naturally occurring "greenhouse effect" and to define the GHGs that contribute to this phenomenon. Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect.

Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3), and sulfur hexafluoride (SF_6). Primary GHGs attributed to global climate change are discussed in the following subsections.

Carbon Dioxide. CO_2 is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere.[11]

Methane. CH_4 is a colorless, odorless gas that is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. CH_4 is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (enteric fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of methane to the atmosphere. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH_4 is about 12 years.[12]

Nitrous Oxide. N_2O is a clear, colorless gas with a slightly sweet odor. N_2O is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years.[13]

Hydrofluorocarbons. HFCs are man-made chemicals, many of which have been developed as alternatives to ozone-depleting substances for industrial, commercial, and consumer products. The only significant emissions of HFCs before 1990 were of the chemical HFC-23, which is generated as a byproduct of the production of HCFC-22 (or Freon 22, used in air conditioning applications). The atmospheric lifetime for HFCs varies from just over a year for HFC-152a to 260 years for HFC-23. Most of the commercially used HFCs have atmospheric lifetimes of less than 15 years (e.g., HFC-134a, which is used in automobile air conditioning and refrigeration, has an atmospheric life of 14 years).[14]

Perfluorocarbons. PFCs are colorless, highly dense, chemically inert, and nontoxic. There are seven PFC gases: perfluoromethane (CF_4), perfluoroethane (C_2F_6), perfluoropropane (C_3F_8), perfluorobutane (C_4F_{10}), perfluorocyclobutane (C_4F_8), perfluoropentane (C_5F_{12}), and perfluorohexane (C_6F_{14}). Natural geological emissions have been responsible for the PFCs that have accumulated in the atmosphere in the past;

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[11] U.S. Environmental Protection Agency. 2023. Overview of Greenhouse Gas Emissions. Website: https://www.epa.gov/ghgemissions/overview-greenhouse-gases. Accessed February 8, 2024.
[12] *Ibid.*
[13] *Ibid.*
[14] *Ibid.*

however, the largest current source is aluminum production, which releases CF_4 and C_2F_6 as byproducts. The estimated atmospheric lifetimes for CF_4 and C_2F_6 are 50,000 and 10,000 years, respectively.[15]

Nitrogen Trifluoride. NF_3 is an inorganic, colorless, odorless, toxic, nonflammable gas used as an etchant in microelectronics. NF_3 is predominantly employed in the cleaning of the plasma-enhanced chemical vapor deposition chambers in the production of liquid crystal displays and silicon-based thin film solar cells. In 2009, NF_3 was listed by California as a potential GHG to be listed and regulated under AB 32 (Section 38505 Health and Safety Code).

Sulfur Hexafluoride. SF_6 is an inorganic compound that is colorless, odorless, nontoxic, and generally nonflammable. SF_6 is primarily used as an electrical insulator in high voltage equipment. The electric power industry uses roughly 80 percent of all SF_6 produced worldwide. Leaks of SF_6 occur from aging equipment and during equipment maintenance and servicing. SF_6 has an atmospheric life of 3,200 years.[16]

Black Carbon. Black carbon is the most strongly light-absorbing component of PM emitted from burning fuels such as coal, diesel, and biomass. Black carbon contributes to climate change both directly by absorbing sunlight and indirectly by depositing on snow and by interacting with clouds and affecting cloud formation. Black carbon is considered a short-lived species, which can vary spatially and, consequently, it is very difficult to quantify associated global-warming potentials. The main sources of black carbon in California are wildfires, off-road vehicles (locomotives, marine vessels, tractors, excavators, dozers, etc.), on-road vehicles (cars, trucks, and buses), fireplaces, agricultural waste burning, and prescribed burning (planned burns of forest or wildlands). California has been an international leader in reducing emissions of black carbon, including programs that target reducing PM from diesel engines and burning activities.[17]

REGULATORY SETTING

Assembly Bill 32 and Senate Bill 32. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. GHGs, as defined under AB 32, include CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. Since AB 32 was enacted, a seventh chemical, NF_3, has also been added to the list of GHGs. CARB is the state agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

> *Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.*

CARB approved the 1990 GHG emissions level of 427 $MMTCO_2e$ on December 6, 2007. Therefore, to meet the state's target, emissions generated in California in 2020 were required to be equal to or less than 427 $MMTCO_2e$. In order to set a framework for the state to meet this target, CARB was tasked with creating

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[15] *Ibid.*
[16] U.S. Environmental Protection Agency. 2023. Sulfur Hexafluoride (SF6) Basics. Website: https://www.epa.gov/eps-partnership/sulfur-hexafluoride-sf6-basics. Accessed February 8, 2024.
[17] CARB. 2023. GHG Short-Lived Climate Pollutant Inventory. Website: https://ww2.arb.ca.gov/ghg-slcp-inventory. Accessed February 8, 2024.

a Scoping Plan (as described below). California announced in July 2018 that the state emitted 427 $MMTCO_2e$ in 2016 and achieved AB 32 goals.[18]

SB 32 was signed into law on September 8, 2016. SB 32 states that "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions authorized by this division, the state [air resources] board shall ensure that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit no later than December 31, 2030."

Assembly Bill 1279: The California Climate Crisis. AB 1279 was signed into law in 2022 and establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045 and maintain net negative GHG emissions thereafter. AB 1279 would also ensure that by 2045 the statewide anthropogenic GHG emissions are reduced by at least 85 percent below 1990 levels. The bill would require CARB to ensure that an updated Scoping Plan identifies and recommends measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable carbon dioxide removal and carbon capture, utilization, and storage technologies to complement AB 1279's emissions reduction requirements.

2022 Climate Change Scoping Plan. The 2022 Scoping Plan was approved in December 2022 and assesses progress toward achieving the SB 32 2030 target and laying out a path to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the state's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.[19]

Plan Bay Area 2050. In 2021, the Metropolitan Transportation Commissions (MTC) and Association of Bay Area Governments (ABAG) adopted Plan Bay Area 2050, which is the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for the Bay Area region. The Plan Bay Area 2050 is intended to guide future planning efforts and coordinate housing, economic growth, and transportation systems in a way that will improve environmental sustainability and reduce GHG emissions.[20]

Energy Background and Setting

Pacific Gas and Electric Company (PG&E) is the utility company that provides electricity and natural gas supplies to the City of Gilroy. Upon buildout of the Project site, electricity would be provided by PG&E. All electricity infrastructure would be located underground and would tie-in to existing infrastructure.

In February 2018, PG&E announced that it had reached California's 2020 renewable energy goal three years ahead of schedule.[21] In 2023, approximately 34 percent of PG&E's total electricity delivered to retail

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[18] CARB. 2018. Climate Pollutants Fall Below 1990 Levels for the First Time. Website: https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levels-first-time. Accessed February 8, 2024.
[19] CARB. 2022. 2022 Scoping Plan. Website: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp_1.pdf. Accessed February 8, 2024.
[20] MTC/ABAG. 2021. Plan Bay Area 2050: A Vision for the Future. Website: https://www.planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_October_2021.pdf. Accessed February 7, 2024.
[21] PG&E. 2018. Where your electricity comes from. Website: https://www.pge.com/pge_global/common/pdfs/your-account/your-bill/understand-your-bill/bill-inserts/2018/10-18_PowerContent.pdf. Accessed February 7, 2024.

customers came from renewable resources including solar, wind, biomass and small hydroelectric sources. Additionally, 53 percent of electricity delivered came from nuclear and 13 percent came from hydroelectric plants. Therefore, PG&E customers received 100 percent GHG free electricity in 2023.[22]

REGULATORY SETTING

California Public Utilities Commission. The California Public Utilities Commission (CPUC) is a state agency created by a constitutional amendment to regulate privately-owned utilities providing telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation services and in-state moving companies. The CPUC is responsible for ensuring that California utility customers have safe, reliable utility services at reasonable rates, while protecting utility customers from fraud. The CPUC regulates the planning and approval for the physical construction of electric generation, transmission, or distribution facilities, and local distribution pipelines of natural gas.

California Energy Code. Compliance with the California Energy Code (Title 24, Part 6, of the CCR, California's Energy Efficiency Standards) and Title 20, Public Utilities and Energy, standards must occur for all new buildings constructed in California. These efficiency standards apply to new construction of both residential and nonresidential (i.e., maintenance buildings and pump station buildings associated with the Program) buildings, and they regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit processes, and local government agencies may adopt and enforce energy standards for new buildings provided that these standards meet or exceed those provided in the Title 24 guidelines.

California Renewables Portfolio Standard. California's Renewable Portfolio Standard (RPS) was initially established in 2002 by SB 1078, with the initial requirement that 20 percent of electricity retail sales be served by renewable resources by 2017. The program was accelerated in 2006 under SB 107, which required that the 20 percent mandate be met by 2010. In April 2011, SB 2 was signed into law, requiring electricity retailers in the state to procure 33 percent of their energy sources from renewable energy sources by the end of 2020.[23] In addition, SB 350, passed in 2015, directs California utilities to further increase the amount of renewable energy delivered to customers to 50 percent by 2030.

CPUC implements and administers RPS compliance rules for California's retail sellers of electricity, which include large and small investor-owned utilities, publicly owned utilities, electric service providers, and community choice aggregators. The CEC is responsible for the certification of electrical generation facilities as eligible renewable energy resources and adopting regulations for the enforcement of RPS procurement requirements of public owned utilities.

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22 PG&E. 2024. PG&E Customers' Electricity 100% Greenhouse Gas-Free in 2023. Website: https://investor.pgecorp.com/news-events/press-releases/press-release-details/2024/PGE-Customers-Electricity-100-Greenhouse-Gas-Free-in-2023/default.aspx. Accessed August 30, 2024.
[23] CPUC. 2021. Renewables Portfolio Standard (RPS) Program. Website: https://www.cpuc.ca.gov/rps. Accessed February 7, 2024.

Methodology and Project Thresholds

This section discusses the methodology used for the Project analysis as well as the thresholds used to determine the significance of criteria pollutant and GHG emissions.

METHOD OF ANALYSIS

Criteria Pollutant and GHG Emissions

Emissions of criteria air pollutants and GHG emissions were calculated using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.21 computer program. Modeling was based on Project-specific information where available (e.g., building type and size, number of parking spaces, disturbance area, construction phase schedule), and default values in CalEEMod that are based on the Project site location and land use type.

The anticipated construction schedule was presented in Table 2, and the off-road equipment was left as model defaults for each construction phase. Soil import and export volumes were applied in the modeling consistent with the values presented in Table 3.

During operations, it was assumed that the following off-road equipment would be used (see Table 6). The vehicle trip generation rate and fleet mix were left as default values for the selected land use.

Table 6. Operational Off-Road Equipment

Equipment Type	Fuel Type	Total Number	Maximum Hours Per Day	Horsepower
Forklift	Diesel	9	8	82
Emergency Generator	Diesel	3	2	100

CalEEMod output files and detailed modeling inputs are provided in Attachment A.

Energy Calculation Methods

Project energy demand during construction and operations was determined based on the modeling that was conducted for the Project using CalEEMod and using vehicle and equipment emission factors from the CARB's EMFAC2021 (v1.0.2) and EMFAC OFFROAD2021 (v1.0.5).

The energy calculation spreadsheets are provided as Attachment B.

PROJECT THRESHOLDS

The BAAQMD adopted regional air quality thresholds in May 2010 in order to establish the level at which the Air District believed air pollution emissions would cause adverse air quality impacts to the region. The thresholds represent the levels at which a project's individual emissions of criteria air pollutants (PM_{10} and $PM_{2.5}$) or ozone precursors (ROG and NOx) would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. The BAAQMD thresholds are presented in Table **7**.

Table 7. BAAQMD Construction and Operational Criteria Pollutant Thresholds

Pollutant	Construction	Operational	
	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tpy)	Average Daily Emissions (lbs/day)
ROG	54	10	54
NOx	54	10	54
PM_{10}	82	15	82
$PM_{2.5}$	54	10	54

Note: Construction particulate matter thresholds only account for exhaust particulate matter emissions.

Source: BAAQMD. 2022. CEQA Air Quality Guidelines. Website: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines?sc_lang=en. Accessed February 7, 2024.

According to the BAAQMD, a project would result in a significant impact if it would individually expose sensitive receptors to TACs resulting in an increased cancer risk greater than 10.0 in 1 million, an increased non-cancer risk of greater than 1.0 on the hazard index (chronic or acute), or an annual average ambient $PM_{2.5}$ increase greater than 0.3 micrograms per cubic meter ($\mu g/m^3$).[24]

In April 2022, the BAAQMD Board of Directors adopted the CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans, which updated the BAAQMD's previous guidance related to evaluating GHG emissions to address the most recent climate legislation. Because construction emissions are temporary and variable, the BAAQMD has not developed a quantitative threshold of significance for construction-related GHG emissions. However, BAAQMD recommends that construction related GHG emissions should still be quantified and disclosed in environmental documents. For land use projects, the BAAQMD considers a project to have a less-than-significant impact related to GHG emissions if it either (1) meets the project design elements listed below, or (2) is consistent with a local GHG reductions strategy that meets the requirements of CEQA Guidelines Section 15183.5(b).[25]

However, CEQA Guidelines Section 15064.4(b)(2) states that the lead agency determines which threshold of significance applies to a project. As the lead agency, the City of Gilroy has determined that a quantitative threshold of significance would be most appropriate for this analysis. Specifically, the lead agency has elected to rely on the SCAQMD's interim GHG threshold of 3,000 MT CO_2e per year for residential and commercial land use projects, including industrial parks and warehouses. This screening level threshold is intended to capture 90 percent of projects subject to CEQA. Therefore, projects that do not exceed the screening-level threshold would have a nominal and less than cumulatively considerable impact on GHG emissions.[26] Additionally, in order to demonstrate consistency with applicable plans, policies, and regulations, the proposed project was compared to the CARB's 2022 Scoping Plan.

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[24] BAAQMD. 2022. CEQA Air Quality Guidelines. Website: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines?sc_lang=en. Accessed February 7, 2024.
[25] *Ibid.*
[26] South Coast Air Quality Management District. 2008. Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans, Available online at: https://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2. Accessed August 26, 2024.

Air Quality Analysis

CRITERIA POLLUTANT EMISSIONS

The General Plan EIR evaluated impacts related to air quality in Section 3.3. The General Plan EIR found that, with implementation of Mitigation Measures AQ-1 and AQ-2, buildout of the General Plan would result in a less-than-significant impact related to conflicts with the applicable air plan. Both measures are applicable to the Project.

However, the General Plan EIR determined that buildout of the Gilroy 2040 General Plan would result in a significant impact related to criteria air pollutants specifically resulting from the increase in VMT. Although the General Plan includes several policies that would reduce VMT, there is no guarantee that VMT could be reduced to a less-than-significant level. Therefore, the impact is assumed to remain significant and unavoidable.

AQ-1. *Add the following new policy to the Gilroy 2040 General Plan Natural and Cultural Resources element:*

> ***Reduce Construction Emissions.*** *Require the use of low emissions construction equipment for public and private projects, consistent with the air district 2017 Clean Air Plan.*
>
> *Where construction-related emissions would exceed the applicable Thresholds of Significance, the City of Gilroy will consider, on a case-by-case basis, implementing Additional Construction Mitigation Measures (Table 8-3 in BAAQMD's CEQA Guidelines).*

AQ-2. *Add the following new policy to the Gilroy 2040 General Plan Natural and Cultural Resources element:*

> ***Implement Dust-Control Measures.*** *Require the implementation of the air district's dust control measures during construction of individual projects, consistent with the air district 2017 Clean Air Plan.*

Construction Emissions

The Project's estimated construction emissions are provided in Table 8. As shown therein, construction of the Project would not result in emissions that exceed BAAQMD thresholds. Therefore, the Project would not be subject to the Additional Construction Mitigation Measures references in General Plan EIR Mitigation Measure AQ-1, and additional impacts would not occur.

Table 8. Construction Criteria Pollutant Emissions

Phase	Year	Emissions (lbs/day)			
		ROG	NOx	PM_{10}	$PM_{2.5}$
I	2025	0.89	7.87	1.39	0.74
	2026	1.33	1.07	0.09	0.05

Phase	Year	Emissions (lbs/day)			
		ROG	NOx	PM_{10}	$PM_{2.5}$
II	2030	0.83	7.10	1.52	0.76
	2031	1.23	0.43	0.04	0.02
III	2035	0.78	6.32	1.99	0.98
	2036	1.25	0.62	0.05	0.02
BAAQMD Thresholds		**54**	**54**	**82**	**54**
Exceed BAAQMD Thresholds?		***No***	***No***	***No***	***No***

Note: BAAQMD thresholds for PM_{10} and $PM_{2.5}$ are intended for exhaust emissions only. The emissions presented above include total particulate matter (exhaust emissions and fugitive emissions) and are therefore a conservative estimate.

Source: Attachment A.

Operational Emissions

The Project's operational emissions are provided in Table 9. As shown therein, operations of the Project would not result in emissions that exceed the BAAQMD operational thresholds.

Table 9. Operational Criteria Pollutant Emissions

Source	Emissions (lbs/day)			
	ROG	NOx	PM_{10}	$PM_{2.5}$
Mobile	1.06	0.56	1.51	0.39
Area	3.37	0.02	0.00	0.00
Energy	0.08	1.42	0.11	0.11
Off-Road	0.32	3.04	0.07	0.06
Stationary	0.13	0.41	0.02	0.02
Total	*4.97*	*5.46*	*1.71*	*0.58*
BAAQMD Thresholds	**54**	**54**	**82**	**54**
Total (tons/year)	*0.91*	*1.00*	*0.31*	*0.11*
BAAQMD Thresholds (tons/year)	**10**	**10**	**15**	**10**
Exceed BAAQMD Thresholds?	***No***	***No***	***No***	***No***

Note: Totals may not appear to sum due to rounding.

Source: Attachment A.

Overall, as shown in Table 8 and Table 9, the Project's construction and operational emissions would not exceed BAAQMD thresholds for all criteria air pollutants.

HEALTH RISK ANALYSIS

The General Plan EIR found that, with implementation of Mitigation Measures AQ-3, AQ-4, and AQ-5, the potential impact from sensitive receptors being exposed to substantial concentrations of TACs would be reduced to a less-than-significant level. Mitigation Measures AQ-3 and AQ-4 apply only to residential development projects and are not applicable to the Project.

AQ-3. *Add the following new policy to the Gilroy 2040 General Plan Natural and Cultural Resources element:*

> ***Sensitive Receptors within 500 feet of U.S. Highway 101.*** *Require modeling of toxic air contaminants, and include mitigation as may be appropriate, prior to approval of new residential development within 500 feet of U.S. Highway 101, to ensure significant health risks are mitigated.*

AQ-4. *Add the following new policy to the Gilroy 2040 General Plan Natural and Cultural Resources element:*

> ***Sensitive Receptors within 500 feet of Existing Point Sources or Existing Heavy Industrial Designated Areas.*** *Require modeling of toxic air contaminants, and include mitigation as may be appropriate, prior to approval of new residential development within the Downtown Specific Plan within 500 feet of existing point sources with screening factors in excess of thresholds, or within 500 feet of areas designated Heavy Industrial, to ensure significant health risks are mitigated.*

AQ-5. *Add the following new policy to the Gilroy 2040 General Plan Natural and Cultural Resources element:*

> ***New Industrial Uses within 500 feet of Sensitive Receptors.*** *Require modeling, and include mitigation as may be appropriate, of toxic air contaminants prior to approval of new industrial development within 500 feet of residential uses, Neighborhood District designations, or the Downtown Specific Plan, to ensure significant health risks are mitigated.*

The following discussion addresses whether the Project would expose sensitive receptors to construction-generated fugitive dust (PM_{10}), construction-generated DPM, operational CO hotspots, or other operational related TACs.

Construction Health Risk

Fugitive dust would be generated from site grading and other earth-moving activities. Most of this fugitive dust would remain localized and would be deposited near the Project site, but the potential exists for impacts from fugitive dust to occur. However, all projects within the jurisdiction of the BAAQMD are required to implement all of the BAAQMD's BCMMs.[27] The Project's required implementation of the BAAQMD's BCMMs, as well as compliance with BAAQMD Regulation 6, Particulate Matter and Visible Emissions, would minimize construction-related fugitive dust emissions. Furthermore, the required implementation of

[27] BAAQMD. 2023. Current Rules. Website: https://www.baaqmd.gov/rules-and-compliance/current-rules. Accessed February 7, 2024.

General Plan EIR Mitigation Measure AQ-2 would ensure that a dust-control measures are implemented during construction.

General Plan Policy NCR 3.19: New Industrial Uses within 500 feet of Sensitive Receptors, modeling, and mitigation as appropriate, is required to ensure that health risks do not occur for industrial uses within 500 feet of sensitive receptors. The Project would be constructed in three phases. Phase I would construct Building 1 on the northwest corner of the site from 2025-2026; Phase II would construct Building 2 on the southwest corner of the site from 2030-2031; and Phase III would construction Building 3 on the northeast corner of the site from 2035-2036. Phases I and II would occur over 500 feet from the nearest receptor, therefore, consistent with General Plan Policy NCR 3.19, the Project would not be required to evaluate health risks. Furthermore, according to CARB, DPM emissions have also been shown to be highly dispersive in the atmosphere with the DPM concentration decreasing with distance from the source (CARB 2005). Therefore, the concentration of DPM at the nearest receptors would be substantially reduced at nearby receptors during Phase I and II. Phase III would occur within 500 feet of existing sensitive receptors. However, the exposure duration would be short-term and construction equipment and vehicles would be required to comply with the regulatory measures such as Advanced Clean Cars II that requires all new cars and light trucks sold in California by 2035 be zero-emission vehicles and Advanced Clean Fleet that phases in the use of zero emissions heavy duty trucks. The implementation of these measures would be in place by Phase III construction and that would reduce DPM emissions as compared to Phase I and Phase II emissions. Therefore, the risk posed to sensitive receptors would be less than significant.

Operational Health Risk

With regard to localized CO emissions, according to BAAQMD, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour in order to generate a significant CO impact. Based on the trip generation rate provided by CalEEMod, the Project is expected to generate up to 3,144 vehicle trips per day. The increase in trips per day attributable to the Project is not sufficient to increase traffic volumes at any nearby intersection by more than 44,000 vehicles per hour. As a result, vehicle trips associated with Project operations would not exceed the screening criteria of BAAQMD and the 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.

The greatest potential for exposure to TACs during long-term operations is typically from the use of heavy-duty diesel trucks and stationary generators that use diesel fuel. As an industrial project, the Project would generate diesel truck trips and may include backup diesel generators. However, pursuant to General Plan EIR Mitigation Measure AQ-5, modeling is required to ensure that health risks do not occur.

ODORS

The General Plan EIR found that buildout pursuant to the General Plan would result in a less than significant impact related to odors.

As noted in the General Plan EIR, major odor sources located in or near Gilroy are the wastewater treatment plant and the food processing plants along Pacheco Pass Highway. The Project would not involve either land use, and impacts would not occur.

Greenhouse Gas Analysis

The General Plan EIR evaluated impacts related to GHG emissions in Section 3.7. The General Plan EIR concluded that impacts related to GHGs would be significant and unavoidable until the City adopts and implements a qualified GHG reduction plan, as required by Mitigation Measures GHG-1 and GHG-2. Both measures are intended to be implemented at the City level, and are not applicable to the Project.

GHG-1. *To further enhance GHG reductions from community activities and provide CEQA streamlining benefits for analysis of GHG impacts, Gilroy 2040 General Plan Policy NCR 3.14 shall be replaced, as follows:*

> ~~*NCR 3.14 Maximum Greenhouse Gas Emission Reductions. Pursue funding through new development as a means to minimize taxpayer funding. Implement the maximum feasible number of greenhouse emission reduction measures in order for the General Plan to achieve the status of a CEQA Qualifying Climate Action Plan, and the accompanying CEQA streamlining benefits. (See CEQA Guidelines, § 15183.5 (b)(1)).*~~
>
> ***NCR 3.14 Prepare a Qualified GHG Reduction Plan****. Pursue funding through grants and any other appropriate funding mechanisms, including California Air Resources Board's list of programs and projects, California State Coastal Conservancy's Climate Ready Grant Program, Climate Corps, and CivicSpark. The plan may be prepared by amending the Gilroy 2040 General Plan or by preparing a separate GHG reduction plan. In either case, requirements for a qualified GHG reduction plan as identified in CEQA Guidelines, § 15183.5 (b)(1) must met. Accordingly, definition and implementation of GHG reduction measures in addition to those identified in Gilroy 2040 General Plan policies and programs may be required to show progress towards meeting the reduction targets established in the GHG reduction plan.*

GHG-2. *To implement modified policy NCR 3.14 identified in mitigation measure GHG-1, the Gilroy 2040 General Plan shall include an implementation program entitled "Qualified GHG Reduction Plan." The implementation program shall require that that city prepare and adopt a qualified GHG reduction plan within three years of the date the Gilroy 2040 General Plan is adopted.*

> *When drafting the Climate Action Plan / Qualified Greenhouse Gas (GHG) Reduction Strategy, the City will consider recommendations outlined in BAAQMD's CEQA Guidelines, and any requirements of AB 32, SB 32, Executive Order B-55-18, and SB 100.*

As noted previously, the BAAQMD's applicable thresholds for the significance of GHG emissions are qualitative. However, consistent with CEQA Guidelines Section 15064.4(b)(2), the City of Gilroy has determined that a quantitative thresholds of significance would be more appropriate. Specifically, the lead agency has elected to rely on the SCAQMD's interim GHG threshold of 3,000 MT CO2e per year for residential and commercial land use projects, including industrial parks and warehouses.[28]

[28] South Coast Air Quality Management District. 2008. Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans, Available online at: https://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2. Accessed August 26, 2024.

EMISSIONS INVENTORY

The estimated construction GHG emissions are shown in Table 10, and operational GHG emissions are shown in Table 11. Consistent with SCAQMD guidelines, construction GHG emissions were amortized over the lifetime of the Project, assumed to be 30 years, then added to annual operational emissions.[29] As shown in Table 11, the Project's annual GHG emissions would not exceed the applicable threshold used in this analysis.

Table 10. Construction Greenhouse Gas Emissions

Phase	Construction Year	Emissions ($MTCO_2e$)
I	2025	375.82
	2026	50.92
II	2030	403.63
	2031	21.10
III	2035	396.73
	2036	36.17
Total		**1,284.37**
Amortized Construction Emissions		**42.81**

Note: Totals may not appear to sum due to rounding.
Source: Attachment A.

Table 11. Operational Greenhouse Gas Emissions

Source	Emissions ($MTCO_2e$ per year)
Mobile	235.94
Area	1.77
Energy	414.05
Water	54.91
Waste	46.76
Refrigerants	5.21
Off-Road	162.37
Stationary	11.46
Amortized Construction	42.81
Total	**975.28**
SCAQMD Threshold	**3,000**
Exceed?	**No**

[29] Ibid.

Source	Emissions ($MTCO_2e$ per year)

Note: Totals may not appear to sum due to rounding.
Source: Attachment A.

CONSISTENCY WITH CARB 2022 SCOPING PLAN

Pursuant to Appendix G of the *CEQA Guidelines*, a significant GHG impact is identified if a project could conflict with applicable GHG reduction plans, policies, or regulations. In order to demonstrate consistency with applicable plans, policies, and regulations, the Project is compared to the CARB's 2022 Scoping Plan. Table 12 considers the Project's consistency with Scoping Plan policies that may be applicable to the proposed project.

Table 12. Project Consistency with CARB 2022 Scoping Plan

Measure	Consistency Determination
Deploy ZEVs and reduce driving demand	**Consistent.** The Project would not directly deploy ZEVs however, the Project would be consistent with the City building standards and include 39 electric vehicle (EV) parking spaces which would encourage site employees and visitors to use zero emissions vehicles. Moreover, the Project would be subject to CARB's ACT Rule that assures that a minimum amount of electric truck sales occurs every year between 2024 to 2035. The Project would also be subject to the ACF Regulation. The ACF Regulation requires fleets to transition to ZEVs and requires manufacturers to only produce ZEV trucks starting in the 2036 model year. Therefore, the Project would be required to adhere to more stringent CARB regulations as the Project comes online.
Coordinate supply of liquid fossil fuels with declining CA fuel demand	**Not Applicable.** This measure is aimed at the State to work with fuel manufacturers. However, the Project would not interfere with this measure, as the Project would comply with all State rules and regulations to reduce fossil fuels. Specifically, the Project would be subject to CARB's ACT Rule that assures that a minimum amount of electric truck sales occurs every year between 2024 to 2035. The Project would also be subject to the and ACF Regulation. The ACF Regulation requires fleets to transition to ZEV and requires manufacturers to only produce ZEV trucks starting in the 2036 model year. Therefore, the Project would be required to adhere to more stringent CARB regulations as the Project comes online.
Generate clean electricity	**Consistent.** The Project would construct solar ready areas on all proposed building roofs.
Decarbonize Buildings	**Consistent.** The Project be required to comply with all California Green Building Standards that sets design requirements including light-emitting diode (LED) lighting and EV charging spaces.
Decarbonize Industrial Energy Supply	**Consistent.** Electricity and natural gas would be provided to the Project site by PG&E. In 2023, PG&E's electric power mix included 100 percent GHG free sources (PG&E 2024). PG&E would be subject to California's RPS and would be required to have a power mix from 100 percent GHG free sources by 2045.

Measure	Consistency Determination
Reduce non-combustion emissions (Methane)	**Not Applicable.** The Project would not produce any fossil fuels and would not include any livestock or agricultural practices that would produce methane.
Reduce non-combustion emissions (Hydrofluorocarbons [HFCs])	**Consistent.** CARB has issued a series of HFC prohibitions for aerosols, foams, refrigerants, cold storage warehouses, vending machines, and chillers (CARB 2023c). The Project would be required to adhere to all HFC prohibitions.
Compensate for remaining emissions	**Not Applicable.** This measure is aimed at the State to reduce the remainder of the GHG emissions.

Source: CARB 2022.

Energy Analysis

The General Plan EIR evaluated impacts related to energy resources and energy conservation in Section 3.21. Implementation of the General Plan was found to result in a less than significant impact related to resulting in the wasteful or inefficient consumption of energy resources, and no impact would occur related to conflicting with a State or local plan for renewable energy or energy efficiency.[30]

The energy requirements for the Project were determined using the construction and operational estimates generated from the calculation worksheets for energy consumption (Attachment B). This impact addresses the energy consumption from both short-term construction and long-term operations, and they are discussed separately below.

CONSTRUCTION ENERGY DEMAND

During construction of the Project, energy resources would be consumed in the form of diesel and gasoline fuel from the use of off-road equipment (i.e., tractors, excavators, cranes) and on-road vehicles (i.e., construction employee commutes, haul trucks).

As noted previously, construction timing of Phase II and Phase III is dependent on economic conditions, but is assumed to be similar to the construction of Phase I. Accordingly, the energy demand was calculated for Phase I only, but is assumed to be similar for Phase II and Phase III.

Off-Road Equipment

Construction activities associated with buildout of Phase I, including site preparation, grading, building construction, and paving, were estimated to consume 28,507 gallons of diesel fuel from the use of off-road equipment. Assuming the same fuel demand for construction of Phase II and Phase III, all Project construction activities would consume approximately 85,521 gallons of diesel fuel from off-road equipment.

[30] City of Gilroy. 2020. Gilroy 2040 General Plan EIR, SCH# 2015082014. Website: https://cityofgilroy.org/DocumentCenter/View/11308/Draft-EIR---Gilroy-2040-General-Plan-?bidId=. Accessed February 7, 2024.

On-Road Vehicles

On-road vehicles for construction workers, vendors, and haulers would require fuel for travel to and from the site during construction. Table 13 provides an estimate of the total on-road vehicle fuel usage during construction of Phase I.

Table 13. Construction of Phase I – On-Road Equipment Fuel Consumption

Project Component	Average Fuel Economy (miles/gallon)	Total VMT	Total Fuel Consumption (gallons)
Worker Trips	27.72	303,264	10,939
Vendor Trips	9.26	74,520	8,049
Haul Trips	5.94	23,200	3,907
Total Phase I On-Road Trips		**400,984**	**22,894**

Notes:
Totals may not appear to sum exactly due to rounding.
VMT = vehicle miles traveled
Source: Attachment B.

As shown in the table, construction of Phase I was estimated to consume 22,894 gallons of fuel from on-road vehicles. It follows that construction of all Project phases would consume approximately 68,682 gallons of fuel from on-road vehicles.

Overall, construction activities associated with the proposed Project would result in the consumption of petroleum-based fuels. However, there are no unusual Project characteristics that would necessitate the use of construction equipment or vehicles that would be less energy efficient than at comparable construction sites in other parts of the state. Therefore, it is expected that construction fuel consumption associated with the Project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

OPERATIONAL ENERGY DEMAND

During operations of the Project, energy would be required to power the proposed buildings, to fuel any off-road equipment, and to fuel the vehicles travelling to and from the site. Operational energy demand is calculated for full Project buildout.

Building Energy

The proposed buildings and parking areas would require energy for normal operations, such as lighting and temperature controls. The Project would not consume any natural gas. Over the course of a year, operational electricity consumption would total 1,418,447 kWh. It is noted that the proposed buildings would comply with the energy efficiency standards set forth in the version of the California Building Standards Code in effect at the time of construction. Therefore, the Project's total energy consumption and would not result in the inefficient, wasteful, or unnecessary use of energy.

Operational Equipment Energy

During operations, it was assumed that each building would include three diesel-powered forklifts and one backup generator. In total, the Project's operational equipment was estimated to consume approximately 18,413 gallons of diesel fuel per year.

Transportation Energy

Employees of the Project would travel to and from the site during normal operations. Table 14 provides an estimate of the daily and annual fuel consumed by vehicles traveling to and from the Project site.

Table 14. Long-Term Operational Vehicle Fuel Consumption

Vehicle Type	Percent of Vehicle Trips	Average Fuel Economy (miles/gallon)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	0.4990	36.35	10,922
Light Trucks and Medium Duty Vehicles (LDT1, LDT2, MDV)	0.4322	28.12	12,229
Light-Heavy to Heavy-Heavy Diesel Trucks (LHD1, LHD2, MHDT, HHDT)	0.0617	10.02	4,898
Motorcycles (MCY)	0.0039	43.21	72
Other (OBUS, UBUS, SBUS, MH)	0.0032	8.02	319
Total	1.0000	--	**28,440**

Notes:
VMT = vehicle miles traveled
Percent of Vehicle Trips and Daily VMT provided by CalEEMod.
Other" consists of buses and motor homes.
Source: Attachment B.

As shown in the table, annual vehicular fuel consumption is estimated to be 28,440 gallons of a combination of gasoline and diesel fuel. The Project would not be any more inefficient, wasteful, or unnecessary than other vehicle uses in the region.

Based on the analysis above, during operations, the Project would not result in a potential significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources; therefore, the impact would be less than significant. The Project would not result in any new or more severe impacts beyond what was evaluated in the General Plan EIR, and the impact finding would remain unchanged.

Reference: Air Quality Technical Memorandum for the Heat Wave Project

Conclusion

As presented above, with implementation of mitigation, the Project would not result in impacts related to air quality, GHG emissions, and energy resources that are more severe than those identified in the City of Gilroy 2040 General Plan EIR. No new impacts would occur.

Regards,

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Attachment: Attachment A, CalEEMod Output Files
Attachment B, Energy Calculations

ATTACHMENT A, CALEEMOD OUTPUT FILES

Gilroy HeatWave Detailed Report

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1.1. Basic Project Information

Data Field	Value
Project Name	Gilroy HeatWave
Construction Start Date	2/3/2025
Operational Year	2036
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	36.4
Location	8875 Murray Ave, Gilroy, CA 95020, USA
County	Santa Clara
City	Gilroy
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1939
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

General Heavy Industry	121	1000sqft	2.77	120,786	0.00	—	—	—
Parking Lot	296	Space	2.66	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.58	1.32	11.3	15.4	0.03	0.44	0.56	1.00	0.40	0.14	0.54	—	3,367	3,367	0.13	0.11	3.13	3,407
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.00	21.7	31.7	30.8	0.05	1.37	19.8	21.2	1.26	10.1	11.4	—	7,220	7,220	0.47	0.68	0.25	7,435
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.07	1.33	7.87	10.8	0.02	0.31	1.82	1.99	0.28	0.83	0.98	—	2,413	2,413	0.10	0.08	0.89	2,438
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.24	1.44	1.97	< 0.005	0.06	0.33	0.36	0.05	0.15	0.18	—	400	400	0.02	0.01	0.15	404

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.58	1.32	11.3	15.4	0.03	0.44	0.56	1.00	0.40	0.14	0.54	—	3,367	3,367	0.13	0.11	3.13	3,407
2026	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2030	1.29	1.08	9.01	14.7	0.03	0.26	0.56	0.82	0.24	0.14	0.38	—	3,267	3,267	0.13	0.09	1.78	3,300
2031	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
2035	1.15	0.96	7.84	14.1	0.03	0.18	0.56	0.74	0.17	0.14	0.31	—	3,167	3,167	0.12	0.08	0.85	3,195
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.00	3.37	31.7	30.8	0.05	1.37	19.8	21.2	1.26	10.1	11.4	—	7,220	7,220	0.47	0.68	0.25	7,435
2026	1.49	21.7	10.7	14.9	0.03	0.39	0.56	0.94	0.36	0.14	0.49	—	3,318	3,318	0.14	0.11	0.07	3,355
2030	3.52	2.96	25.2	28.9	0.05	1.07	19.8	20.9	0.98	10.1	11.1	—	5,423	5,423	0.24	0.27	0.07	5,443
2031	2.03	21.7	14.9	24.6	0.04	0.46	0.68	1.14	0.42	0.17	0.59	—	4,835	4,835	0.19	0.10	0.05	4,871
2035	2.96	2.50	19.2	23.2	0.05	0.74	19.8	20.5	0.68	10.1	10.8	—	5,416	5,416	0.22	0.18	0.03	5,434
2036	1.12	21.7	7.64	13.8	0.03	0.17	0.56	0.73	0.16	0.14	0.30	—	3,124	3,124	0.12	0.08	0.02	3,151
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.07	0.89	7.87	10.0	0.02	0.31	1.08	1.39	0.28	0.46	0.74	—	2,242	2,242	0.10	0.08	0.89	2,270
2026	0.15	1.33	1.07	1.56	< 0.005	0.04	0.05	0.09	0.04	0.01	0.05	—	305	305	0.01	0.01	0.10	308
2030	1.00	0.83	7.10	10.8	0.02	0.22	1.30	1.52	0.20	0.56	0.76	—	2,413	2,413	0.10	0.07	0.55	2,438
2031	0.06	1.23	0.43	0.75	< 0.005	0.01	0.02	0.04	0.01	0.01	0.02	—	127	127	< 0.005	< 0.005	0.02	127
2035	0.93	0.78	6.32	10.4	0.02	0.17	1.82	1.99	0.16	0.83	0.98	—	2,376	2,376	0.09	0.06	0.25	2,396
2036	0.09	1.25	0.62	1.13	< 0.005	0.01	0.04	0.05	0.01	0.01	0.02	—	217	217	0.01	< 0.005	0.02	218
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.19	0.16	1.44	1.83	< 0.005	0.06	0.20	0.25	0.05	0.08	0.14	—	371	371	0.02	0.01	0.15	376
2026	0.03	0.24	0.19	0.29	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	50.4	50.4	< 0.005	< 0.005	0.02	50.9

2030	0.18	0.15	1.30	1.97	< 0.005	0.04	0.24	0.28	0.04	0.10	0.14	—	400	400	0.02	0.01	0.09	404
2031	0.01	0.22	0.08	0.14	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	21.0	21.0	< 0.005	< 0.005	< 0.005	21.1
2035	0.17	0.14	1.15	1.90	< 0.005	0.03	0.33	0.36	0.03	0.15	0.18	—	393	393	0.02	0.01	0.04	397
2036	0.02	0.23	0.11	0.21	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.9	35.9	< 0.005	< 0.005	< 0.005	36.2

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.47	7.90	12.4	31.7	0.05	0.51	2.22	2.73	0.50	0.56	1.06	134	7,119	7,254	14.0	0.27	33.5	7,717
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.49	6.99	12.5	26.5	0.05	0.50	2.22	2.72	0.49	0.56	1.06	134	6,974	7,108	14.1	0.27	31.5	7,573
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.26	4.97	5.46	16.7	0.03	0.21	1.50	1.71	0.20	0.38	0.58	134	5,048	5,183	14.0	0.23	32.1	5,632
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.41	0.91	1.00	3.06	0.01	0.04	0.27	0.31	0.04	0.07	0.11	22.2	836	858	2.31	0.04	5.31	932

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	1.67	1.59	0.74	8.84	0.02	0.01	2.22	2.23	0.01	0.56	0.57	—	2,129	2,129	0.10	0.09	2.06	2,161
Area	0.94	3.81	0.04	5.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	21.6	21.6	< 0.005	< 0.005	—	21.7
Energy	0.16	0.08	1.42	1.19	0.01	0.11	—	0.11	0.11	—	0.11	—	2,488	2,488	0.28	0.02	—	2,501
Water	—	—	—	—	—	—	—	—	—	—	—	53.5	101	155	5.50	0.13	—	332
Waste	—	—	—	—	—	—	—	—	—	—	—	80.7	0.00	80.7	8.07	0.00	—	282
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.4	31.4
Off-Road	0.54	0.45	4.27	9.24	0.01	0.09	—	0.09	0.09	—	0.09	—	1,372	1,372	0.06	0.01	—	1,377
Stationary	2.16	1.97	5.96	7.15	0.01	0.29	0.00	0.29	0.29	0.00	0.29	0.00	1,007	1,007	0.04	0.01	0.00	1,011
Total	5.47	7.90	12.4	31.7	0.05	0.51	2.22	2.73	0.50	0.56	1.06	134	7,119	7,254	14.0	0.27	33.5	7,717
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.63	1.54	0.86	8.92	0.02	0.01	2.22	2.23	0.01	0.56	0.57	—	2,005	2,005	0.12	0.10	0.05	2,039
Area	—	2.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.16	0.08	1.42	1.19	0.01	0.11	—	0.11	0.11	—	0.11	—	2,488	2,488	0.28	0.02	—	2,501
Water	—	—	—	—	—	—	—	—	—	—	—	53.5	101	155	5.50	0.13	—	332
Waste	—	—	—	—	—	—	—	—	—	—	—	80.7	0.00	80.7	8.07	0.00	—	282
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.4	31.4
Off-Road	0.54	0.45	4.27	9.24	0.01	0.09	—	0.09	0.09	—	0.09	—	1,372	1,372	0.06	0.01	—	1,377
Stationary	2.16	1.97	5.96	7.15	0.01	0.29	0.00	0.29	0.29	0.00	0.29	0.00	1,007	1,007	0.04	0.01	0.00	1,011
Total	4.49	6.99	12.5	26.5	0.05	0.50	2.22	2.72	0.49	0.56	1.06	134	6,974	7,108	14.1	0.27	31.5	7,573
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.11	1.06	0.56	5.88	0.01	0.01	1.50	1.51	0.01	0.38	0.39	—	1,402	1,402	0.08	0.07	0.62	1,425
Area	0.46	3.37	0.02	2.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.7
Energy	0.16	0.08	1.42	1.19	0.01	0.11	—	0.11	0.11	—	0.11	—	2,488	2,488	0.28	0.02	—	2,501
Water	—	—	—	—	—	—	—	—	—	—	—	53.5	101	155	5.50	0.13	—	332

Waste	—	—	—	—	—	—	—	—	—	—	—	80.7	0.00	80.7	8.07	0.00	—	282
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.4	31.4
Off-Road	0.38	0.32	3.04	6.59	0.01	0.07	—	0.07	0.06	—	0.06	—	977	977	0.04	0.01	—	981
Stationary	0.15	0.13	0.41	0.49	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	69.0	69.0	< 0.005	< 0.005	0.00	69.2
Total	2.26	4.97	5.46	16.7	0.03	0.21	1.50	1.71	0.20	0.38	0.58	134	5,048	5,183	14.0	0.23	32.1	5,632
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.20	0.19	0.10	1.07	< 0.005	< 0.005	0.27	0.28	< 0.005	0.07	0.07	—	232	232	0.01	0.01	0.10	236
Area	0.08	0.62	< 0.005	0.47	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.76	1.76	< 0.005	< 0.005	—	1.77
Energy	0.03	0.01	0.26	0.22	< 0.005	0.02	—	0.02	0.02	—	0.02	—	412	412	0.05	< 0.005	—	414
Water	—	—	—	—	—	—	—	—	—	—	—	8.86	16.7	25.6	0.91	0.02	—	54.9
Waste	—	—	—	—	—	—	—	—	—	—	—	13.4	0.00	13.4	1.34	0.00	—	46.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.21	5.21
Off-Road	0.07	0.06	0.56	1.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	162	162	0.01	< 0.005	—	162
Stationary	0.03	0.02	0.07	0.09	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5
Total	0.41	0.91	1.00	3.06	0.01	0.04	0.27	0.31	0.04	0.07	0.11	22.2	836	858	2.31	0.04	5.31	932

3. Construction Emissions Details

3.1. Site Prep 1 (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movemen:	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.87	0.83	< 0.005	0.04	—	0.04	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movemen:	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movemen:	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.61	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	139	139	< 0.005	0.01	0.02	141
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.85	3.85	< 0.005	< 0.005	0.01	3.90
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65
Vendor	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	0.00
Hauling	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	0.00

3.3. Site Prep 2 (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.47	2.92	25.2	28.4	0.05	1.07	—	1.07	0.98	—	0.98	—	5,296	5,296	0.21	0.04	—	5,314

Dust From Material Movemen:	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.69	0.78	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movemen:	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.14	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movemen:	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	127	127	< 0.005	0.01	0.01	129
Vendor	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	0.00
Hauling	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	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.52	3.52	< 0.005	< 0.005	< 0.005	3.54
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.58	0.58	< 0.005	< 0.005	< 0.005	0.59
Vendor	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	0.00
Hauling	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	0.00

3.5. Site Prep 3 (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.93	2.46	19.2	22.9	0.05	0.74	—	0.74	0.68	—	0.68	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movemen:	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.05	1.25	< 0.005	0.04	—	0.04	0.04	—	0.04	—	290	290	0.01	< 0.005	—	291

Dust From Material Movemen:	—	—	—	—	—	—	1.08	1.08	—	0.55	0.55	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	48.0	48.0	< 0.005	< 0.005	—	48.2
Dust From Material Movemen:	—	—	—	—	—	—	0.20	0.20	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.35	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	< 0.005	120
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.62	6.62	< 0.005	< 0.005	< 0.005	6.65
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.10	1.10	< 0.005	< 0.005	< 0.005	1.10
Vendor	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	0.00

Hauling	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	0.00

3.7. Grading 1 (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movemen:	—	—	—	—	—	—	7.10	7.10	—	3.43	3.43	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	81.1	81.1	< 0.005	< 0.005	—	81.4
Dust From Material Movemen:	—	—	—	—	—	—	0.19	0.19	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.5

Dust From Material Movemen:	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	119	119	< 0.005	0.01	0.01	121
Vendor	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	0.00
Hauling	0.43	0.08	5.44	2.55	0.03	0.08	1.07	1.15	0.05	0.29	0.34	—	4,141	4,141	0.35	0.65	0.23	4,345
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.30	3.30	< 0.005	< 0.005	0.01	3.35
Vendor	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	0.00
Hauling	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	113	113	0.01	0.02	0.11	119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.55
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	0.02	19.7

3.9. Grading 2 (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.76	1.48	12.6	17.3	0.03	0.51	—	0.51	0.47	—	0.47	—	2,959	2,959	0.12	0.02	—	2,969
Dust From Material Movemen:	—	—	—	—	—	—	7.09	7.09	—	3.43	3.43	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.69	0.95	< 0.005	0.03	—	0.03	0.03	—	0.03	—	162	162	0.01	< 0.005	—	163
Dust From Material Movemen:	—	—	—	—	—	—	0.39	0.39	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.17	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	26.8	26.8	< 0.005	< 0.005	—	26.9
Dust From Material Movemen:	—	—	—	—	—	—	0.07	0.07	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.38	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.01	111
Vendor	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	0.00
Hauling	0.14	0.02	1.94	0.95	0.01	0.02	0.46	0.48	0.02	0.12	0.15	—	1,553	1,553	0.11	0.25	0.06	1,629
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.04	6.04	< 0.005	< 0.005	0.01	6.07
Vendor	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	0.00
Hauling	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	85.1	85.1	0.01	0.01	0.06	89.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.00	1.00	< 0.005	< 0.005	< 0.005	1.00
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.1	14.1	< 0.005	< 0.005	0.01	14.8

3.11. Grading 3 (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	10.1	15.4	0.03	0.36	—	0.36	0.33	—	0.33	—	2,959	2,959	0.12	0.02	—	2,969

Dust From Material Movemen:	—	—	—	—	—	—	7.09	7.09	—	3.43	3.43	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.55	0.85	< 0.005	0.02	—	0.02	0.02	—	0.02	—	162	162	0.01	< 0.005	—	163
Dust From Material Movemen:	—	—	—	—	—	—	0.39	0.39	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.8	26.8	< 0.005	< 0.005	—	26.9
Dust From Material Movemen:	—	—	—	—	—	—	0.07	0.07	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.30	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	102	102	< 0.005	< 0.005	< 0.005	103
Vendor	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	0.00
Hauling	0.08	0.02	1.22	0.56	0.01	0.02	0.33	0.34	0.02	0.09	0.11	—	976	976	0.06	0.15	0.02	1,023

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.68	5.68	< 0.005	< 0.005	< 0.005	5.70
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	53.5	53.5	< 0.005	0.01	0.02	56.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.94	0.94	< 0.005	< 0.005	< 0.005	0.94
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.85	8.85	< 0.005	< 0.005	< 0.005	9.28

3.13. BC 1 (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.76	0.64	5.93	7.40	0.01	0.25	—	0.25	0.23	—	0.23	—	1,361	1,361	0.06	0.01	—	1,365
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.08	1.35	< 0.005	0.04	—	0.04	0.04	—	0.04	—	225	225	0.01	< 0.005	—	226
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.17	0.12	2.07	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	435	435	0.01	0.02	1.72	442
Vendor	0.05	0.02	0.69	0.33	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	534	534	0.03	0.08	1.42	559
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.16	1.78	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	403	403	0.01	0.02	0.04	408
Vendor	0.05	0.02	0.72	0.34	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	534	534	0.03	0.08	0.04	558
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.08	0.99	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	231	231	0.01	0.01	0.42	234
Vendor	0.03	0.01	0.40	0.19	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	303	303	0.02	0.04	0.35	317
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.3	38.3	< 0.005	< 0.005	0.07	38.8
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	50.2	50.2	< 0.005	0.01	0.06	52.5
Hauling	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	0.00

3.15. BC 1 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.58	0.76	< 0.005	0.02	—	0.02	0.02	—	0.02	—	141	141	0.01	< 0.005	—	141
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.3	23.3	< 0.005	< 0.005	—	23.4
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.16	0.14	0.14	1.65	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	395	395	0.01	0.02	0.04	401
Vendor	0.05	0.02	0.69	0.32	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	525	525	0.03	0.08	0.03	549
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.5	23.5	< 0.005	< 0.005	0.04	23.8
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	30.8	30.8	< 0.005	< 0.005	0.03	32.2
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.88	3.88	< 0.005	< 0.005	0.01	3.94
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.10	5.10	< 0.005	< 0.005	0.01	5.34
Hauling	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	0.00

3.17. BC 2 (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.58	5.21	7.99	0.01	0.16	—	0.16	0.15	—	0.15	—	1,487	1,487	0.06	0.01	—	1,492
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.95	1.46	< 0.005	0.03	—	0.03	0.03	—	0.03	—	246	246	0.01	< 0.005	—	247
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.08	1.51	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	398	398	0.01	< 0.005	1.00	400
Vendor	0.04	0.01	0.54	0.28	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	472	472	0.03	0.07	0.78	494
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.09	1.30	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	369	369	0.01	0.02	0.03	374
Vendor	0.04	0.01	0.57	0.28	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	473	473	0.02	0.07	0.02	494
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.79	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	231	231	< 0.005	< 0.005	0.27	232
Vendor	0.03	0.01	0.35	0.17	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	293	293	0.02	0.04	0.21	306
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	38.3	38.3	< 0.005	< 0.005	0.04	38.5
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	48.5	48.5	< 0.005	0.01	0.03	50.7
Hauling	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	0.00

3.19. BC 2 (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.1	14.1	< 0.005	< 0.005	—	14.1
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.33	2.33	< 0.005	< 0.005	—	2.34
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.09	1.24	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	364	364	0.01	< 0.005	0.02	365
Vendor	0.04	0.01	0.54	0.27	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	456	456	0.02	0.07	0.02	477
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.16	2.16	< 0.005	< 0.005	< 0.005	2.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.68	2.68	< 0.005	< 0.005	< 0.005	2.80
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.36	0.36	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.46
Hauling	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	0.00

3.21. BC 3 (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.50	4.34	7.50	0.01	0.11	—	0.11	0.10	—	0.10	—	1,417	1,417	0.06	0.01	—	1,421
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.79	1.37	< 0.005	0.02	—	0.02	0.02	—	0.02	—	235	235	0.01	< 0.005	—	235
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.06	1.21	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	374	374	< 0.005	< 0.005	0.50	376
Vendor	0.03	0.01	0.44	0.24	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	396	396	0.02	0.06	0.35	414
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.03	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	347	347	0.01	< 0.005	0.01	348
Vendor	0.03	0.01	0.47	0.24	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	396	396	0.02	0.06	0.01	414
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.04	0.60	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	207	207	< 0.005	< 0.005	0.13	208
Vendor	0.02	0.01	0.27	0.14	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	234	234	0.01	0.03	0.09	245
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	34.3	34.3	< 0.005	< 0.005	0.02	34.4
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	38.8	38.8	< 0.005	0.01	0.01	40.5
Hauling	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	0.00

3.23. BC 3 (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.44	< 0.005	0.01	—	0.01	0.01	—	0.01	—	84.4	84.4	< 0.005	< 0.005	—	84.7
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.0	14.0	< 0.005	< 0.005	—	14.0

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	0.99	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	343	343	0.01	< 0.005	0.01	344
Vendor	0.03	0.01	0.45	0.24	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	384	384	0.02	0.06	0.01	401
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.2	12.2	< 0.005	< 0.005	0.01	12.3
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.5	13.5	< 0.005	< 0.005	< 0.005	14.1
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.02	2.02	< 0.005	< 0.005	< 0.005	2.03
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.24	2.24	< 0.005	< 0.005	< 0.005	2.34
Hauling	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	0.00

3.25. Paving 1 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.54	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	117	117	< 0.005	0.01	0.01	118
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.47	6.47	< 0.005	< 0.005	0.01	6.57
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.07	1.07	< 0.005	< 0.005	< 0.005	1.09
Vendor	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	0.00
Hauling	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	0.00

3.27. Coating 1 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	21.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	1.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.08	0.99	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	237	237	0.01	0.01	0.02	240
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.1	13.1	< 0.005	< 0.005	0.02	13.3
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.17	2.17	< 0.005	< 0.005	< 0.005	2.21
Vendor	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	0.00
Hauling	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	0.00

3.29. Coating 2 (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	21.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	1.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.73	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	215	215	< 0.005	< 0.005	0.01	216
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.01	12.0
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.97	1.97	< 0.005	< 0.005	< 0.005	1.98
Vendor	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	0.00
Hauling	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	0.00

3.31. Coating 3 (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.75	1.10	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134

Architect Coatings	—	21.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	1.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.58	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	203	203	< 0.005	< 0.005	0.01	204
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	0.01	11.3
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.86	1.86	< 0.005	< 0.005	< 0.005	1.87
Vendor	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	0.00
Hauling	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	0.00

3.33. Paving 3 (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.53	5.62	9.78	0.01	0.14	—	0.14	0.13	—	0.13	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.31	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.29	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	101	101	< 0.005	< 0.005	< 0.005	102
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.62	5.62	< 0.005	< 0.005	< 0.005	5.64
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.93
Vendor	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	0.00
Hauling	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	0.00

3.35. Paving 2 (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	6.13	9.88	0.01	0.21	—	0.21	0.19	—	0.19	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.34	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.7	13.7	< 0.005	< 0.005	—	13.8
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	108	108	< 0.005	< 0.005	0.01	108
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.96	5.96	< 0.005	< 0.005	0.01	5.99
Vendor	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	0.00
Hauling	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	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.99	0.99	< 0.005	< 0.005	< 0.005	0.99
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	1.67	1.59	0.74	8.84	0.02	0.01	2.22	2.23	0.01	0.56	0.57	—	2,129	2,129	0.10	0.09	2.06	2,161
Parking Lot	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	0.00
Total	1.67	1.59	0.74	8.84	0.02	0.01	2.22	2.23	0.01	0.56	0.57	—	2,129	2,129	0.10	0.09	2.06	2,161
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	1.63	1.54	0.86	8.92	0.02	0.01	2.22	2.23	0.01	0.56	0.57	—	2,005	2,005	0.12	0.10	0.05	2,039
Parking Lot	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	0.00
Total	1.63	1.54	0.86	8.92	0.02	0.01	2.22	2.23	0.01	0.56	0.57	—	2,005	2,005	0.12	0.10	0.05	2,039
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	0.20	0.19	0.10	1.07	< 0.005	< 0.005	0.27	0.28	< 0.005	0.07	0.07	—	232	232	0.01	0.01	0.10	236
Parking Lot	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	0.00
Total	0.20	0.19	0.10	1.07	< 0.005	< 0.005	0.27	0.28	< 0.005	0.07	0.07	—	232	232	0.01	0.01	0.10	236

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	736	736	0.12	0.01	—	744
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	56.8	56.8	0.01	< 0.005	—	57.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	793	793	0.13	0.02	—	801
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	736	736	0.12	0.01	—	744
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	56.8	56.8	0.01	< 0.005	—	57.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	793	793	0.13	0.02	—	801
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	122	122	0.02	< 0.005	—	123
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	9.41	9.41	< 0.005	< 0.005	—	9.50
Total	—	—	—	—	—	—	—	—	—	—	—	—	131	131	0.02	< 0.005	—	133

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.16	0.08	1.42	1.19	0.01	0.11	—	0.11	0.11	—	0.11	—	1,695	1,695	0.15	< 0.005	—	1,700
Parking Lot	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
Total	0.16	0.08	1.42	1.19	0.01	0.11	—	0.11	0.11	—	0.11	—	1,695	1,695	0.15	< 0.005	—	1,700
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.16	0.08	1.42	1.19	0.01	0.11	—	0.11	0.11	—	0.11	—	1,695	1,695	0.15	< 0.005	—	1,700
Parking Lot	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
Total	0.16	0.08	1.42	1.19	0.01	0.11	—	0.11	0.11	—	0.11	—	1,695	1,695	0.15	< 0.005	—	1,700
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	0.03	0.01	0.26	0.22	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	281

Parking Lot	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
Total	0.03	0.01	0.26	0.22	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	281

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.94	0.86	0.04	5.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	21.6	21.6	< 0.005	< 0.005	—	21.7
Total	0.94	3.81	0.04	5.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	21.6	21.6	< 0.005	< 0.005	—	21.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	2.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.08	0.08	< 0.005	0.47	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.76	1.76	< 0.005	< 0.005	—	1.77
Total	0.08	0.62	< 0.005	0.47	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.76	1.76	< 0.005	< 0.005	—	1.77

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	53.5	101	155	5.50	0.13	—	332
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	53.5	101	155	5.50	0.13	—	332
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	53.5	101	155	5.50	0.13	—	332

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	53.5	101	155	5.50	0.13	—	332
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	8.86	16.7	25.6	0.91	0.02	—	54.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8.86	16.7	25.6	0.91	0.02	—	54.9

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	80.7	0.00	80.7	8.07	0.00	—	282
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.7	0.00	80.7	8.07	0.00	—	282
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	80.7	0.00	80.7	8.07	0.00	—	282

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.7	0.00	80.7	8.07	0.00	—	282
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	13.4	0.00	13.4	1.34	0.00	—	46.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.4	0.00	13.4	1.34	0.00	—	46.8

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.4	31.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.4	31.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.4	31.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.4	31.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Heavy Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.21	5.21
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.21	5.21

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.54	0.45	4.27	9.24	0.01	0.09	—	0.09	0.09	—	0.09	—	1,372	1,372	0.06	0.01	—	1,377
Total	0.54	0.45	4.27	9.24	0.01	0.09	—	0.09	0.09	—	0.09	—	1,372	1,372	0.06	0.01	—	1,377
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.54	0.45	4.27	9.24	0.01	0.09	—	0.09	0.09	—	0.09	—	1,372	1,372	0.06	0.01	—	1,377
Total	0.54	0.45	4.27	9.24	0.01	0.09	—	0.09	0.09	—	0.09	—	1,372	1,372	0.06	0.01	—	1,377
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Forklifts	0.07	0.06	0.56	1.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	162	162	0.01	< 0.005	—	162
Total	0.07	0.06	0.56	1.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	162	162	0.01	< 0.005	—	162

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	2.16	1.97	5.96	7.15	0.01	0.29	0.00	0.29	0.29	0.00	0.29	0.00	1,007	1,007	0.04	0.01	0.00	1,011
Total	2.16	1.97	5.96	7.15	0.01	0.29	0.00	0.29	0.29	0.00	0.29	0.00	1,007	1,007	0.04	0.01	0.00	1,011
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	2.16	1.97	5.96	7.15	0.01	0.29	0.00	0.29	0.29	0.00	0.29	0.00	1,007	1,007	0.04	0.01	0.00	1,011
Total	2.16	1.97	5.96	7.15	0.01	0.29	0.00	0.29	0.29	0.00	0.29	0.00	1,007	1,007	0.04	0.01	0.00	1,011
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.03	0.02	0.07	0.09	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5
Total	0.03	0.02	0.07	0.09	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.4	11.4	< 0.005	< 0.005	0.00	11.5

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Prep 1	Site Preparation	2/3/2025	2/14/2025	5.00	10.0	—
Site Prep 2	Site Preparation	1/7/2030	1/18/2030	5.00	10.0	—
Site Prep 3	Site Preparation	1/8/2035	2/2/2035	5.00	20.0	—
Grading 1	Grading	2/17/2025	2/28/2025	5.00	10.0	—

Grading 2	Grading	1/21/2030	2/15/2030	5.00	20.0	—
Grading 3	Grading	2/5/2035	3/2/2035	5.00	20.0	—
BC 1	Building Construction	3/17/2025	1/30/2026	5.00	230	—
BC 2	Building Construction	2/18/2030	1/3/2031	5.00	230	—
BC 3	Building Construction	3/5/2035	1/18/2036	5.00	230	—
Paving 1	Paving	2/2/2026	2/27/2026	5.00	20.0	—
Coating 1	Architectural Coating	3/2/2026	3/27/2026	5.00	20.0	—
Coating 2	Architectural Coating	2/3/2031	2/28/2031	5.00	20.0	—
Coating 3	Architectural Coating	2/18/2036	3/14/2036	5.00	20.0	—
Paving 3	Trenching	1/21/2036	2/15/2036	5.00	20.0	—
Paving 2	Trenching	1/3/2031	1/30/2031	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Prep 1	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Prep 1	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Prep 2	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Prep 2	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Prep 3	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Prep 3	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 1	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading 1	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37

Grading 1	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 2	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading 2	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading 2	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading 3	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 3	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading 3	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading 3	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
BC 1	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
BC 1	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
BC 1	Cranes	Diesel	Average	1.00	7.00	367	0.29
BC 1	Welders	Diesel	Average	1.00	8.00	46.0	0.45
BC 1	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
BC 2	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
BC 2	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
BC 2	Cranes	Diesel	Average	1.00	7.00	367	0.29
BC 2	Welders	Diesel	Average	1.00	8.00	46.0	0.45
BC 2	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
BC 3	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
BC 3	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
BC 3	Cranes	Diesel	Average	1.00	7.00	367	0.29
BC 3	Welders	Diesel	Average	1.00	8.00	46.0	0.45
BC 3	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37

Paving 1	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving 1	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving 1	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Coating 1	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Coating 2	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Coating 3	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Paving 3	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving 3	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving 3	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving 2	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving 2	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving 2	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Prep 1	—	—	—	—
Site Prep 1	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Prep 1	Vendor	—	8.40	HHDT,MHDT
Site Prep 1	Hauling	0.00	20.0	HHDT
Site Prep 1	Onsite truck	—	—	HHDT
Grading 1	—	—	—	—
Grading 1	Worker	15.0	11.7	LDA,LDT1,LDT2
Grading 1	Vendor	—	8.40	HHDT,MHDT
Grading 1	Hauling	57.8	20.0	HHDT
Grading 1	Onsite truck	—	—	HHDT

BC 1	—	—	—	—
BC 1	Worker	50.7	11.7	LDA,LDT1,LDT2
BC 1	Vendor	19.8	8.40	HHDT,MHDT
BC 1	Hauling	0.00	20.0	HHDT
BC 1	Onsite truck	—	—	HHDT
Paving 1	—	—	—	—
Paving 1	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving 1	Vendor	—	8.40	HHDT,MHDT
Paving 1	Hauling	0.00	20.0	HHDT
Paving 1	Onsite truck	—	—	HHDT
Coating 1	—	—	—	—
Coating 1	Worker	30.4	11.7	LDA,LDT1,LDT2
Coating 1	Vendor	—	8.40	HHDT,MHDT
Coating 1	Hauling	0.00	20.0	HHDT
Coating 1	Onsite truck	—	—	HHDT
Site Prep 2	—	—	—	—
Site Prep 2	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Prep 2	Vendor	—	8.40	HHDT,MHDT
Site Prep 2	Hauling	0.00	20.0	HHDT
Site Prep 2	Onsite truck	—	—	HHDT
Site Prep 3	—	—	—	—
Site Prep 3	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Prep 3	Vendor	—	8.40	HHDT,MHDT
Site Prep 3	Hauling	0.00	20.0	HHDT
Site Prep 3	Onsite truck	—	—	HHDT
Grading 2	—	—	—	—
Grading 2	Worker	15.0	11.7	LDA,LDT1,LDT2

Grading 2	Vendor	—	8.40	HHDT,MHDT
Grading 2	Hauling	24.6	20.0	HHDT
Grading 2	Onsite truck	—	—	HHDT
Grading 3	—	—	—	—
Grading 3	Worker	15.0	11.7	LDA,LDT1,LDT2
Grading 3	Vendor	—	8.40	HHDT,MHDT
Grading 3	Hauling	17.8	20.0	HHDT
Grading 3	Onsite truck	—	—	HHDT
BC 2	—	—	—	—
BC 2	Worker	50.7	11.7	LDA,LDT1,LDT2
BC 2	Vendor	19.8	8.40	HHDT,MHDT
BC 2	Hauling	0.00	20.0	HHDT
BC 2	Onsite truck	—	—	HHDT
BC 3	—	—	—	—
BC 3	Worker	50.7	11.7	LDA,LDT1,LDT2
BC 3	Vendor	19.8	8.40	HHDT,MHDT
BC 3	Hauling	0.00	20.0	HHDT
BC 3	Onsite truck	—	—	HHDT
Coating 2	—	—	—	—
Coating 2	Worker	30.0	11.7	LDA,LDT1,LDT2
Coating 2	Vendor	—	8.40	HHDT,MHDT
Coating 2	Hauling	0.00	20.0	HHDT
Coating 2	Onsite truck	—	—	HHDT
Coating 3	—	—	—	—
Coating 3	Worker	30.0	11.7	LDA,LDT1,LDT2
Coating 3	Vendor	—	8.40	HHDT,MHDT
Coating 3	Hauling	0.00	20.0	HHDT

Coating 3	Onsite truck	—	—	HHDT
Paving 3	—	—	—	—
Paving 3	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving 3	Vendor	—	8.40	HHDT,MHDT
Paving 3	Hauling	0.00	20.0	HHDT
Paving 3	Onsite truck	—	—	HHDT
Paving 2	—	—	—	—
Paving 2	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving 2	Vendor	—	8.40	HHDT,MHDT
Paving 2	Hauling	0.00	20.0	HHDT
Paving 2	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Coating 1	0.00	0.00	60,393	20,131	2,321
Coating 2	0.00	0.00	60,393	20,131	2,321
Coating 3	0.00	0.00	60,393	20,131	2,321

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)

Site Prep 1	—	—	15.0	0.00	—
Site Prep 2	—	—	15.0	0.00	—
Site Prep 3	—	—	30.0	0.00	—
Grading 1	3,130	1,488	10.0	0.00	—
Grading 2	1,112	2,821	20.0	0.00	—
Grading 3	410	2,423	20.0	0.00	—
Paving 1	0.00	0.00	0.00	0.00	2.66

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Heavy Industry	0.00	0%
Parking Lot	2.66	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2030	0.00	204	0.03	< 0.005
2031	0.00	204	0.03	< 0.005
2035	0.00	204	0.03	< 0.005
2036	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Heavy Industry	475	775	615	196,250	1,925	3,144	2,493	795,713
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	181,179	60,393	6,963

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Heavy Industry	1,317,793	204	0.0330	0.0040	5,289,111

Parking Lot	101,654	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Heavy Industry	27,931,763	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Heavy Industry	150	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Heavy Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Forklifts	Diesel	Average	9.00	8.00	82.0	0.20

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	3.00	2.00	50.0	100	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	12.6	annual days of extreme heat
Extreme Precipitation	7.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	20.5	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A

Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	32.1
AQ-PM	4.41
AQ-DPM	80.4
Drinking Water	37.6
Lead Risk Housing	63.2
Pesticides	86.0
Toxic Releases	8.53
Traffic	82.8
Effect Indicators	—
CleanUp Sites	69.5
Groundwater	70.3
Haz Waste Facilities/Generators	54.0
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	68.1
Cardio-vascular	76.2
Low Birth Weights	69.2
Socioeconomic Factor Indicators	—
Education	88.4
Housing	86.0

Linguistic	61.1
Poverty	59.1
Unemployment	65.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.27101245
Employed	27.87116643
Median HI	30.25792378
Education	—
Bachelor's or higher	18.24714487
High school enrollment	100
Preschool enrollment	43.82137816
Transportation	—
Auto Access	24.53483896
Active commuting	62.60746824
Social	—
2-parent households	17.61837547
Voting	53.90735275
Neighborhood	—
Alcohol availability	36.90491467
Park access	44.83510843
Retail density	51.62325164
Supermarket access	46.22096753
Tree canopy	44.29616322

Housing	—
Homeownership	22.55870653
Housing habitability	7.14744001
Low-inc homeowner severe housing cost burden	5.41511613
Low-inc renter severe housing cost burden	3.490311818
Uncrowded housing	11.86962659
Health Outcomes	—
Insured adults	34.33850892
Arthritis	0.0
Asthma ER Admissions	23.7
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	32.2
Cognitively Disabled	28.0
Physically Disabled	18.7
Heart Attack ER Admissions	21.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	73.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	20.9
Elderly	72.3
English Speaking	31.7
Foreign-born	70.8
Outdoor Workers	4.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	38.5
Traffic Density	74.4
Traffic Access	71.7
Other Indices	—
Hardship	85.6
Other Decision Support	—
2016 Voting	44.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	77.0
Healthy Places Index Score for Project Location (b)	26.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Construction schedule and phasing provided in PD
Construction: Trips and VMT	All phases assumed to generate the same number of workers.
Construction: Off-Road Equipment	Equipment left as defaults except each Paving phase assumed to involve the same equipment.

ATTACHMENT B, ENERGY CALCULATIONS

Gilroy Heat Wave Project—Energy Consumption Summary

Date of Last Revision: February 13, 2024

Summary of Energy Use During Construction	Annual Consumption	
Construction On-Road Vehicle Fuel	22,894	gallons (gasoline, diesel)
Construction Off-Road Equipment Fuel	28,507	gallons (diesel)

Summary of Energy Use During Proposed Operations	Annual Consumption	
Operational On-Road Vehicle Fuel	28,440	gallons (gasoline, diesel)
Operational Off-Road Equipment Fuel	18,413	gallons (diesel)
Operational Electricity Consumption	1,419,447	kilowatt hours

Construction Vehicle Fuel Calculations (Page 1 of 2)

California Air Resource Board (CARB). 2024. EMFAC2021 Web Database. Website: https://arb.ca.gov/emfac/emissions-

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Santa Clara
Calendar Year: 2025
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled
FE = Fuel Economy

						Given			*Calculations*	
Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT (mi/day)	Fuel Consumption (1000 gallons/day)	FE (mi/gallon)	VMT*FE
Santa Clara	2025	HHDT	Aggregate	Aggregate	Gasoline	2.33035896	124.94482	0.030860449	4.048703991	505.8646
Santa Clara	2025	HHDT	Aggregate	Aggregate	Diesel	8692.57496	1008963.9	169.8966016	5.938694114	5991928
Santa Clara	2025	LDA	Aggregate	Aggregate	Gasoline	598860.284	22133915	717.2291564	30.86031082	6.83E+08
Santa Clara	2025	LDA	Aggregate	Aggregate	Diesel	1620.03991	46912.854	1.062234444	44.16431266	2071874
Santa Clara	2025	LDT1	Aggregate	Aggregate	Gasoline	51680.8552	1664705.9	64.46812681	25.82215362	42986291
Santa Clara	2025	LDT1	Aggregate	Aggregate	Diesel	21.282725	302.82578	0.012373201	24.47432738	7411.457
Santa Clara	2025	LDT2	Aggregate	Aggregate	Gasoline	290874.748	10447706	416.8590541	25.06292158	2.62E+08
Santa Clara	2025	LDT2	Aggregate	Aggregate	Diesel	1049.95238	38652.337	1.145644126	33.73851973	1304073
Santa Clara	2025	LHDT1	Aggregate	Aggregate	Gasoline	19422.4639	728336.98	73.54932741	9.902700714	7212503
Santa Clara	2025	LHDT1	Aggregate	Aggregate	Diesel	10387.1028	408019.33	25.36663199	16.08488395	6562944
Santa Clara	2025	LHDT2	Aggregate	Aggregate	Gasoline	2512.65228	91345.054	10.3915741	8.790300024	802950.4
Santa Clara	2025	LHDT2	Aggregate	Aggregate	Diesel	4837.2356	188645.05	14.03711289	13.43902048	2535205
Santa Clara	2025	MDV	Aggregate	Aggregate	Gasoline	159532.218	5551044.4	268.773186	20.65326714	1.15E+08
Santa Clara	2025	MDV	Aggregate	Aggregate	Diesel	2421.36412	85326.799	3.356576548	25.42078146	2169074
Santa Clara	2025	MHDT	Aggregate	Aggregate	Gasoline	1412.26257	72039.874	14.86404823	4.846585027	349147.4
Santa Clara	2025	MHDT	Aggregate	Aggregate	Diesel	10548.0591	435100.62	51.21452632	8.495648601	3696462

Worker

Sum of VMT*FE (Column BI)	**1.11E+09**
Total VMT	**39968566**
Weighted Average Fuel Economy	**27.72417**

Vendor

Sum of VMT*FE (Column BI)	**27151645**
Total VMT	**2932576**
Weighted Average Fuel Economy	**9.258634**

Haul

Sum of VMT*FE (Column BI)	**5992434**
Total VMT	**1009089**
Weighted Average Fuel Economy	**5.93846**

Construction Vehicle Fuel Calculations (Page 2 of 2)

Construction Schedule

Heat Wave Project - Phase I Only

CalEEMod Phase Type	Phase Name	Start Date	End Date	Num Days/ Week	Num Days
Site Prep 1	Site Preparation	2/3/2025	2/14/2025	5	10
Grading 1	Grading	2/17/2025	2/28/2025	5	10
BC 1	Building Construction	3/17/2025	1/30/2026	5	230
Paving 1	Paving	2/2/2026	2/27/2026	5	20
Coating 1	Architectural Coating	3/2/2026	3/27/2026	5	20

Construction Trips and VMT

	Trips per Day			Construction Trip Length in Miles				Trips per Phase			VMT per Phase			Fuel Consumption (gallons)		
Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Number of Days per Phase	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
Site Preparation	36.0	0	0	11.7	8.1	20	10	360	0	0	4,212	0	0	151.93	0.00	0.00
Grading	30	0	116	11.7	8.1	20	10	300	0	1,160	3,510	0	23,200	126.60	0.00	3,906.74
Building Construction	102	40	0	11.7	8.1	20	230	23,460	9,200	0	274,482	74,520	0	9,900.46	8,048.70	0.00
Paving	30	0	0	11.7	8.1	20	20	600	0	0	7,020	0	0	253.21	0.00	0.00
Architectural Coating	60	0	0	11.7	8.1	20	20	1,200	0	0	14,040	0	0	506.42	0.00	0.00
											303,264	74,520	23,200	10,939	8,049	3,907

Total Project Construction VMT (miles)

400,984

Total Project Fuel Consumption (gallons)

22,894

Construction Equipment Fuel Calculation

Heat Wave Project - Phase I Only

Construction Schedule

CalEEMod Phase Type	Phase Name	Start Date	End Date	Num Days/ Week	Num Days
Site Prep 1	Site Preparation	2/3/2025	2/14/2025	5	10
Grading 1	Grading	2/17/2025	2/28/2025	5	10
BC 1	Building Construction	3/17/2025	1/30/2026	5	230
Paving 1	Paving	2/2/2026	2/27/2026	5	20
Coating 1	Architectural Coating	3/2/2026	3/27/2026	5	20

Construction Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours		HP Bin	Equipment Type + HP	Fuel (gallons/HP-hour)	Diesel Fuel Usage
Site Prep 1	Rubber Tired Dozers	3	8	367	0.4	10	35,232.00		600	Rubber Tired Dozers 600	0.04536070	1,598.15
Site Prep 1	Tractors/Loaders/Backhoes	4	8	84	0.37	10	9,945.60		100	Tractors/Loaders/Backhoes 100	0.05648827	561.81
Grading 1	Graders	1	8	148	0.41	10	4,854.40		175	Graders 175	0.05382880	261.31
Grading 1	Excavators	1	8	36	0.38	10	1,094.40		50	Excavators 50	0.05609785	61.39
Grading 1	Tractors/Loaders/Backhoes	3	8	84	0.37	10	7,459.20		100	Tractors/Loaders/Backhoes 100	0.05648827	421.36
Grading 1	Rubber Tired Dozers	1	8	367	0.4	10	11,744.00		600	Rubber Tired Dozers 600	0.04536070	532.72
BC 1	Rough Terrain Forklifts	3	8	82	0.2	230	90,528.00		100	Rough Terrain Forklifts 100	0.05787522	5,239.33
BC 1	Generator Sets	1	8	14	0.74	230	19,062.40		15	Generator Sets 15	0	0.00
BC 1	Cranes	1	7	367	0.29	230	171,352.30		600	Cranes 600	0.05152933	8,829.67
BC 1	Welders	1	8	46	0.45	230	38,088.00		50	Welders 50	0.02580590	982.90
BC 1	Tractors/Loaders/Backhoes	3	7	84	0.37	230	150,116.40		100	Tractors/Loaders/Backhoes 100	0.05648827	8,479.82
Paving 1	Pavers	2	8	81	0.42	20	10,886.40		100	Pavers 100	0.05653635	615.48
Paving 1	Paving Equipment	2	8	89	0.36	20	10,252.80		100	Paving Equipment 100	0.05958651	610.93
Paving 1	Rollers	2	8	36	0.38	20	4,377.60		50	Rollers 50	0.05785104	253.25
Coating 1	Air Compressors	1	6	37	0.48	20	2,131.20		50	Air Compressors 50	0.02755950	58.73
												28,506.83

Notes:

Equipment assumptions are provided in the CalEEMod output files.

Website: https://arb.ca.gov/emfac/offroad/emissions-inventory/407772cb136c496205d3366b4a65a7e2f71d5fa2

Accessed: 2/13/2024

Model Output: OFFROAD2021 (v1.0.5) Emissions Inventory
Region Type: County
Region: Santa Clara
Calendar Year: 2025
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hour

Region	CalYr	Vehicle Class + HP Bin	Model Year	Fuel
Santa Clara	2025	Bore/Drill Rigs 100	Aggregate	Diesel
Santa Clara	2025	Bore/Drill Rigs 175	Aggregate	Diesel
Santa Clara	2025	Bore/Drill Rigs 300	Aggregate	Diesel
Santa Clara	2025	Bore/Drill Rigs 50	Aggregate	Diesel
Santa Clara	2025	Bore/Drill Rigs 600	Aggregate	Diesel
Santa Clara	2025	Bore/Drill Rigs 75	Aggregate	Diesel
Santa Clara	2025	Cranes 100	Aggregate	Diesel
Santa Clara	2025	Cranes 175	Aggregate	Diesel
Santa Clara	2025	Cranes 25	Aggregate	Diesel
Santa Clara	2025	Cranes 300	Aggregate	Diesel
Santa Clara	2025	Cranes 50	Aggregate	Diesel
Santa Clara	2025	Cranes 600	Aggregate	Diesel
Santa Clara	2025	Cranes 75	Aggregate	Diesel
Santa Clara	2025	Crawler Tractors 100	Aggregate	Diesel
Santa Clara	2025	Crawler Tractors 175	Aggregate	Diesel
Santa Clara	2025	Crawler Tractors 300	Aggregate	Diesel
Santa Clara	2025	Crawler Tractors 50	Aggregate	Diesel
Santa Clara	2025	Crawler Tractors 600	Aggregate	Diesel
Santa Clara	2025	Crawler Tractors 75	Aggregate	Diesel
Santa Clara	2025	Excavators 100	Aggregate	Diesel
Santa Clara	2025	Excavators 175	Aggregate	Diesel
Santa Clara	2025	Excavators 25	Aggregate	Diesel
Santa Clara	2025	Excavators 300	Aggregate	Diesel
Santa Clara	2025	Excavators 50	Aggregate	Diesel
Santa Clara	2025	Excavators 600	Aggregate	Diesel
Santa Clara	2025	Excavators 75	Aggregate	Diesel
Santa Clara	2025	Graders 100	Aggregate	Diesel
Santa Clara	2025	Graders 175	Aggregate	Diesel
Santa Clara	2025	Graders 300	Aggregate	Diesel
Santa Clara	2025	Graders 50	Aggregate	Diesel
Santa Clara	2025	Graders 600	Aggregate	Diesel
Santa Clara	2025	Graders 75	Aggregate	Diesel
Santa Clara	2025	Bore/Drill Rigs 15	Aggregate	Diesel
Santa Clara	2025	Bore/Drill Rigs 25	Aggregate	Diesel
Santa Clara	2025	Cement And Mortar Mixers 15	Aggregate	Diesel
Santa Clara	2025	Cement And Mortar Mixers 25	Aggregate	Diesel

Santa Clara	2025	Concrete/Industrial Saws 25	Aggregate	Diesel
Santa Clara	2025	Concrete/Industrial Saws 50	Aggregate	Diesel
Santa Clara	2025	Dumpers/Tenders 25	Aggregate	Diesel
Santa Clara	2025	Excavators 25	Aggregate	Diesel
Santa Clara	2025	Other 15	Aggregate	Diesel
Santa Clara	2025	Other 25	Aggregate	Diesel
Santa Clara	2025	Pavers 25	Aggregate	Diesel
Santa Clara	2025	Paving Equipment 25	Aggregate	Diesel
Santa Clara	2025	Plate Compactors 15	Aggregate	Diesel
Santa Clara	2025	Rollers 15	Aggregate	Diesel
Santa Clara	2025	Rollers 25	Aggregate	Diesel
Santa Clara	2025	Rubber Tired Loaders 25	Aggregate	Diesel
Santa Clara	2025	Signal Boards 15	Aggregate	Diesel
Santa Clara	2025	Signal Boards 50	Aggregate	Diesel
Santa Clara	2025	Skid Steer Loaders 25	Aggregate	Diesel
Santa Clara	2025	Tractors/Loaders/Backhoes 25	Aggregate	Diesel
Santa Clara	2025	Trenchers 15	Aggregate	Diesel
Santa Clara	2025	Trenchers 25	Aggregate	Diesel
Santa Clara	2025	Off-Highway Tractors 100	Aggregate	Diesel
Santa Clara	2025	Off-Highway Tractors 175	Aggregate	Diesel
Santa Clara	2025	Off-Highway Tractors 300	Aggregate	Diesel
Santa Clara	2025	Off-Highway Tractors 50	Aggregate	Diesel
Santa Clara	2025	Off-Highway Tractors 600	Aggregate	Diesel
Santa Clara	2025	Off-Highway Tractors 75	Aggregate	Diesel
Santa Clara	2025	Off-Highway Trucks 100	Aggregate	Diesel
Santa Clara	2025	Off-Highway Trucks 175	Aggregate	Diesel
Santa Clara	2025	Off-Highway Trucks 300	Aggregate	Diesel
Santa Clara	2025	Off-Highway Trucks 50	Aggregate	Diesel
Santa Clara	2025	Off-Highway Trucks 600	Aggregate	Diesel
Santa Clara	2025	Off-Highway Trucks 75	Aggregate	Diesel
Santa Clara	2025	Pavers 100	Aggregate	Diesel
Santa Clara	2025	Pavers 175	Aggregate	Diesel
Santa Clara	2025	Pavers 300	Aggregate	Diesel
Santa Clara	2025	Pavers 50	Aggregate	Diesel
Santa Clara	2025	Pavers 600	Aggregate	Diesel
Santa Clara	2025	Pavers 75	Aggregate	Diesel
Santa Clara	2025	Paving Equipment 100	Aggregate	Diesel
Santa Clara	2025	Paving Equipment 175	Aggregate	Diesel
Santa Clara	2025	Paving Equipment 300	Aggregate	Diesel
Santa Clara	2025	Paving Equipment 50	Aggregate	Diesel
Santa Clara	2025	Paving Equipment 600	Aggregate	Diesel
Santa Clara	2025	Paving Equipment 75	Aggregate	Diesel
Santa Clara	2025	Rollers 100	Aggregate	Diesel
Santa Clara	2025	Rollers 175	Aggregate	Diesel
Santa Clara	2025	Rollers 300	Aggregate	Diesel
Santa Clara	2025	Rollers 50	Aggregate	Diesel
Santa Clara	2025	Rollers 600	Aggregate	Diesel

Santa Clara	2025	Rollers 75	Aggregate	Diesel
Santa Clara	2025	Rough Terrain Forklifts 100	Aggregate	Diesel
Santa Clara	2025	Rough Terrain Forklifts 175	Aggregate	Diesel
Santa Clara	2025	Rough Terrain Forklifts 300	Aggregate	Diesel
Santa Clara	2025	Rough Terrain Forklifts 50	Aggregate	Diesel
Santa Clara	2025	Rough Terrain Forklifts 600	Aggregate	Diesel
Santa Clara	2025	Rough Terrain Forklifts 75	Aggregate	Diesel
Santa Clara	2025	Rubber Tired Dozers 100	Aggregate	Diesel
Santa Clara	2025	Rubber Tired Dozers 175	Aggregate	Diesel
Santa Clara	2025	Rubber Tired Dozers 300	Aggregate	Diesel
Santa Clara	2025	Rubber Tired Dozers 50	Aggregate	Diesel
Santa Clara	2025	Rubber Tired Dozers 600	Aggregate	Diesel
Santa Clara	2025	Rubber Tired Dozers 75	Aggregate	Diesel
Santa Clara	2025	Rubber Tired Loaders 100	Aggregate	Diesel
Santa Clara	2025	Rubber Tired Loaders 175	Aggregate	Diesel
Santa Clara	2025	Rubber Tired Loaders 300	Aggregate	Diesel
Santa Clara	2025	Rubber Tired Loaders 50	Aggregate	Diesel
Santa Clara	2025	Rubber Tired Loaders 600	Aggregate	Diesel
Santa Clara	2025	Rubber Tired Loaders 75	Aggregate	Diesel
Santa Clara	2025	Scrapers 100	Aggregate	Diesel
Santa Clara	2025	Scrapers 175	Aggregate	Diesel
Santa Clara	2025	Scrapers 300	Aggregate	Diesel
Santa Clara	2025	Scrapers 50	Aggregate	Diesel
Santa Clara	2025	Scrapers 600	Aggregate	Diesel
Santa Clara	2025	Scrapers 75	Aggregate	Diesel
Santa Clara	2025	Skid Steer Loaders 100	Aggregate	Diesel
Santa Clara	2025	Skid Steer Loaders 175	Aggregate	Diesel
Santa Clara	2025	Skid Steer Loaders 300	Aggregate	Diesel
Santa Clara	2025	Skid Steer Loaders 50	Aggregate	Diesel
Santa Clara	2025	Skid Steer Loaders 600	Aggregate	Diesel
Santa Clara	2025	Skid Steer Loaders 75	Aggregate	Diesel
Santa Clara	2025	Surfacing Equipment 100	Aggregate	Diesel
Santa Clara	2025	Surfacing Equipment 175	Aggregate	Diesel
Santa Clara	2025	Surfacing Equipment 300	Aggregate	Diesel
Santa Clara	2025	Surfacing Equipment 50	Aggregate	Diesel
Santa Clara	2025	Surfacing Equipment 600	Aggregate	Diesel
Santa Clara	2025	Surfacing Equipment 75	Aggregate	Diesel
Santa Clara	2025	Tractors/Loaders/Backhoes 100	Aggregate	Diesel
Santa Clara	2025	Tractors/Loaders/Backhoes 175	Aggregate	Diesel
Santa Clara	2025	Tractors/Loaders/Backhoes 25	Aggregate	Diesel
Santa Clara	2025	Tractors/Loaders/Backhoes 300	Aggregate	Diesel
Santa Clara	2025	Tractors/Loaders/Backhoes 50	Aggregate	Diesel
Santa Clara	2025	Tractors/Loaders/Backhoes 600	Aggregate	Diesel
Santa Clara	2025	Tractors/Loaders/Backhoes 75	Aggregate	Diesel
Santa Clara	2025	Trenchers 100	Aggregate	Diesel
Santa Clara	2025	Trenchers 175	Aggregate	Diesel
Santa Clara	2025	Trenchers 300	Aggregate	Diesel

Santa Clara	2025	Trenchers 50	Aggregate	Diesel
Santa Clara	2025	Trenchers 600	Aggregate	Diesel
Santa Clara	2025	Trenchers 75	Aggregate	Diesel
Santa Clara	2025	Air Compressors 15	Aggregate	Diesel
Santa Clara	2025	Air Compressors 25	Aggregate	Diesel
Santa Clara	2025	Air Compressors 50	Aggregate	Diesel
Santa Clara	2025	Generator Sets 15	Aggregate	Diesel
Santa Clara	2025	Generator Sets 25	Aggregate	Diesel
Santa Clara	2025	Generator Sets 50	Aggregate	Diesel
Santa Clara	2025	Welders 15	Aggregate	Diesel
Santa Clara	2025	Welders 25	Aggregate	Diesel
Santa Clara	2025	Welders 50	Aggregate	Diesel

s/year for Horsepower-hours

Fuel Consumption (gallons/year)	Horsepower Hours (HP-hours/year)	Fuel (gallons/HP-hour)
3308.857928	58847.00872	0.056228141
23757.60726	472683.4851	0.050261132
28254.22231	562703.79	0.050211537
1121.21115	19992.90026	0.056080465
40639.766	815775.9754	0.049817312
4327.992684	76826.97896	0.056334282
1533.940399	18785.89265	0.081653847
11491.00874	194849.4646	0.058973776
3.085590731	55.02077614	0.056080465
37176.18152	698851.6576	0.053196098
130.5004937	1529.520898	0.085321158
51805.71657	1005363.726	0.051529327
507.2093979	6463.04351	0.078478413
17204.82335	295318.6073	0.058258514
62166.3768	1224684.271	0.050761146
76959.72647	1518410.692	0.050684394
655.0121161	10272.70392	0.063762386
134921.918	2719682.647	0.049609434
4466.464008	74476.79025	0.05997122
42807.73549	759863.7553	0.056336067
241545.1889	4786754.601	0.05046116
1.846873936	32.9325715	0.056080465
258431.1222	5124705.972	0.050428478
69348.12673	1236199.273	0.056097854
298350.6421	5930205.895	0.050310334
55055.61709	979382.4334	0.056214626
1771.834802	29379.84364	0.060307836
28315.66459	526031.8403	0.053828804
93518.0304	1837835.621	0.050884872
217.3507118	3602.460959	0.060333953
22610.25835	448529.8464	0.050409707
831.9553545	11333.42984	0.0734072
6.056474783	0	0
28.04828968	0	0
41.78316927	0	0
8.157111681	0	0

5.595332794	0	0
1930.85	46373.25	0.041637151
4.026507801	0	0
28.76043001	0	0
92.05006266	0	0
15.04442089	0	0
7.559516465	0	0
12.8479714	0	0
35.94023691	0	0
130.3408693	0	0
90.17648947	0	0
5.230818958	0	0
561.7960185	0	0
861.4	19312.15	0.044604045
1481.972941	0	0
137.6248839	0	0
51.6105954	0	0
133.6837187	0	0
9768.131555	173783.4672	0.056208635
53098.55656	1054248.583	0.050366258
23813.65772	475154.6257	0.050117702
11679.15928	203243.0222	0.057464011
62828.75465	1271397.193	0.049417094
10236.08724	176125.9281	0.058118003
265.3007149	4730.715289	0.056080465
13680.40631	271371.8597	0.05041203
32033.03888	637677.8447	0.05023389
499.7728048	8911.7093	0.056080465
235615.5546	4698512.963	0.050146835
558.7528418	9293.363944	0.060123852
5953.429933	105302.6857	0.056536354
20029.0471	396810.4923	0.050475095
24320.78671	482079.4765	0.050449745
1081.691412	19006.8713	0.056910545
4307.285068	86090.8517	0.050031856
5507.213334	96920.30353	0.056822081
3386.685369	56836.44	0.059586515
22236.45872	439436.1654	0.05060225
10016.08876	198001.3255	0.050585968
2792.998136	49034.94784	0.056959337
23739.18395	472935.7747	0.050195365
2029.305626	36185.60603	0.056080465
16723.88468	288202.3802	0.058028267
96142.98314	1900532.99	0.050587379
8274.689162	160637.0341	0.051511715
26991.70259	466572.4368	0.057851044
6693.619384	135971.1579	0.04922823

10729.14903	190019.0462	0.056463545
23926.06331	413407.7221	0.057875221
153801.827	3046921.686	0.050477775
1313.185236	25598.68681	0.05129893
860.3462169	15341.2817	0.056080465
374.194169	7403.48546	0.050542973
34179.38086	606042.3291	0.056397679
1167.988156	19764.42981	0.059095464
3635.035594	71894.5699	0.050560642
4550.465688	90125.70695	0.050490208
254.0414001	2755.607632	0.092190701
24086.64521	531002.5375	0.045360697
558.6269613	8883.659585	0.062882527
20738.11358	361442.7879	0.057375923
157282.8109	3112118.327	0.050538827
295618.6501	5865579.707	0.05039888
1641.560691	27726.62098	0.05920522
228012.4305	4556806.188	0.050037772
12701.92056	220067.9972	0.057718163
625.3563512	9885.405517	0.063260566
5057.530094	98064.14498	0.051573693
73953.06029	1411147.725	0.052406321
72.19206756	617.1182926	0.116982544
260469.7118	5462679.493	0.047681676
515.0742355	8263.730661	0.062329504
94875.96258	1689549.819	0.056154581
27874.80676	551897.5807	0.05050721
2280.234042	45202.44382	0.050444928
26286.99677	458746.6788	0.05730177
1583.91133	31398.82204	0.050444928
186856.9023	3323416.723	0.056224337
685.5455217	9991.245642	0.06861462
2534.10971	49962.06327	0.050720678
2966.409651	57987.21847	0.051156267
301.2024066	4604.472248	0.065415186
17014.53455	338150.1125	0.050316513
514.2098866	8114.372253	0.063370261
288082.0722	5099856.207	0.056488273
305253.6681	6030710.589	0.050616534
6.229770493	111.0862838	0.056080465
129310.8665	2560757.047	0.050497124
27112.6508	458754.1623	0.05910061
98536.53641	1961131.028	0.050244749
123160.5773	2152217.1	0.057224979
3224.57849	56488.98594	0.057083313
5264.015638	103440.3759	0.050889371
3163.145263	62483.78218	0.05062346

8320.52954	145953.058	0.057008258
5134.913059	103764.8065	0.049486076
2674.121701	45488.69532	0.058786511
777.2959601	0	0
3102.118123	0	0
55352.25	2008463.6	0.027559499
45290.40224	0	0
57072.58269	0	0
152507.95	3605429.85	0.042299519
17798.38251	0	0
28402.91482	0	0
254032.7	9843977	0.025805901

Operational Fuel Calculation—Project-Generated Operational Trips (Page 1 of 2)

California Air Resource Board (CARB). 2024. EMFAC2021 Web Database. Website: https://arb.ca.gov/emfac/emissions-inventory/3ebf4900254e8e8aa6fb03e08fa7a4bd6a3f7fe1. Accessed 2/13/2024.

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Santa Clara
Calendar Year: 2036
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled
FE = Fuel Economy

			Given						*Calculations*	
Region	Calendar Year	Vehicle Class	Model Year	Speed	Fuel	Population	VMT	Fuel Consumption	FE	VMT*FE
Santa Clara	2036	LDA	Aggregate	Aggregate	Gasoline	613922.7501	22429013.65	617.206137	36.33958302	815061003.6
Santa Clara	2036	LDA	Aggregate	Aggregate	Diesel	561.2432783	16749.64969	0.318658439	52.56301936	880412.1611
									Sum of VMT*FE	**815941415.7**
									Total VMT	**22445763.3**
									Weighted Average Fuel Economy	**36.35168939**
Santa Clara	2036	LDT1	Aggregate	Aggregate	Gasoline	44319.20076	1423693.79	46.79589243	30.4234777	43313716.26
Santa Clara	2036	LDT1	Aggregate	Aggregate	Diesel	0.372103617	13.75655551	0.000454685	30.25516452	416.2068502
Santa Clara	2036	LDT2	Aggregate	Aggregate	Gasoline	335337.4096	11511147.74	386.709621	29.76690289	342651216.8
Santa Clara	2036	LDT2	Aggregate	Aggregate	Diesel	1236.542962	43040.14609	1.0827644	39.75024121	1710856.189
Santa Clara	2036	MDV	Aggregate	Aggregate	Gasoline	190025.5686	6388984.705	260.2319929	24.55111162	156856676.6
Santa Clara	2036	MDV	Aggregate	Aggregate	Diesel	2312.466879	75108.38636	2.521193587	29.79080494	2237539.287
									Sum of VMT*FE	**546770421.4**
									Total VMT	**19441988.52**
									Weighted Average Fuel Economy	**28.12317376**
Santa Clara	2036	LHDT1	Aggregate	Aggregate	Gasoline	18493.78183	640135.8726	58.47703954	10.94679002	7007432.98
Santa Clara	2036	LHDT1	Aggregate	Aggregate	Diesel	11070.22576	388936.296	23.47828311	16.5657895	6443036.81
Santa Clara	2036	LHDT2	Aggregate	Aggregate	Gasoline	2203.257313	74015.05264	7.637819004	9.690600497	717250.3059
Santa Clara	2036	LHDT2	Aggregate	Aggregate	Diesel	5403.661768	182825.8916	12.96851848	14.09766982	2577419.054
Santa Clara	2036	MHDT	Aggregate	Aggregate	Gasoline	1199.243705	57150.85382	10.80878441	5.287445066	302182
Santa Clara	2036	MHDT	Aggregate	Aggregate	Diesel	9453.696812	356824.8325	39.42595512	9.050505724	3229445.189
Santa Clara	2036	HHDT	Aggregate	Aggregate	Gasoline	1.412843655	181.2869565	0.039355416	4.606404312	835.0810183
Santa Clara	2036	HHDT	Aggregate	Aggregate	Diesel	9459.229843	1074519.846	153.395332	7.004905768	7526910.268
									Sum of VMT*FE	**27804511.69**
									Total VMT	**2774589.932**
									Weighted Average Fuel Economy	**10.02112469**
Santa Clara	2036	MCY	Aggregate	Aggregate	Gasoline	31749.1426	176500.2647	4.085118052	43.20567054	7625812.286
									Weighted Average Fuel Economy	**43.20567054**
Santa Clara	2036	MH	Aggregate	Aggregate	Gasoline	1899.873734	19623.88766	4.437100591	4.422682618	86790.22685
Santa Clara	2036	MH	Aggregate	Aggregate	Diesel	1137.023627	10646.34522	1.138744855	9.349192816	99534.73422
Santa Clara	2036	OBUS	Aggregate	Aggregate	Gasoline	305.7412297	10740.15689	2.021571663	5.312775742	57060.04501
Santa Clara	2036	OBUS	Aggregate	Aggregate	Diesel	1107.531428	66704.47375	7.649156227	8.720500898	581696.4232
Santa Clara	2036	SBUS	Aggregate	Aggregate	Gasoline	192.4724928	9298.624165	0.892544765	10.41810398	96874.03342
Santa Clara	2036	SBUS	Aggregate	Aggregate	Diesel	589.7445979	12396.67181	1.453345285	8.529749907	105740.5102
Santa Clara	2036	UBUS	Aggregate	Aggregate	Gasoline	47.57961673	4968.728215	0.49178639	10.10342766	50201.18608
Santa Clara	2036	UBUS	Aggregate	Aggregate	Diesel	87.58423691	10351.62458	1.204245977		
									Sum of VMT*FE	**1077897.159**
									Total VMT	**134378.8877**
									Weighted Average Fuel Economy	**8.021328182**

Operational Fuel Calculation—Project-Generated Operational Trips (Page 2 of 2)

Total Operational VMT

Gilroy Heat Wave Project

Land Use Type	VMT/Year
General Heavy Industry	795,713.27

Fleet Mix

				Light-Heavy to Heavy-Heavy					Other			
LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	MCY	OBUS	UBUS	SBUS	MH
0.498976894	0.031649499	0.256853496	0.143698971	0.06				0.00392366	0.003217408			

1.000

Fleet mix based on the EMFAC VMT data above

Vehicle Type	Fraction of 1	Annual VMT	Average Fuel Economy (miles/gallon)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	0.4990	397,043	36.35	10,922
Light Trucks and Medium Vehicles (LDT1, LDT2, and MDV	0.4322	343,909	28.12	12,229
Light-Heavy to Heavy-Heavy Diesel Trucks	0.0617	49,080	10.02	4,898
Motorcycles	0.0039	3,122	43.21	72
Other	0.0032	2,560	8.02	319
Total	1.0000	795,713		**28,440**

Operational Off-Road Equipment Fuel Calculation

Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Fuel (gallons/HP-hour)	Diesel Fuel Usage
Forklifts	9	8	82	0.2	260	307,008.00	0.05933372	18,215.93
Emergency Generators	3	2	100	0.73	25	10,950.00	0.01801585	197.27
								18,413.20

Notes:
Equipment assumptions verified by City staff via email 2/12/2024.

Model Output: OFFROAD2021 (v1.0.5) Emissions Inventory
Region Type: County
Region: Santa Clara
Calendar Year: 2036
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year fo

Region	CalYr	Vehicle Category	Horsepower Bin
Santa Clara	2036	Industrial - Forklifts	100
Santa Clara	2036	Portable Equipment - Non-Rental Generator	100

›r Horsepower-hours

Model Year	Fuel	Fuel Consumption (gallons/year)	Horsepower Hours (HP-hours/year)	Fuel (gallons/HP-hour)
Aggregate	Diesel	211575.3877	3565854.221	0.059333718
Aggregate	Diesel	106240.8242	5897075.671	0.018015849

From CalEEMod

Land Use	Electricity (kWh/yr)
General Heavy Industry	1,317,793
Parking Lot	101,654
	1,419,447

Appendix C Technical Biological Report

LIVE OAK
ASSOCIATES, INC.

HEAT WAVE VISUAL PROJECT SITE
TECHNICAL BIOLOGICAL REPORT
CITY OF GILROY, SANTA CLARA COUNTY, CALIFORNIA

Prepared by

LIVE OAK ASSOCIATES, INC.

Rick Hopkins, Ph.D., Principal/Senior Wildlife Ecologist
Katrina Krakow, M.S., Sr. Project Manager/Staff Ecologist

Prepared for

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January 3, 2023 PN 2745-01

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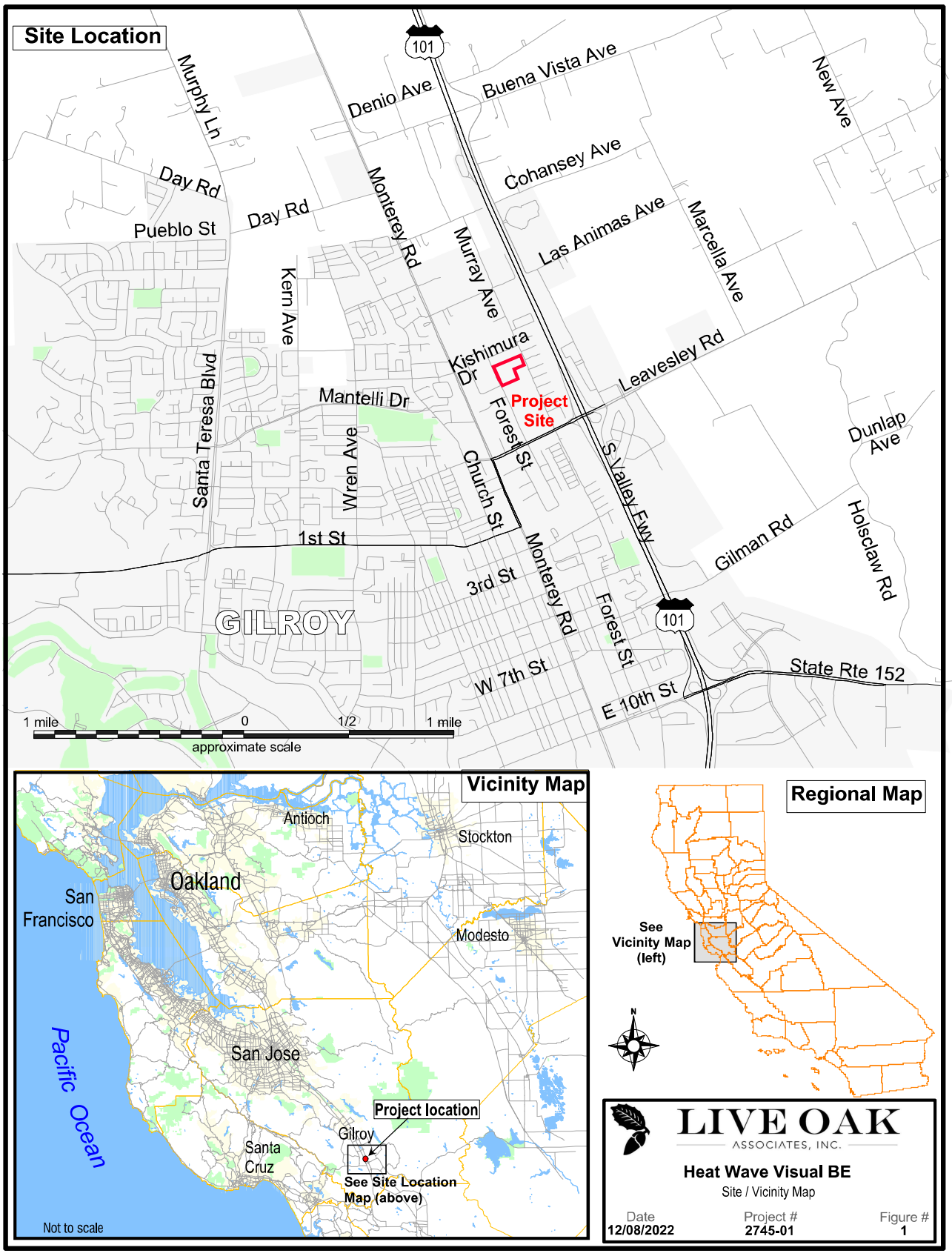
1 INTRODUCTION

The Heat Wave Visual Property ("project site") was evaluated by Live Oak Associates, Inc. (LOA) to ascertain whether or not build-out of an industrial development ("project") would have a significant impact, as defined by the California Environmental Quality Act (CEQA), on the biological resources of the site and region. This report describes the biotic resources of the approximately 7.71-acre project site and evaluates potential impacts to these biotic resources resulting from the proposed project. The site is located on Forest Street (APN 835-01-059) in Gilroy, Santa Clara County, California (Figure 1). The site can be found on the Gilroy U.S.G.S. 7.5' quadrangle in Section 2 of Township 10 south, Range 3 east.

In general, the development of parcels can damage or modify biotic habitats used by sensitive plant and wildlife species. In such cases, site development may be regulated by state or federal agencies, subject to provisions of CEQA, and/or covered by local policies and ordinances. Therefore, this report addresses: 1) sensitive biotic resources potentially occurring in the project site; 2) the federal, state, and local laws regulating such resources, 3) possible significant impacts to these resources that could result from the project; and 4) mitigation measures that would reduce these impacts to a less-than-significant level as defined by CEQA.

The analysis of impacts, as discussed in Section 3.0 of this report, was based on the known and potential biotic resources of the project site discussed in Section 2.0. Sources of information used in the preparation of this analysis included: 1) the *California Natural Diversity Data Base* (RareFind 5; CDFW 2022); 2) the *California Rare Plant Rank* (CNPS 2022); 3) manuals and references related to plants and animals of the Santa Clara Valley region; 4) policies and ordinances of the City of Gilroy that relate to biotic resources; and 5) the Santa Clara Valley Habitat Plan (SCVHP; 2012).

A field survey of the project site was conducted on November 30, 2022, by LOA ecologist Tara Johnson-Kelly and LOA plant and wetland ecologist and Arborist Davinna Ohlson.


Site Location
Murphy Ln
Denio Ave
Buena Vista Ave
New Ave
101
Day Rd
Day Rd
Cohansey Ave
Pueblo St
Monterey Rd
Las Animas Ave
Marcella Ave
Murray Ave
Kern Ave
Kishimura Dr
Leavesley Rd
Project Site
Mantelli Dr
Santa Teresa Blvd
Wren Ave
Forest St
Church St
S Valley Fwy
Dunlap Ave
1st St
Monterey Rd
Gilman Rd
Holsclaw Rd
3rd St
GILROY
Forest St
101
W 7th St
E 10th St
State Rte 152
1 mile
0
1/2
1 mile
approximate scale
Vicinity Map
Antioch
Stockton
Oakland
San Francisco
Modesto
San Jose
Pacific Ocean
Project location
Gilroy
Santa Cruz
See Site Location Map (above)
Not to scale
Regional Map
See Vicinity Map (left)
N
LIVE OAK
ASSOCIATES, INC.
Heat Wave Visual BE
Site / Vicinity Map
Date
12/08/2022
Project #
2745-01
Figure #
1

1.1 PROJECT DESCRIPTION

The 7.71-acre property is planned for a 40,000 sq. ft. building where all offices and warehouse operations will be located, making it the new official Heat Wave Visual headquarters. This will be constructed as Phase 1 of the project. Future phases will complete a of total of 100,000 sf in total buildout once complete.

Activities would include the following:

- Offices for executives, admin, and management
- Warehouse operations such as order assembly and fulfillment
- Storage of product
- Storage of Heat Wave assets, vehicles, trailers and show supplies
- Show room / Headquarters for customers to visit

2 EXISTING CONDITIONS

At the time of the field survey, the project site consisted primarily of disked California annual grassland with some trees mostly around the border of the site. A portion of the site is within the fenced yard of the HOPE Services property. The is bounded by Forest Street to the west, Murray Avenue to the east, a ruderal field to the south, and commercial development to the north. The site has a relatively flat topography with elevations ranging from a low of approximately 206 feet (62 meters) National Geodetic Vertical Datum (NGVD) in the southwestern portion of the site to 209 feet NGVD (64 meters) in the northeastern portion of the site.

Annual precipitation in the general vicinity of the project site is about 15-20 inches, almost 85% of which falls between the months of October and March. Virtually all precipitation falls in the form of rain.

Two soil map units occur on the site (NRCS 2022): Pleasanton loam, 0 to 2 percent slopes, MLRA 14 (well drained, not hydric) and San Ysidro loam, 0 to 2 percent slopes, MLRA 14 (very deep, moderately well drained soils, hydric). None of these soils is alkaline or serpentine; therefore, special status plants adapted to alkaline and serpentine soils are not expected to occur on the site. San Ysidro is considered a hydric soil. This soil type occurs in a very small part of the project site in the southeastern corner. Hydric soils are soils are defined as saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions such that under sufficiently wet conditions they support hydrophytic vegetation.

2.1 BIOTIC HABITATS

Two land cover types, California annual grassland and Developed: Urban-Suburban) are present on the Heat Wave Visual Property. These are named consistent with nomenclature for land cover types contained in the Santa Clara Valley Habitat Plan (SCVHP) (Figure 2). These land cover types are described in greater detail below.


Gavilan Ct
Forest St
Madison Ct
Murray Ave
Garfield Ct
LEGEND
Approximate Project site
Off-Site Improvement Boundary
California Annual Grassland
Developed: Urban-Suburban
Source:
U.S. Dept. of Agriculture, Natural Resources Conservation Service
USDA FSA Aerial Photography Field Office 2020
200' 0 100' 200 feet
approximate scale
LIVE OAK
ASSOCIATES, INC.
Heat Wave Visual BE
Biological Habitats
Date
12/08/2022
Project #
2745-01
Figure #
2

2.1.1 California Annual Grassland

The site supports California annual grassland. This habitat is ruderal in nature, had been disked, except for the small, fenced area on the HOPE site, at the time of the November 2022 site visit and is dominated by non-native plants. Vegetation in this habitat includes, but is not limited to narrow-leaf milkweed (*Asclepias fascicularis*), wild oats (*Avena* sp.), coyote brush (*Baccharis pilularis*), black mustard (*Brassica nigra*), yellow-star thistle (*Centaurea solstitialis*), cichorieae (*Cichorieae* sp.), bindweed (*Convolvulus arvensis*), filaree (*Erodium* sp.), redstem filaree (*Erodium incutarium*), English ivy (*Hedera helix*), short pod mustard (*Hirschfeldia incana*),barley (*Hordeum marinum*), prickly lettuce (*Lactuca serriola*), mallow (*Malva* sp.) English plantain (*Plantago lanceolata*), and curly dock (*Rumex crispus*). Trees onsite are concentrated along the boundary and include walnut (*Juglans* sp.), olive tree (*Olea europea*), pine (*Pinus* sp.), Callery pear (*Pyrus calleryana*), valley oak (*Quercus lobata*), and fan palm (*Washingtonia* sp.).

Wildlife observed within or flying over the site during the November 2022 survey included the rock pigeon (*Columba livia*), mourning dove (*Zenaida macroura*), California scrub jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), black phoebe (*Sayornis nigricans*), Anna's hummingbird (*Calypte anna*), bushtit (*Psaltriparus minimus*), lesser goldfinch (*Spinus psaltria*), western meadowlark (*Sturnella neglecta*), white-crowned sparrow (*Zonotrichia leucophrys*), house finch (*Haemorhous mexicanus*), a few California ground squirrel (*Otospermophilus beecheyi*) burrows, and feral cat (*Felis catus*).

2.1.2 Developed: Urban-Suburban

The site supports a graveled driveway from Murray Avenue as well as a cement pad near the end of the driveway. A second graveled area exists in the northwest corner of the site. The site also supports a portion of a basketball court in the fenced HOPE area. The site will be required to widen Murray Avenue along the frontage of the project site; therefore, a portion of Murray Avenue and its frontage would also be within the project boundary. These areas are small, and wildlife species using the surrounding landscape would be expected to use this habitat as well. Additional off-site improvements include trenching in Forest Street and Murray Avenue.

2.2 MOVEMENT CORRIDORS

General Discussion- Habitat corridors are vital to terrestrial animals for connectivity between core habitat areas (i.e., larger intact habitat areas where species make their living). Connections between two or more core habitat areas help ensure that genetic diversity is maintained, thereby diminishing the probability of inbreeding depression and geographic extinctions.

The quality of habitat within the corridors is important. In general, "better" habitat has less human interference (e.g., roads, homes, etc.) and is more desirable to more species than areas with sparse vegetation and high-density roads. Movement corridors in California are typically associated with valleys, rivers and creeks supporting riparian vegetation, and ridgelines. With increasing encroachment of humans on wildlife habitats, it has become important to establish and maintain linkages, or movement corridors, for animals to be able to access locations containing different biotic resources that are essential to maintaining their life cycles.

Healthy riparian areas (supporting structural diversity, i.e., understory species to saplings to mature riparian trees) not only support a rich and diverse wildlife community but have also been shown to facilitate regional wildlife movement. Riparian areas can vary from tributaries winding through scrubland to densely vegetated riparian forests.

Site-specific Discussion- The site is located within the City of Gilroy. Wildlife currently moves freely through the site without barriers such as fences, however, the site is surrounded by the environs of the City of Gilroy and likely support species common to urban living, such as raccoons, skunks, opossums, feral cats, and other animals commonly occurring in urban environments. West Branch Llagas Creek, also known as Ronan Channel, exists nearby which likely supports wider north-south movement along Highway 101. Therefore, localized movements throughout the site are currently unimpeded.

Per the above discussion, local animals can be expected to move through the site in their ordinary day-to-day movement, and the site is not likely to support regional movement.

2.3 SPECIAL STATUS PLANTS AND ANIMALS

Several species of plants and animals within the state of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the state's human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described more fully in Section 3.2, state and federal laws have provided the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as "candidates" for such listing. Still others have been designated as "species of special concern" by the CDFW. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened, or endangered (CNPS 2001). Collectively, these plants and animals are referred to as "special status species."

A number of special status plants and animals occur in the vicinity of the project site. These species, and their potential to occur in the project site, are listed in Table 1. Sources of information for this table included *California Natural Diversity Data Base* (CDFW 2022), *Listed Plants* and *Listed Animals* (USFWS 2022), *State and Federally Listed Endangered and Threatened Animals of California* (CDFW 2022), *The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2022), *California Bird Species of Special Concern* (Shuford and Gardall 2008), and *California Amphibian and Reptile Species of Special Concern* (Thompson et al. 2016). This information was used to evaluate the potential for special status plant and animal species that occur on the site. Figure 3 depict the location of special status species found by the California Natural Diversity Data Base (CNDDB).

A search of published accounts for all of the relevant special status plant and animal species was conducted for the Gilroy USGS 7.5-minute quadrangle in which the project site occurs, and for the eight surrounding quadrangles (Morgan Hill, Mt. Sizer, Mississippi Creek, Mt. Madonna, Gilroy Hot Springs, Watsonville East, Chittenden, and San Felipe) using the CNDDB Rarefind5. All species

listed as occurring in these quadrangles on CNPS Lists 1A, 1B, 2, or 4 were also reviewed (See Figure 3).

Serpentine soils are absent from the site; as such, those species that are uniquely adapted to serpentine conditions in the project's vicinity are considered absent from the site. These species include the Bay checkerspot butterfly (*Euphydryas editha bayensis*), big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*), Tiburon Indian paintbrush (*Castilleja affinis* ssp. *neglecta*), pink creamsacs (*Castilleja rubicundula ssp. rubicundula*), coyote ceanothus (*Ceanothus ferrisae*), Mt. Hamilton fountain thistle (*Cirsium fontinale* var. *campylon*), San Francisco collinsia (*Collinsia multicolor*), Santa Clara Valley dudleya (*Dudleya abramsii ssp. setchellii*), smooth lessingia (*Lessingia micradenia* ssp. *glabrata*), woodland woollythreads (*Monolopia gracilens*), Metcalf Canyon jewel-flower (*Streptanthus albidus ssp. albidus*), and most beautiful jewel-flower (*Streptanthus albidus* ssp. *peramoenus*).

Several other special status plant species have been ruled out on the site as they occur in habitats not present in the project site (e.g., vernal pool, chaparral, broad leafed forest, coastal prairie, coastal scrub, etc.) or at elevations significantly below or above elevations of the site (approximately 206 to 209 meters NGVD). These species include the Anderson's manzanita (*Arctostaphylos andersonii*), Pajaro manzanita (*Arctostaphylos pajaroensis*), chaparral harebell (*Campanula exigua*), Congdon's tarplant (*Centromadia parryi ssp. congdonii*), dwarf soaproot (*Chlorogalum pomeridianum* var. *minus*), Monterey spineflower (*Chorizanthe pungens var. pungens*), Santa Clara red ribbons (*Clarkia concinna ssp. automixa*), Hospital Canyon larkspur (*Delphinium californicum* ssp. *interius*), Hoover's button-celery (*Eryngium aristulatum var. hooveri*), legenere (*Legenere limosa*), Mt. Hamilton coreopsis (*Leptosyne hamiltonii*), prostrate vernal pool navarretia (*Navarretia prostrate*), Santa Cruz Mountains beardtongue (*Penstemon rattanii* var. *kleei*), hairless popcornflower (*Plagiobothrys glaber*), rock sanicle (*Sanicula saxatilis*), and Mt. Hamilton jewelflower (*Streptanthus callistus*).

Additionally, fish are absent from the site, as streams and other waters are absent from the site. Special status plant and animal species having potential to occur on the project site or immediate vicinity because suitable habitats are present are discussed further below.

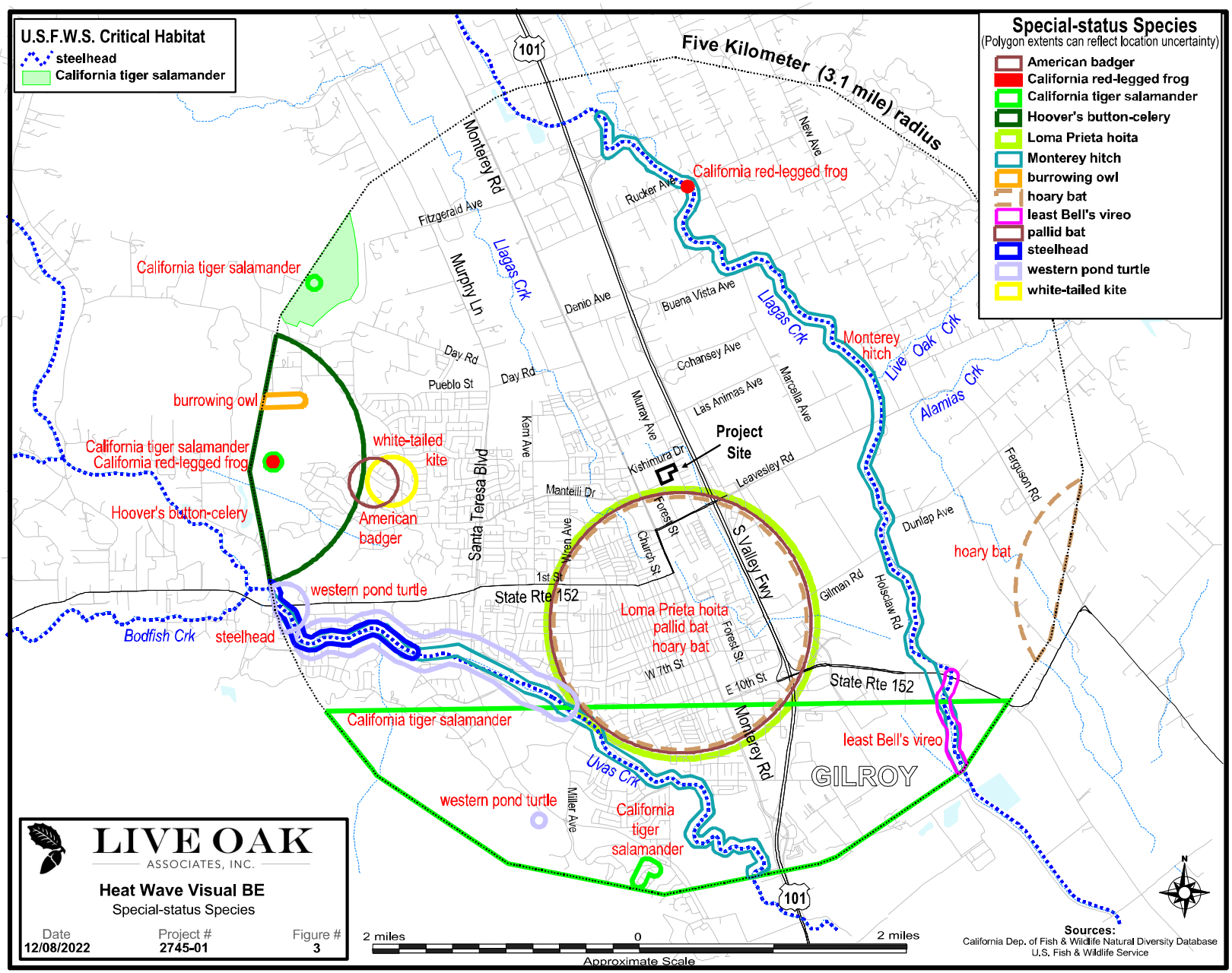

U.S.F.W.S. Critical Habitat
steelhead
California tiger salamander
Special-status Species
(Polygon extents can reflect location uncertainty)
American badger
California red-legged frog
California tiger salamander
Hoover's button-celery
Loma Prieta hoita
Monterey hitch
burrowing owl
hoary bat
least Bell's vireo
pallid bat
steelhead
western pond turtle
white-tailed kite
Five Kilometer (3.1 mile) radius
Project Site
Monterey Rd
Fitzgerald Ave
Murphy Ln
Llagas Crk
Denio Ave
Day Rd
Pueblo St
Buena Vista Ave
Cohansey Ave
Las Animas Ave
Marcella Ave
Live Oak Crk
Alamias Crk
Ferguson Rd
Dunlap Ave
Holsclaw Rd
Gilman Rd
Leavesley Rd
Kishimura Dr
Murray Ave
Kern Ave
Santa Teresa Blvd
Mantelli Dr
Neen Ave
Church St
Forest St
S Valley Fwy
1st St
State Rte 152
W 7th St
E 10th St
Uvas Crk
Miller Ave
GILROY
101
New Ave
Rucker Ave
California red-legged frog
Monterey hitch
California tiger salamander
burrowing owl
white-tailed kite
California tiger salamander
California red-legged frog
Hoover's button-celery
American badger
western pond turtle
Bodfish Crk
steelhead
Loma Prieta hoita
pallid bat
hoary bat
hoary bat
California tiger salamander
least Bell's vireo
western pond turtle
California tiger salamander
LIVE OAK
ASSOCIATES, INC.
Heat Wave Visual BE
Special-status Species
Date
12/08/2022
Project #
2745-01
Figure #
3
2 miles
0
2 miles
Approximate Scale
N
Sources:
California Dep. of Fish & Wildlife Natural Diversity Database
U.S. Fish & Wildlife Service

TABLE 1: SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY. **PLANTS (adapted from CDFW 2022 and CNPS 2022)** ***Threatened and Endangered Plants***			
Common and scientific names	**Status**	**General habitat description**	***Occurrence in the study area**
Santa Cruz tarplant *Holocarpha macradenia*	FT, CE, CNPS 1B	Habitat: Occurs coastal prairie, coastal scrub, and valley and foothill grasslands, often in clay or sandy soils. Elevation: 10-220 meters. Blooms: June-October.	**Absent.** Suitable habitat for this species is absent form the site, additionally, skeletons of this species were not observed during the November 2022 survey and the closest documented occurrence of this species is more than three miles from the site (CNDDB 2022).

TABLE 1: SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY. **PLANTS (adapted from CDFW 2021 and CNPS 2021)** ***Other plant species listed by CNPS***			
Common and scientific names	**Status**	**General habitat description**	***Occurrence in the study area**
San Joaquin Spearscale *Extriplex joaquinana*	CNPS 1B	Habitat: Occurs in chenopod scrub, meadows and seeps, playas, and valley and foothill grasslands on alkaline soils. Elevation: 1-835 meters. Blooms: April-October.	**Absent.** Habitat is absent on the site for this species, as alkaline soils are absent from the site. Additionally, the closest documented occurrence of this species is more than three miles from the site (CNDDB 2022).
Fragrant fritillary *Fritillaria liliacea*	CRPR 1B	Habitat: Occurs in grassland, chaparral, cismontane woodland, riparian woodland, often on serpentine. Elevation: 30-860 meters. Blooms: Perennial herb; May-October.	**Absent.** Suitable habitat is absent from the site and soils of the site are not serpentine. Additionally, there are no documented occurrences within three miles from the site (CDFW 2022).
Loma Prieta hoita *Hoita strobilina*	CRPR 1B	Habitat: Chaparral, cismontane woodland and riparian woodland, usually on mesic and serpentine soils. Elevation: 30-860 meters. Blooms: Perennial herb; May – July.	**Absent.** Suitable habitat is absent from the site and soils of the site are not serpentine. Additionally, there are no documented occurrences within three miles from the site (CDFW 2022).
Arcuate bush-mallow *Malacothamnus arcuatus*	CRPR 1B	Habitat: Chaparral and cismontane woodlands. Elevation: 15-355 meters. Blooms: Perennial shrub; April – September.	**Absent.** The site does not support suitable habitat; this perennial shrub would have been observed if present during the November 2022 site visit. Additionally, there are no documented occurrences within three miles from the site (CDFW 2022).
Hall's bush-mallow *Malacothamnus hallii*	CRPR 1B	Habitat: Chaparral and coastal scrub. Elevation: 10-760 meters. Blooms: Perennial shrub; (April) May – September (October).	**Absent.** The site does not support suitable habitat; this perennial shrub would have been observed if present during the November 2022 site visit. Additionally, there are no documented

TABLE 1: SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.

PLANTS (adapted from CDFW 2021 and CNPS 2021)
Other plant species listed by CNPS

Common and scientific names	Status	General habitat description	*Occurrence in the study area
			occurrences within three miles from the site (CDFW 2022).
California alkali grass *Puccinellia simplex*	CNPS 1B	Habitat: Occurs in alkaline, vernally mesic, sinks, flats, and lake margins within chenopod scrub, meadows and seeps, Valley and foothill grasslands, and vernal pools. Elevation:2-930 meters. Blooms: March-May.	**Absent.** The site does not support suitable habitat, including suitable soils. Additionally, there are no documented occurrences within three miles from the site (CDFW 2022).
Santa Cruz clover *Trifolium buckwestiorum*	CRPR 1B	Habitat: Gravelly margins of broadleafed upland forest, cismontane woodland, and coastal prairie. Elevation: 105-610 meters. Blooms: Annual herb; April – October.	**Absent.** The site does not support suitable habitat, including suitable soils. Additionally, there are no documented occurrences within three miles from the site (CDFW 2022).
Saline clover *Trifolium depauperatum var. hydrophilum*	CNPS 1B	Habitat: Marshes and swamps, valley, and foothill grasslands on mesic or alkaline soils, and vernal pools. Elevation: 0-300 meters. Blooms: April–June.	**Absent.** The site does not support suitable habitat in the form of mesic, alkaline soils. Additionally, there are no documented occurrences within three miles from the site (CDFW 2022).

TABLE 1: SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.

ANIMALS (adapted from CDFW 2022 and USFWS 2022)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Acts

Common and scientific name	Status	General habitat description	*Occurrence in the study area
Western bumble bee *Bombus occidentalis*	CCE	In California, mainly occurring within the coastal and Sierra Nevada ranges within meadows and grasslands and some natural areas within urban environments. Indication of recent population potentially being restricted to high elevation and coastal areas. Historically occurred from the Channel Islands to the northern California border. Flight period is February to late November, peaking in late June and late September. Tends to construct nest underground in animal burrows on west and south-west facing slopes. Overwintering sites are likely in friable soils or in debris or leaf litter.	**Unlikely.** Suitable nesting sites for this species is restricted to the few ground squirrel burrows onsite, and the site supports a limited growth of flowering plants on which this species can forage. Therefore, this species is not likely to use the site for nesting or regular foraging.
Crotch bumble bee *Bombus crotchii*	CCE	In California, inhabits open grassland and scrub habitats of the southern 2/3 of California. Historically in, but largely extirpated from the Central Valley. Flight period for queens is late February to late October peaking in April and July; flight period for males and workers is March through September peaking in early July. Constructs nests underground in animal burrows. Overwintering sites are likely in soft soils or in debris or leaf litter.	**Unlikely.** Suitable nesting sites for this species is restricted to the few ground squirrel burrows onsite, and the site supports a limited growth of flowering plants on which this species can forage. Therefore, this species is not likely to use the site for nesting or regular foraging.
California tiger salamander (CTS) *Ambystoma californiense*	FT, CT, SCVHP Focal Species	Breeds in vernal pools and stock ponds of central California; adults aestivate in grassland habitats adjacent to the breeding sites.	**Absent.** Suitable breeding habitat for this species is absent from the site and the immediate vicinity.
Foothill yellow-legged frog (FYLF) *Rana boylii*	FPT, CE, SCVHP Focal Species	Occurs in swiftly flowing streams and rivers with rocky substrate with open, sunny banks in forest, chaparral, and woodland habitats, and can sometimes be found in isolated pools.	**Absent.** Suitable habitat for the FYLF is absent from the site.

TABLE 1: SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.

ANIMALS (adapted from CDFW 2022 and USFWS 2022)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Acts

Common and scientific name	Status	General habitat description	*Occurrence in the study area
California Red-legged Frog (CRLF) *Rana aurora draytonii*	FT, CSC, SCVHP Focal Species	Rivers, creeks and stock ponds of the Sierra foothills and Bay Area, preferring pools with overhanging vegetation.	**Absent.** Suitable habitat for the CRLF is absent from the site.
Tricolored Blackbird *Agelaius tricolor*	CSC, CT, SCVHP Focal Species	Breeds near fresh water in dense emergent vegetation.	**Absent.** Suitable nesting habitat for this species is absent from the site.
Least Bell's vireo (LBV) *Vireo bellii pusillus*	FE, CE, SCVHP Focal Species	Occurs in southern California and southern Santa Clara County during the breeding season March, migrates out of the state July through September. Early successional riparian vegetation including dense brush, mesquite, or cottonwood-willow forests in riparian areas.	**Absent.** Suitable nesting habitat for this species is absent for the site.
Swainson's hawk (SWHA) *Buteo swainsoni*	CT	Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah. Requires adjacent suitable foraging areas such as grasslands or alfalfa fields supporting rodent populations.	**Unlikely.** The SWHA is only known in the region from one pair which breeds each year in Coyote Valley. The past several years, they have nested immediately south of Bailey Avenue north of Morgan Hill. There are no other recent records of this species in Santa Clara County.
San Joaquin kit fox *Vulpes macrotis mutica*	FE, CT	Frequents desert alkali scrub and annual grasslands and may forage in adjacent agricultural habitats. Utilizes enlarged (4 to 10 inches in diameter) ground squirrel burrows as denning habitat.	**Absent.** The site is outside of the range for San Joaquin kit fox.

TABLE 1: SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.

ANIMALS (adapted from CDFW 2022 and USFWS 2022)
Species Listed as Species of Special Concern

Common and scientific names	Status	General habitat description	*Occurrence in the study area
Santa Cruz black salamander *Aneides niger*	CSC	Occurs in deciduous woodland, coniferous forests, and coastal grasslands around the Santa Cruz Mountains and foothills. This species is also known to occur on the developed flats in pockets within older developments. They can be found under rocks near streams, in talus, under damp logs, rotting wood, and other objects.	**Absent.** Suitable habitat for the Santa Cruz black salamander is absent from the project site.
Coast horned lizard *Phrynosoma blainvillii*	CSC	Occurs in grasslands, scrublands, oak woodlands, etc. of central California. Common in sandy washes with scattered shrubs.	**Absent.** Habitats required by coast horned lizards are absent from the site.
Western pond turtle (WPT) *Actinemys marmorata*	CSC, SCVHP Focal Species	Intermittent and permanent waterways including streams, marshes, rivers, ponds, and lakes. Open slow-moving water of rivers and creeks of central California with rocks and logs for basking.	**Absent.** Suitable habitat for WPT is absent from the site.
Northern harrier *Circus cyaneus*	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	**Possible.** Although the nearest documented observation of this species is more than three miles from the site (CDFW 2022), the site provides suitable breeding and foraging habitat for this species.
White-tailed Kite (WTK) *Elanus leucurus*	CP	Open grasslands and agricultural areas throughout central California.	**Possible.** Although the nearest documented observation of this species is approximately two miles from the site (CDFW 2022), the site provides moderately suitable breeding and foraging habitat for this species.
Golden Eagle (GE) *Aquila chrysaetos*	CP	Typically frequents rolling foothills, mountain areas, sage-juniper flats, and desert.	**Possible.** Although suitable breeding habitat for the golden eagle is absent from the site, foraging habitat exists onsite.
Burrowing Owl (BUOW) *Athene cunicularia*	CSC, SCVHP Focal Species	Found in open, dry grasslands, deserts, and ruderal areas. Requires suitable burrows. This species is often associated with California ground squirrels.	**Possible.** Moderately suitable habitat is present onsite with a few ground squirrel burrows on the site. The nearest documented occurrence of BUOW is just over three miles to the west of the site (CDFW 2022).

TABLE 1: SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.

ANIMALS (adapted from CDFW 2022 and USFWS 2022)
Species Listed as Species of Special Concern

Common and scientific names	Status	General habitat description	*Occurrence in the study area
Loggerhead Shrike (LOSH) *Lanius ludovicianus*	CSC	Frequents open habitats with sparse shrubs and trees, other suitable perches, bare ground, and low herbaceous cover. Nests in tall shrubs and dense trees. Forages in grasslands, marshes, and ruderal habitats. Can often be found in cropland.	**Possible.** Suitable breeding and foraging habitat exist onsite.
Yellow-breasted chat (YBC) *Icteria virens*	CSC	Frequently breeds in dense shrubs and blackberry thickets and uses areas of dense vegetation during migration.	**Absent.** Dense vegetation suitable for nesting is absent from the site.
California Yellow Warbler *Dendroica petechia brewsteri*	CSC	Migrants move through many habitats of Sierra and its foothills. This species breeds in riparian thickets of alder, willow, and cottonwoods.	**Absent.** Suitable breeding habitat is absent from the site.
Grasshopper sparrow *Ammodramus savannarum*	CSC	Occurs in California during spring and summer in open grasslands with scattered shrubs.	**Unlikely.** Suitable breeding habitat is poor for this species on the site.
Townsend's Big-eared bat *Corynorhinus townsendii*	CSC	Primarily a cave-dwelling bat that may also roost in buildings. Occurs in a variety of habitats.	**Possible.** Although suitable foraging habitat occurs onsite, suitable roosting habitat is absent from the site. The nearest documented occurrence of this species is more than three miles from the site (CDFW 2022).
Pallid Bat *Antrozous pallidus*	CSC	Grasslands, chaparral, woodlands, and forests; most common in dry rocky open areas providing roosting opportunities.	**Possible.** Although suitable foraging habitat occurs onsite, suitable roosting habitat is absent from the site. The nearest documented occurrence of this species is approximately one and a half miles to the south of the site (CDFW 2022).
San Francisco Dusky-Footed Woodrat *Neotoma fuscipes annectens*	CSC	Found in hardwood forests, oak riparian, and shrub habitats.	**Absent.** Woodrat nests are absent from the site, and they are not expected to move onto the site.
American Badger *Taxidea taxus*	CSC	Found in drier open stages of most shrub, forest, and herbaceous habitats with friable soils, specifically grassland environments. Natal dens occur on slopes.	**Unlikely.** The site is suitable for badgers, and there is a small chance they would occur on the site, given the site is on the northern edge of the environs of Gilroy, however, it is unlikely a badger would den or breed on site. The nearest documented documentation of a badger is approximately two miles to the west of the site.

*Explanation of Occurrence Designations and Status Codes
Present: Species observed on the site at time of field surveys or during recent past.
Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible: Species not observed on the site, but it could occur there from time to time.
Unlikely: Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent: Species not observed on the site and precluded from occurring there because habitat requirements not met.

STATUS CODES

FE	Federally Endangered	CSC	California Species of Special Concern
FT	Federally Threatened	CE	California Endangered
CT	California Threatened	CR	California Rare
FPE	Federally Endangered (Proposed)	CP	California Protected
FPT	Federally Threatened (Proposed)	CCE	California Candidate Endangered
FC	Federal Candidate		

CRPR	California Native Plant Society Listing		
1A	Plants Presumed Extinct in California	3	Plants about which we need more information – a review list
1B	Plants Rare, Threatened, or Endangered in California and elsewhere	4	Plants of limited distribution – a watch list
2	Plants Rare, Threatened, or Endangered in California, but more common elsewhere		

2.4 JURISDICTIONAL WATERS

Jurisdictional waters include rivers, creeks, and drainages that have a defined bed and bank and which, at the very least, carry ephemeral flows. Jurisdictional waters also include lakes, ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), CDFW, and the Regional Water Quality Control Board (RWQCB). See Section 3.2.5 of this report for additional information. The site does not support any jurisdictional waters.

3 IMPACTS AND MITIGATIONS

3.1 SIGNIFICANCE CRITERIA

General plans, area plans, and specific projects are subject to the provisions of the California Environmental Quality Act. The purpose of CEQA is to assess the impacts of proposed projects on the environment before they are constructed. For example, site development may require the removal of some or all of its existing vegetation. Animals associated with this vegetation could be destroyed or displaced. Animals adapted to humans, roads, buildings, pets, etc., may replace those species formerly occurring on a site. Plants and animals that are state and/or federally listed as threatened or endangered may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed. These impacts may be considered significant. According to *2022 CEQA Status and Guidelines* (2022), "Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest. Specific project impacts to biological resources may be considered "significant" if they will:

- 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;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- 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;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.2 RELEVANT GOALS, POLICIES, AND LAWS

3.2.1 Threatened and Endangered Species

State and federal "endangered species" legislation has provided the CDFW and USFWS with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal Endangered Species Acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as "species of special status." Permits may be required from both the CDFW and USFWS if activities associated with a proposed project will result in the take of a listed species. To "take" a listed species, as defined by the state of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" said species (California Fish and Game Code, Section 86). "Take" is more broadly defined by the federal Endangered Species Act to include "harm" of a listed species (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFW and the USFWS are responding agencies under CEQA. Both agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

3.2.2 Migratory Birds

State and federal laws also protect most bird species. The State of California signed Assembly Bill 454 into law in 2019, which clarifies native bird protection and increases protections where California law previously deferred to Federal law. The Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., scc. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

3.2.3 Birds of Prey

Birds of prey are protected in California under provisions of the State Fish and Game Code, Section 3503.5, which states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFW.

Additionally, the Bald and Golden Eagle Protection Act (16 U.S.C., scc. 668-668c) prohibits anyone from taking bald or golden eagles, including their parts, nests, or eggs, unless authorized under a federal permit. The act prohibits any disturbance that directly affects an eagle or an active eagle nest as well as any disturbance caused by humans around a previously used nest site during a time when eagles are not present such that it agitates or bothers an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death, or nest abandonment.

3.2.4 Bats

Section 2000 and 4150 of the California Fish and Game Code states that it is unlawful to take or possess a number of species, including bats, without a license or permit, as required by Section 3007. Additionally, Title 14 of the California Code of Regulations states it is unlawful to harass, herd, or drive a number of species, including bats. To harass is defined as "an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering." For these reasons, bat colonies in particular are considered to be sensitive and therefore, disturbances that cause harm to bat colonies are unlawful.

3.2.5 Wetlands and Other "Jurisdictional Waters"

Jurisdictional waters include waters of the United States subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE) and waters of the State of California subject to the regulatory authority of the California Department of Fish and Wildlife (CDFW) and the California Regional Water Quality Control Board (RWQCB).

Clean Water Act, Section 404. The USACE regulates the filling or grading of Waters of the U.S. under the authority of Section 404 of the Clean Water Act. Drainage channels and adjacent wetlands may be considered "waters of the United States" or "jurisdictional waters" subject to the jurisdiction of the USACE. The extent of jurisdiction has been defined in the Code of Federal Regulations and clarified in federal courts.

The definition of waters of the U.S. have changed several times in recent years. In January 2020, the Environmental Protection Agency (EPA) and USACE jointly issued the Navigable Waters Protection Rule. The new rule was published in the Federal Register on April 21, 2020 and became effective on June 22, 2020.

The Navigable Waters Protection Rule (33 CFR §328.3(a)) defines waters of the U.S. as:

Territorial Seas and Traditional Navigable Waters (TNWs)

- The territorial seas and traditional navigable waters include large rivers and lakes and tidally influenced waterbodies used in interstate or foreign commerce.

Tributaries

- Tributaries include perennial and intermittent rivers and streams that contribute surface flow to traditional navigable waters in a typical year. These naturally occurring surface water channels must flow more often than just after a single precipitation event—that is, tributaries must be perennial or intermittent.
    - Tributaries can connect to a traditional navigable water or territorial sea in a typical year either directly or through other "waters of the United States," through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).
    - Ditches are to be considered tributaries only where they satisfy the flow conditions of the perennial and intermittent tributary definition, and either were constructed in or relocate a tributary or were constructed in an adjacent wetland and contribute perennial or intermittent flow to a traditional navigable water in a typical year.

Lakes, Ponds, and Impoundments of Jurisdictional Waters

- Lakes, ponds, and impoundments of jurisdictional waters are jurisdictional where they contribute surface water flow to a traditional navigable water or territorial sea in a typical year either directly or through other waters of the United States, through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).
- Lakes, ponds, and impoundments of jurisdictional waters are also jurisdictional where they are flooded by a water of the United States in a typical year, such as certain oxbow lakes that lie along the Mississippi River.

Adjacent Wetlands

- Wetlands that physically touch other jurisdictional waters are "adjacent wetlands."
- Wetlands separated from a water of the United States by only a natural berm, bank or dune are also "adjacent."
- Wetlands inundated by flooding from a water of the United States in a typical year are "adjacent."
- Wetlands that are physically separated from a jurisdictional water by an artificial dike, barrier, or similar artificial structure are "adjacent" so long as that structure allows for a direct hydrologic surface connection between the wetlands and the jurisdictional water in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature.
- An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

The Navigable Waters Protection Rule also outlines what do not constitute waters of the United States. The following waters/features are not jurisdictional under the rule:

- Waterbodies that are not included in the four categories of waters of the United States listed above.
- Groundwater, including groundwater drained through subsurface drainage systems, such as drains in agricultural lands.
- Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools.
- Diffuse stormwater run-off and directional sheet flow over upland.
- Many farm and roadside ditches.
- Prior converted cropland retains its longstanding exclusion but is defined for the first time in the final rule. The agencies are clarifying that this exclusion will cease to apply when cropland is abandoned (i.e., not used for, or in support of, agricultural purposes in the immediately preceding five years) and has reverted to wetlands.
- Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease.
- Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters.
- Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel.
- Stormwater control features excavated or constructed in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off.
- Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention and infiltration basins and ponds, that are constructed in upland or in non-jurisdictional waters.

- Waste treatment systems have been excluded from the definition of waters of the United States since 1979 and will continue to be excluded under the final rule. Waste treatment systems include all components, including lagoons and treatment ponds (such as settling or cooling ponds), designed to either convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater or stormwater prior to discharge (or eliminating any such discharge).

All activities that involve the discharge of dredge or fill material into waters of the U.S. are subject to the permit requirements of the USACE under Section 404 of the Clean Water Act. Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values. No permit can be issued without a CWA Section 401 Water Quality Certification (or waiver of such certification) verifying that the proposed activity will meet state water quality standards (Section 3.6.2).

- *Porter-Cologne Water Quality Act/Clean Water Act, Section 401*. There are nine Regional Water Quality Control Boards statewide; collectively, they oversee regional and local water quality in California. The RWQCB administers Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. The RWQCB for a given region regulates discharges of fill or pollutants into waters of the State through the issuance of various permits and orders.

Pursuant to Section 401 of the Clean Water Act, the RWQCB regulates waters of the State that are also waters of the U.S. Discharges into such waters require a Section 401 Water Quality Certification from the RWQCB as a condition to obtaining certain federal permits, such as a Clean Water Act Section 404 permit (Section 3.6.1). Discharges into all Waters of the State, even those that are not also Waters of the U.S., require Waste Discharge Requirements (WDRs), or a waiver of WDRs, from the RWQCB.

The Porter-Cologne Water Quality Control Act, Water Code Section 13260, requires that "any person discharging waste, or proposing to discharge waste, within any region that could affect the 'waters of the State' to file a report of discharge" with the RWQCB. Waters of the State as defined

in the Porter-Cologne Act (Water Code Section 13050[e]) are "any surface water or groundwater, including saline waters, within the boundaries of the state." This gives the RWQCB authority to regulate a broader set of waters than the Clean Water Act alone; specifically, in addition to regulating waters of the U.S. through the Section 401 Water Quality Certification process, the RWQCB also claims jurisdiction and exercises discretionary authority over "isolated waters," or waters that are not themselves waters of the U.S. and are not hydrologically connected to waters of the U.S.

The RWQCB also administers the Construction Stormwater Program and the federal National Pollution Discharge Elimination System (NPDES) program. Projects that disturb one or more acres of soil must obtain a Construction General Permit under the Construction Stormwater Program. A prerequisite for this permit is the development of a Stormwater Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. Projects that discharge wastewater, stormwater, or other pollutants into a Water of the U.S. may require a NPDES permit.

- *California Department of Fish and Game Code, Section 1602*. The CDFW has jurisdiction over the bed and bank of natural drainages and lakes according to provisions of Section 1602 of the California Fish and Game Code. Activities that may substantially modify such waters through the diversion or obstruction of their natural flow, change or use of any material from their bed or bank, or the deposition of debris require a Notification of Lake or Streambed Alteration. If the CDFW determines that the activity may adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will be prepared. Such an agreement typically stipulates that certain measures will be implemented to protect the habitat values of the lake or drainage in question.

3.2.6 City Tree Ordinance

The City of Gilroy has a Tree Ordinance (Section 30.28.270 of the Municipal Code), which regulates the removal of trees. The City's Tree Ordinance requires a permit to remove Protected Trees and Heritage Trees and includes the following definitions:

Protected Tree:

"Any indigenous tree characterized by having a single trunk of thirty-eight (38) inches in circumference or more at a point four and one-half (4-1/2) feet above the ground. Nonindigenous tree species and orchards (including individual fruit and nut trees) are exempt from this definition for the purpose of this section."

Heritage Tree:

"A tree of any species with a single trunk of ninety (90) inches in circumference or more at a point four and one-half (4-1/2) feet above the ground or with multiple trunks, two (2) of which collectively measure seventy-two (72) inches in circumference or more at a point four and one-half feet above the ground."

Indigenous Tree:

"A tree which is native to the Gilroy region including oaks (all types), California Bay (*Umbellularia californica*), big leaf maple (*Acer macrophyllum*), madrone (*Arbutus menziesii*), California sycamore (*Platanus racemosa*) California buckeye (*Aesculus californica*), and alder (*Alnus glutinosa*)."

3.2.7 Santa Clara Valley Habitat Plan

Six local partners (i.e., County of Santa Clara, Santa Clara Valley Transportation Authority; Santa Clara Valley Water District; and the Cities of San Jose, Gilroy, and Morgan Hill) and two wildlife agencies (CDFW and USFWS) prepared and adopted this multi-species habitat conservation plan, which primarily covers southern Santa Clara County, as well as the City of San Jose with the exception of the bayland areas. The SCVHP addresses listed species and species that are likely to become listed during the plan's 50-year permit term. The eighteen covered species include nine plants and nine animals. The animal species covered include, but are not limited to, the California tiger salamander, California red-legged frog, western pond turtle, and western burrowing owl. The SCVHP requires that the agencies comment on reportable interim projects and recommend mitigation measures or project alternatives that would help achieve the preliminary conservation objectives and not preclude important conservation planning options or connectivity between areas of high habitat value. Funding sources for the SCVHP include development fees based on

land cover types (natural, agricultural or small vacant sites surrounded by urban development). Additional fees are charged based on the occurrence of certain sensitive habitat types such as serpentine and wetlands.

The project is considered a covered project under the SCVHP. As a result, the project would be subject to conditions and fees of the SCVHP.

3.2.7.1 SCVHP Fees

Chapter 9 of the SCVHP identifies fees that would be required by this project. The following describes fees that are based on the 2022-2023 fee schedule; however, fees are calculated at the time the project submits the SCVHP application, which corresponds to application timing of grading and/or building permits. Thus, the following numbers are provided for a sense of magnitude and should be considered approximate.

The site is within Fee Zone B "Mostly Cultivated Agricultural Lands." The 2022-2023 SCVHP fees for development of Zone B lands are $16,425 per acre. In addition, a Nitrogen Deposition Fee would also be required at $5.85 per new vehicle trip and $55.38 per each new single-family residence. Temporary impact fees, such as for utility trenching, are assessed at a fraction of these fees.

3.2.7.2 Conditions on Covered Activities

The SCVHP provides several conditions for covered activities under the SCVHP. These conditions can be found in Chapter 6 of the SCVHP and are summarized below.

- **Condition 1 (page 6-7). Avoid Direct Impacts on Legally Protected Plant and Wildlife Species-** Condition 1 instructs developers to avoid direct impacts on legally protected plant and wildlife species, including federally endangered Contra Costa goldfields and fully protected wildlife species including the golden eagle, bald eagle, American peregrine falcon, southern bald eagle, white-tailed kite, California condor, and ring-tailed cat. Several of these species are likely to occur on or forage over the site (golden eagle, white-tailed kite, and ringtail). Condition 1 also protects bird species and their nests that are protected under the Migratory Bird Treaty Act (MBTA); additionally, golden eagles and bald eagles are protected under the Bald and Golden

Eagle Protection Act. Additionally, page 6-94 and Table 6-8 identify required surveys for breeding habitat of select covered wildlife species.

- **Condition 2 (page 6-9). Incorporate Urban-Reserve System Interface Design Requirements-** Condition 2 provides design requirements for the urban-reserve system interface. Some of the design requirements included in Condition 2 are installing non-permeable fences between urban and reserve areas, fencing public roads that run adjacent to reserve areas, minimizing the length of shared boundaries between urban and reserve areas, outdoor lighting limitations, and landscaping requirements.
- **Condition 3 (page 6-12). Maintain Hydrologic Conditions and Protect Water Quality- (Condition applies to project)-** Condition 3 applies to all projects due to the fact that implementation of projects could result in impacts on watershed health, including impacts to aquatic habitat for species, through changes in hydrology and water quality. This condition incorporates all of the most important measures for water quality protection of the National Pollutant Discharge Elimination System (NPDES) Program of the Clean Water Act. Required measures of Condition 3 are located in Table 6-2 of the SCVHP; these measures relate to water quality and habitat protection during and after project construction. They include measures typically included in a SWPPP but may include measures that are in addition to such plans.
- **Condition 4 (page 6-14). Avoidance and Minimization for In-Stream Projects-** Condition 4 minimizes impacts on riparian and aquatic habitat through appropriate design requirements and construction practices and provides avoidance and minimization measures for in-stream projects that may impact stream morphology, aquatic and riparian habitat, flow conditions, covered species, natural communities, and wildlife movement.
- **Condition 5 (page 6-18). Avoidance and Minimization Measures for In-Stream Operations and Maintenance-** Condition 5 provides avoidance and minimization measures for in-stream operations and maintenance activities, which includes, but is not limited to trail, bridge, road, and culvert maintenance, bank stabilization, removal of debris, and vegetation management.
- **Condition 6 (Page 6-21). Design and Construction Requirements for Covered Transportation Projects-** Condition 6 provides requirements for rural development design, construction, and post-construction. Types of projects covered by Condition 6 include highway projects, mass

transit projects, roadway projects and interchange upgrades, road safety and operational improvements, and dirt road construction.

- **Condition 7 (page 6-28). Rural Development Design and Construction Requirements-** Condition 7 provides requirements for development design and construction of new development outside of the urban service area including requirements relating to site hydrology, vineyards, private rural roads, vegetation management, soils, and lighting.
- **Condition 8 (page 6-35). Implement Avoidance and Minimization Measures for Rural Road Maintenance-** Condition 8 provides requirements for rural roads, road median, and barrier maintenance including requirements regarding riparian setbacks, erosion measures, herbicide and pesticide use, seasonal restrictions, mower cleaning, revegetation, ground-disturbing road maintenance, and flow lines.
- **Condition 9 (page 6-37). Prepare and Implement a Recreation Plan-** Condition 9 requires providing public access to all reserve lands owned by a public entity; each reserve land must provide a recreation plan.
- **Condition 10 (page 6-42). Fuel Buffer-** Condition 10 provides requirements for fuel buffers between 30 and 100 feet of structures. Requirements include measures relating to fuel buffers near structures and on reserve lands; the most notable measure is the requirement for nesting bird surveys prior to any fuel buffer maintenance during the nesting season.
- **Condition 11 (page 6-44). Stream and Riparian Setbacks-** Condition 11 provides requirements for stream and riparian setbacks; as the development area is outside the Urban Service Area, stream setbacks measured from the top of the stream bank should be 35 to 200 feet depending on the category rating of the stream and the slope class. Setbacks for Category 1 streams with 0-30% slopes should be at least 150 feet, and with >30% slopes should be at least 200 feet. The setback would be more if the edge-of-riparian line plus 35 feet is greater than the stream setback. Category 2 streams should have a setback of 35 feet.
- **Condition 12 (page 6-56). Wetland and Pond Avoidance and Minimization-** Condition 12 provides measures to protect wetlands and ponds, including planning actions, design, and construction actions.

- **Condition 13 (page 6-58). Serpentine and Associated Covered Species Avoidance and Minimization-** Condition 13 requires surveys for special status plants and the Bay checkerspot butterfly as well as its larval host plant in areas that support serpentine bunchgrass grassland, serpentine rock outcrops, serpentine seeps, and serpentine chaparral. Fees apply for impacts to serpentine habitat.
- **Condition 14 (page 6-60). Valley Oak and Blue Oak Woodland Avoidance and Minimization-** Condition 14 provides requirements for project planning and project construction, including avoidance of large oaks, guidance on irrigation near oak trees, and a buffer around the root protection zone, roads, and pathways within 25 feet of the dripline of an oak tree, trenching, and pruning activities.
- **Condition 15 (page 6-62). Western Burrowing Owl-** Condition 15 requires preconstruction surveys for burrowing owls in appropriate habitat prior to construction activities, provides avoidance measures for owls and nests in the breeding season and owls in the non-breeding season, and requirements for construction monitoring.
- **Condition 16 (page 6-68) Least Bell's Vireo-** Condition 16 requires preconstruction surveys in appropriate habitat for the least Bell's vireo prior to construction activities and provides avoidance and construction monitoring measures.
- **Condition 17 (page 6-69) Tricolored Blackbird-** Condition 17 requires preconstruction surveys in appropriate habitat for the tricolored blackbird prior to construction activities and provides avoidance and construction monitoring measures.
- **Condition 18 (page 6-71) San Joaquin Kit Fox-** Condition 18 requires preconstruction surveys in appropriate habitat for the San Joaquin kit fox prior to construction activities and provides avoidance and construction monitoring measures.
- **Condition 19 (page 6-74). Plant Salvage when Impacts are Unavoidable-** Condition 19 provides salvage guidance and requirements for covered plants.

Condition 20 (page 6-76). Avoid and Minimize Impacts to Covered Plant Occurrences- Condition 20 provides requirements for preconstruction surveys for appropriate covered plants (per habitat).

3.3 IMPACTS SPECIFIC TO THE PROJECT

The 7.71-acre property is planned for a 40,000 sq. ft. building where all offices and warehouse operations will be located, making it the new official Heat Wave Visual headquarters. This will be constructed as Phase 1 of the project. As discussed above, activities resulting in impacts to biotic resources may be regulated by local, state, and federal laws. The natural resource issues specific to this project are discussed in detail below.

3.3.1 Potential Project Impacts to Special Status Plants

Potential Impact. The grassland habitat of the site does not provide habitat for special status plants due to on-going and long-term disturbance and disking in addition. Special status plant species known to occur, or to once have occurred, in the project region are considered absent from the site due to an absence of potential habitat for these species (i.e. an absence of serpentine soils, vernal pools, chaparral, and/or because the site is substantially below the elevations at which these species occur, etc.). As such, the project as proposed is expected to have no impact on special status plants.

Mitigation. None warranted.

3.3.2 Loss of Habitat for Special Status Animals

Potential Impact. Twenty-four special status animal species occur, or once occurred, regionally (see Table 1). Of these, 17 species would be absent or unlikely to occur on the site due to a lack of suitable habitat for these species. The species that would be absent or unlikely to occur include the western bumble bee, Crotch bumble bee, California tiger salamander, foothill yellow-legged frog, California red-legged frog, Santa Cruz black salamander, coast horned lizard, western pond turtle, Swainson's hawk, yellow-breasted chat, yellow warbler, least Bell's vireo, tricolored blackbird, grasshopper sparrow, San Francisco dusky-footed woodrat, American badger, and San Joaquin kit fox.

The remaining seven special status animal species from Table 1 potentially occur more frequently as potential foragers or transients, may be resident to the site, or may occur within areas adjacent to the site. These include northern harrier, white-tailed kite, golden eagle, burrowing owl, loggerhead shrike, Townsend's big-eared bat, and pallid bat.

Suitable roosting habitat was not observed during November 2022 survey. Although roosting habitat is not available onsite for the Townsend's big-eared bat and pallid bat, these species are expected to forage within the site from time to time.

The loss of grassland habitat, which does not contain regionally important habitat for the northern harrier, white-tailed kite, golden eagle, burrowing owl, loggerhead shrike, Townsend's big-eared bat, and pallid bat, will not result in a significant loss of habitat for the species listed in Table 1.

The project does have the potential to result in an impact to individuals such as construction-related injury or mortality of nesting migratory birds and raptors, northern harrier, white-tailed kite, golden eagle, burrowing owl, and loggerhead shrike, as discussed below in Sections 3.3.5 and 3.3.6.

Mitigation. No mitigation warranted for loss of habitat for special status animal species.

3.3.3 Loss of Habitat for Native Wildlife

Potential Impact. The habitats of the site comprise only a small portion of the regionally available habitat for plant and animal species that are expected to use the habitat. The proposed project would result in the loss of California annual grassland habitat. This is not expected to result in a significant loss of habitat for local wildlife. Therefore, impacts due to the loss of habitats for native wildlife resulting from the proposed project are considered less-than-significant.

Mitigation. No mitigation would be warranted for the loss of habitat for native wildlife.

3.3.4 Interference with the Movement of Native Wildlife

Potential Impact. The site does is not within a regional movement corridor or landscape linkage, therefore, native wildlife that currently move across the site are expected to continue to move across the site after the site is built out.

Mitigation. No mitigation would be warranted for the loss of a wildlife movement corridor.

3.3.5 Impacts to Nesting Migratory Birds Including Northern Harrier, White-tailed Kite, Golden Eagle, Loggerhead Shrike, and other Nesting Raptors and Protected Birds

Potential Impacts. Trees and grassland habitat of the project site may support nesting birds and raptors. Buildout of the project during the nesting period for migratory birds (i.e., typically between February 1 to August 31), including initial site grading, soil excavation, and/or tree and vegetation removal, poses a risk of nest abandonment and death of any live eggs or young that may be present in nests within or near the site. Such an effect would be considered a significant impact. To ensure that any active nests will not be disturbed, and individual birds will not be harmed by construction activities, the following measures should be followed.

Mitigation. The following measures will ensure that active migratory bird and raptor nests will not be disturbed, and individual birds will not be harmed by construction activities and will reduce the project's potential impacts to nesting migratory birds to a less-than-significant level.

Mitigation Measure 3.3.5a. If initial site disturbance activities, including, tree, shrub, or vegetation removal, are to occur during the breeding season (typically February 1 to August 31), a qualified biologist would conduct pre-construction surveys for nesting migratory birds and raptors. The survey for nesting migratory birds would cover the project site itself, and the survey for nesting raptors would encompass the site and surrounding lands within 250 feet, where accessible. The survey should occur within 7 days prior to the onset of ground disturbance. If a nesting migratory bird were to be detected, an appropriate construction-free buffer would be established. Actual size of buffer, which would be determined by the project biologist, would depend on species, topography, and type of activity that would occur in the vicinity of the nest. The project buffer would be monitored periodically by the project biologist to ensure compliance. After the nesting is completed, as determined by the biologist, the buffer would no longer be required.

3.3.6 Impacts to Western Burrowing Owls

Potential Impacts. The site is outside of the burrowing owl fee area for the SCVHP; however, the site provides overwintering habitat for burrowing owls in the form of California ground squirrel burrows and foraging habitat, and suitable habitat for this species is also present in the field to

the south of the site. As burrowing owls are protected under Condition 1 of the SCVHP, following measures within Condition 15 of the SCVHP is required, and the project shall conduct pre-construction surveys in accordance with the Condition 15 of the SCVHP. Measures to ensure compliance with this condition are included below as Mitigation Measure 3.3.6.

Should site demolition or grading occur during the nesting season for this species (February 1 through August 31), nests and nestlings that may be present would likely be destroyed. Overwintering burrowing owls may also be buried in their roost burrows outside of the nesting season (September 1 through January 31). Any actions related to site development that result in the mortality of burrowing owls would constitute a violation of the federal Migratory Bird Treaty Act and provisions of the California Fish and Game Code. Therefore, the mortality of burrowing owls would constitute a significant impact under CEQA.

Mitigation. The following measures will ensure that burrowing owls will not be harmed by construction activities. Implementation of the following measures will reduce the project's potential impacts to burrowing owls to a less-than-significant level under CEQA and will ensure compliance with the SCVHP and state and federal laws.

Mitigation Measure 3.3.6a: Preconstruction surveys are required to ascertain whether or not burrowing owls occupy burrows on or adjacent to the site. These surveys consist of a minimum of two surveys, with the first survey no more than 14 days prior to initial construction activities (i.e. vegetation removal, grading, excavation, etc.) and the second survey conducted no more than 2 days prior to initial construction activities. If no burrowing owls or fresh sign of burrowing owls are observed during pre-construction surveys, construction may proceed. If burrowing owls or their recent sign are observed during these surveys, occupied burrows will be identified by the monitoring biologist and appropriate buffers, as described below, will be established.

- A 250-foot non-disturbance buffer will be established around all active burrowing owl burrows or nest sites as identified and defined by a qualified biologist. If the biologist determines that a nest is vacant, the non-disturbance buffer zone around that nest may be removed. The SCVHP specifies that a vacation from the site for a week or more by a

burrowing owl, as determined by a qualified biologist, would constitute a voluntary relocation by the owl, and the qualified biologist could then take measures to collapse suitable burrows of the site to discourage reoccupation. The biologist will supervise hand excavation of the burrow to prevent reoccupation only after receiving approval from the wildlife agencies (SCVHP, Chapter 6, Condition 15).

  - For permission to encroach within 250 feet of such burrows during the nesting season (February 1 through August 31), an Avoidance, Minimization, and Monitoring Plan would need to be prepared and approved by the Implementing Entity and the Wildlife Agencies prior to such encroachment (review Chapter 6, pp. 6-64 & 6-65 of the SCVHP for further detail).

- Should a burrowing owl be located onsite in the non-breeding season (September through January), construction activities would not be allowed within this 250-foot buffer of the active burrow(s) used by any burrowing owl unless the following avoidance measures are adhered to:
  - A qualified biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).
  - The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.
  - If there is any change in owl nesting and foraging behavior as a result of construction activities, these activities will cease within the 250-foot buffer.
  - If the owls are gone for at least one week, the project proponent may request approval from the Implementing Entity that a qualified biologist excavate usable burrows to prevent owls from reoccupying the site. After all usable burrows are excavated, the buffer zone will be removed, and construction may continue.

Mitigation Measure 3.3.6b: The SCVHP stipulates that passive relocation or exclusion of burrowing owls would not be allowed until a positive regional growth trend is achieved as defined in Section 5.4.6 of the SCVHP; however, a project may qualify for an exception to this prohibition. Permission to engage in passive relocation during the non-breeding season would need to be requested through the standard application process (Section 6.8 of the SCVHP). Application for an

exception would require additional information including a relocation plan/schedule and documentation by a qualified biologist that owls have occupied the site for the full year without vacating the site for 10 or more consecutive days. The application would need to be submitted to the Implementing Entity, and the Wildlife Agencies would then evaluate the application and make a determination for granting the exception. If passive relocation is granted, additional measures may be required by the Implementing Entity.

3.3.7 Potential Impacts to Riparian Habitat and Other Sensitive Natural Communities, Including Federally and State Protected Wetlands

Potential Impacts. Riparian habitat and other sensitive natural communities are absent from the project site. Therefore, the project as proposed will have no impact on riparian habitats or on waters under the jurisdiction of the U.S. or state.

Mitigation. No mitigation is warranted for potential impacts to riparian habitat and other sensitive natural communities.

3.3.8 Degradation of Water Quality in Seasonal Drainages, Stock Ponds and Downstream Waters

Potential Impact. Eventual site development and construction may require grading that leaves the soil of construction zones barren of vegetation and, therefore, vulnerable to sheet, rill, or gully erosion. Eroded soil is generally carried as sediment in surface runoff to be deposited in natural creek beds, canals, and adjacent wetlands. Furthermore, urban runoff is often polluted with grease, oil, pesticide and herbicide residues, heavy metals, etc. These pollutants may eventually be carried to sensitive wetland habitats used by a diversity of native wildlife species. The deposition of pollutants and sediments in sensitive riparian and wetland habitats would be considered a potentially significant adverse environmental impact. The project would comply with the City's grading requirements. Therefore, the project buildout would result in a less-than-significant impact to water quality.

Mitigation. No mitigation is warranted.

3.3.9 Conflict with Local Policies and Ordinances: City of Gilroy Tree Ordinance

Potential Impacts. A tree inventory was conducted by LOA arborist Davinna Ohlson on November 30, 2022, for this site; trees with a 90-inch circumference or with multiple trunks, two of which collectively measure 72 inches in circumference or more at a point of four and a half feet above the ground require a permit. A tree inventory has been completed and an arborist report is in preparation. The arborist report will determine how many ordinance-sized and heritage trees exist onsite. Onsite trees could be directly impacted in the form of removal, while off-site trees could be severely impacted in the form of root damage during grading efforts. The loss of ordinance-sized trees without further compliance with the City's tree policies would constitute a significant adverse impact of the project.

Mitigation. Ordinance-sized trees will require mitigation for removal and the permittee shall follow the City's tree ordinance requirements.

3.3.10 Conflict with Local Policies and Ordinances: Santa Clara Valley Habitat Conservation Plan

Proposed development of the approximately 7.71-acre site would be considered a covered project under the SCVHP and, as such, would be subject to conditions and fees of the SCVHP. Failure to comply with the SCVHP would constitute a significant impact under CEQA.

3.3.10.1 Fees

Compliance with the SCVHP includes payment of fees according to the "Fee Zone" designation of the property, payment of nitrogen deposition fees related to the number of residential units and/or anticipated car trips (for non-residential projects) resulting from the development, and any surcharge fees that are required based on site-specific impacts to sensitive habitats or sensitive species. The onsite portion of the proposed project would be subject to Zone B fees, which are currently $16,452 per acre (2022-2023 rates) and nitrogen deposition fees, which are currently $5.85 for each new vehicle trip and $55.38 per each new single-family residence. For any temporary impacts, all the same fees are applied, but at a fraction of the total cost depending on how long the project expects the temporary impact to last.

3.3.10.2 Conditions on Covered Activities

In addition to fees, the project would be required to comply with applicable conditions of the SCVHP. Conditions of the SCVHP, summarized above (Section 3.2.7), that would apply to the project include Conditions 1, 3, and 15 (Table 3).

TABLE 3. APPLICABLE SANTA CLARA VALLEY HABITAT PLAN (SCVHP) CONDITIONS OF THE PROPOSED PROJECT, LOCATED IN THE CITY OF SAN JOSE, CALIFORNIA

Condition (page references ICF International 2012)	Applicable to project	Comments/Requirements
Condition 1 (page 6-7). Avoid Direct Impacts on Legally Protected Plant and Wildlife Species	Applies	This condition requires actions conducted under the SCVHP to comply with existing laws protecting plant and wildlife species including those species not covered as part of the SCVHP. This requires compliance with the Migratory Bird Treaty Act, which prohibits killing or possessing covered migratory birds, their young, nests, feathers, or eggs. Nearly all species of nesting bird that could use the project site are protected by the MBTA. Project mitigations for pre-construction surveys for migratory birds, including for burrowing owls, ensures compliance with this condition.
Condition 2 (page 6-9). Incorporate Urban-Reserve System Interface Design Requirements	N/A	The project is not interfacing with the reserve system.
Condition 3 (page 6-12). Maintain Hydrologic Conditions and Protect Water Quality	Applies	This condition requires all projects to incorporate appropriate measures itemized in the SCVHP's Table 6-2 (refer to ICF International 2012) to minimize indirect and direct effects to covered species and their aquatic habitat. This condition also requires the local jurisdiction (i.e. the City of Gilroy) to verify that all appropriate measures from Table 6-2 are implemented. Measures from Table 6-2 shall be incorporated into project engineering and SWPPP plans.
Condition 4 (page 6-14). Avoidance and Minimization for In-Stream Projects	N/A	The project will not impact streams.
Condition 5 (page 6-18). Avoidance and Minimization Measures for In-Stream Operations and Maintenance	N/A	The project will not impact streams.
Condition 6 (Page 6-21). Design and Construction Requirements for Covered Transportation Projects	N/A	The project is not a transportation project.
Condition 7 (page 6-28). Rural Development Design and Construction Requirements	N/A	The project is within the urban service area and is not a rural development.

TABLE 3. APPLICABLE SANTA CLARA VALLEY HABITAT PLAN (SCVHP) CONDITIONS OF THE PROPOSED PROJECT, LOCATED IN THE CITY OF SAN JOSE, CALIFORNIA		
Condition (page references ICF International 2012)	**Applicable to project**	**Comments/Requirements**
Condition 8 (page 6-35). Implement Avoidance and Minimization Measures for Rural Road Maintenance	N/A	The project does not involve rural road maintenance.
Condition 9 (page 6-37). Prepare and Implement a Recreation Plan	N/A	The project is not part of the Reserve System.
Condition 10 (page 6-42). Fuel Buffer	N/A	A fuel buffer is not required for this project.
Condition 11 (page 6-44). Stream and Riparian Setbacks	N/A	The project will not impact streams or riparian habitat.
Condition 12 (page 6-56). Wetland and Pond Avoidance and Minimization	N/A	The project will not impact wetlands or ponds.
Condition 13 (page 6-58). Serpentine and Associated Covered Species Avoidance and Minimization	N/A	The project does not support serpentine soils and suitable habitat for Covered Plants are absent from the site.
Condition 14 (page 6-60). Valley Oak and Blue Oak Woodland Avoidance and Minimization	N/A	Valley and blue oak woodlands are absent.
Condition 15 (page 6-62). Western Burrowing Owl	Applies	Although the site is outside the burrowing owl fee zone, burrowing owls may occur onsite, and therefore, in order to comply with Condition 1, this project must also comply with Condition 15, including preconstruction surveys and avoidance measures for owls and nests, and requirements for construction monitoring. Measure 3.3.6 (above) defines the required actions for compliance with this condition.
Condition 16 (page 6-68) Least Bell's Vireo	N/A	Potentially suitable habitat for this species does not exist on the site or within 250 feet of the site.
Condition 17 (page 6-69) Tricolored Blackbird	Applies	Potentially suitable habitat for this species does not exist on the site or within 250 feet of the site.
Condition 18 (page 6-71) San Joaquin Kit Fox	N/A	Project is outside of modeled habitat for the San Joaquin kit fox.
Condition 19 (page 6-74). Plant Salvage when Impacts are Unavoidable	N/A	The project does not support serpentine soils and suitable habitat for Covered Plants are absent from the site.
Condition 20 (page 6-76). Avoid and Minimize Impacts to Covered Plant Occurrences	N/A	The project does not support serpentine soils and suitable habitat for Covered Plants are absent from the site.

Implementation of the measures listed and described above, including payment of Land Zone B and nitrogen deposition fees and compliance with Conditions 1, 3, and 15, would ensure that the project does not conflict with the SCVHP. The project would follow the required measures of the SCVHP; therefore, the project would not conflict with this local policy. To ensure compliance, it is recommended that the project proponent thoroughly review the identified sections of the SCVHP, including Table 6-2.

Mitigation. No mitigation is warranted.

4 LITERATURE CITED

Beier, P. and S. Loe. 1992. A Checklist for Evaluating Impacts to Wildlife Movement Corridors. Wildlife Society Bulletin 20(4):434-440.

California Department of Fish and Game. 2002. California Fish and Game code. Gould Publications. Binghamton, N.Y.

California Department of Fish and Wildlife. 2022. Annual Report on the Status of California State Listed Threatened and Endangered Animals and Plants. The Resources Agency, Sacramento, CA.

California Department of Fish and Wildlife. 2022. California Natural Diversity Database, Rarefind5. The Resources Agency, Sacramento, CA.

California Native Plant Society (CNPS). 2022. Inventory of Rare and Endangered Plants (online edition, v6-05c). California Native Plant Society. Sacramento, CA. http://www.cnps.org/inventory.

City of Gilroy Municipal Code.

Conservation Lands Network. https://www.bayarealands.org/explorer-tool/

Harris, L.D., Gallagher, P.B., 1989. New initiatives for wildlife conservation: the need for movement corridors. In: Mackintosh, G. (Ed.), Preserving Communities and Corridors. Defenders of Wildlife, Washington DC, pp. 11–34.

Holland, R.F. 1986. Preliminary Description of the Terrestrial Natural Communities of California. Resources Agency, Sacramento, CA. 156 pp.

Mayer, K. E., and W. F. Laudenslayer, Jr. Ed. 1988. A guide to wildlife habitats of California. California Department of Forestry and Fire Protection. Sacramento, CA. 166 pp.

Natural Resource Conservation Service. 2022. Web Soil Survey. USDA.

Remy, M. H., T. A. Thomas, J. G. Moose, and W. F. Manley. 1996. Guide to the California Environmental Quality Act.

Shuford, W. David and Thomas Gardall eds. 2008. California Bird Species of Special Concern. Western Field Orinthologists and California Department of Fish and Game.

Thomson, Robert C., Amber N. Wright, and H. Bradley Shaffer. 2016. California Amphibian and Reptile Species of Special Concern. California Department of Wildlife. University of California Press.

USACE. 1987. Corps of Engineers Wetlands Delineation Manual. Department of the Army.

U.S. Fish and Wildlife Service. 2018. Endangered and threatened wildlife and plants.

Wetland Training Institute, Inc. 1990. Federal Wetland Regulation Reference Manual. B.N. Goode and R.J. Pierce (eds.) WTI 90-1. 281pp.

Appendix D Arborist Report

LIVE OAK
ASSOCIATES, INC.

December 30, 2022

Justin Hertel
Heat Wave Visual
8840 Forest Street
Gilroy, CA 95020

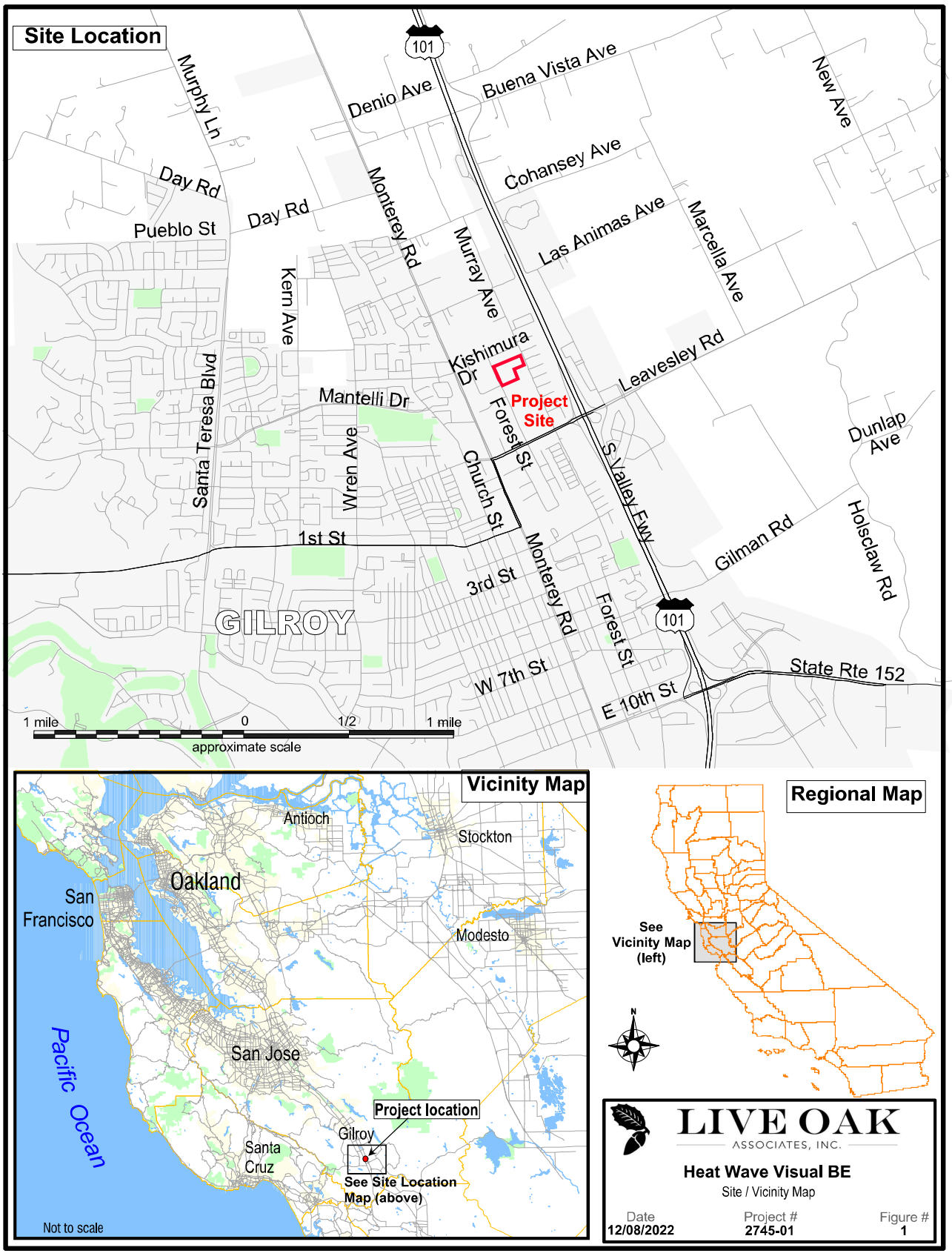
Subject: Arborist Report for Proposed Heat Wave Visual Headquarters Project, Gilroy, Santa Clara County, California (PN 2745-01)

Dear Mr. Hertel:

Per your request, Live Oak Associates, Inc. (LOA), has completed an arborist inventory of twenty-nine (29) trees on an approximately 7.29-acre parcel located in the City of Gilroy, in Santa Clara County, California. The site is bounded by Forest Street (west) and Murray Avenue (east) ("project site") (Figure 1). The project applicant, Heat Wave Visual, is proposing to develop an approximately 40,000-square-foot industrial building on the project site.

This report is intended to identify whether trees on site meet the criteria for protection as defined in the City of Gilroy ("City") zoning ordinance for Landscaping, Water Efficiency, and Storm Water Retention and Treatment (Chapter 30, Article XXXVIII). As per City requirements, this report provides the location of such trees, identifies the species, provides tree height and canopy width measurements, and rate their health, structure, and general condition. Of the 29 trees inventoried on site, seven trees are protected. All seven of the protected trees, three meeting the definition of heritage and four meeting the definition of indigenous tree, are expected to be removed as a result of project activities. The remaining twenty-two (22) trees located on site do not meet the City's criteria for protection due to their CBH (Circumference at Breast Height) and/or their species. These trees are also anticipated for removal. Lastly, some trees along Murray Avenue may meet the definition of a street tree per the City ordinance and may require additional permissions from the director for removal.

This report is a summary of all protected trees inventoried that meet the City of Gilroy protected tree criteria. This report can be used as guidance for acquiring a permit for tree removal. The tree inventory data is valid for two years from the completed survey date. An excerpt of the City of Gilroy municipal code pertaining to protected trees is provided in Attachment 1. A detailed table of the tree inventory data collected is included as Attachment 2. Photos referenced throughout this evaluation are included as Attachment 3. Photos of each individual tree are available upon request.


Site Location
Murphy Ln
Denio Ave
Buena Vista Ave
New Ave
101
Day Rd
Day Rd
Cohansey Ave
Pueblo St
Monterey Rd
Las Animas Ave
Marcella Ave
Murray Ave
Kern Ave
Kishimura Dr
Leavesley Rd
Project Site
Mantelli Dr
Santa Teresa Blvd
Wren Ave
Forest St
Church St
S Valley Fwy
Dunlap Ave
1st St
Monterey Rd
Gilman Rd
Holsclaw Rd
3rd St
GILROY
Forest St
101
W 7th St
E 10th St
State Rte 152
1 mile
0
1/2
1 mile
approximate scale
Vicinity Map
Antioch
Stockton
Oakland
San Francisco
Modesto
San Jose
Pacific Ocean
Project location
Gilroy
Santa Cruz
See Site Location Map (above)
Not to scale
Regional Map
See Vicinity Map (left)
N
LIVE OAK
ASSOCIATES, INC.
Heat Wave Visual BE
Site / Vicinity Map
Date
12/08/2022
Project #
2745-01
Figure #
1

City of Gilroy Protected Tree Code

The City of Gilroy states that "the city recognizes that existing and future trees and tree communities located in the city are a valuable and distinctive resource. These trees and tree communities augment the economic base of the city through encouragement of tourism and enhancement of the living environment. The removal of protected trees and diminishing of tree communities would reduce property values and the scenic beauty and attractiveness of the city to residents and visitors. In order to protect this resource, it is the intent of this section to regulate the removal or destruction of protected trees and tree communities on private property within the city (Chapter 30, Article 38, Section 270)." As such, Protected Trees, as defined in Chapter 30, Article 38, Section 270 of the City of Gilroy Municipal Code protects certain trees and requires that an approved permit be obtained before disturbances.

Chapter 30, Article 38, Section 270 (b) defines which trees are subject to permits for removal as follows:

(b) ***Definitions.***

> *(1)* ***Community of Protected Trees.*** *Any grouping of protected trees which are ecologically or aesthetically related to each other such that the loss of several of them would cause a protected ecological, aesthetic, or environmental impact in the immediate area, as determined by a certified arborist. In subsections (d), (e), (g), and (h) of this section, the term "tree" shall refer to each and every tree in the community of protected trees that is proposed for removal.*
>
> *(2)* ***Heritage Tree.*** *A tree of any species with a single trunk of ninety (90) inches in circumference or more at a point four and one-half (4-1/2) feet above the ground or with multiple trunks, two (2) of which collectively measure seventy-two (72) inches in circumference or more at a point four and one-half (4-1/2) feet above the ground.*
>
> *(3)* ***Indigenous Tree.*** *A tree which is native to the Gilroy region, including oaks (all types), California bay (Umbellularia californica), big leaf maple (Acer macrophyllum), madrone (Arbutus menziesii), California sycamore (Platanus racemosa), California buckeye (Aesculus californica) and alder (Alnus glutinosa).*
>
> *(4)* ***Protected Tree.*** *Any indigenous tree characterized by having a single trunk of thirty-eight (38) inches in circumference or more at a point four and one-half (4-1/2) feet above the ground. Nonindigenous tree species and orchards (including individual fruit and nut trees) are exempt from this definition for the purpose of this section.*
>
> *(5)* ***Tree.*** *A woody perennial plant characterized by having a main stem or trunk, or a multi-stemmed trunk system with a more or less definitely formed crown and is usually over ten (10) feet high at maturity. This definition shall not include trees planted, grown, and held for sale by licensed nurseries or the first removal or transplanting of such trees pursuant to and as a part of operation of a licensed nursery business.*

Additionally, Chapter 30, Article 38, Section 270 (c) describes under what circumstances a tree removal permit is required:

(c) ***Permit Required.*** *It is unlawful for any person to cut down, remove, poison or otherwise damage, kill or destroy or cause to be removed any of the following on any private property without first securing a*

permit as provided in this section:

(1) A protected tree.

(2) Greater than twenty-five percent (25%) of the trees within the outermost dripline of a community of protected trees.

(3) A heritage tree.

A separate tree removal permit shall not be required for projects which have been approved through a discretionary process by the planning division, planning commission or city council and the removal of protected trees or community of trees were reviewed to ensure compliance with all requirements of this section and authorized by that approval. Trimming, removal, and other activities related to trees in the public right-of-way are regulated by Chapter 26.

Methods

The project site was surveyed for trees meeting the City of Gilroy criteria on November 30, 2022, by LOA International Society of Arboriculture (ISA) Certified Arborist, Davinna Ohlson (WE-14071A), and assistant Tara Johnson-Kelly.

Prior to the field visit, a desktop analysis was conducted to review the project boundaries, site construction plan, and City of Gilroy municipal code. The survey area includes the construction envelope within one parcel (Accessor Parcel Number 835-01-059). The construction envelope was not staked on site at the time of the survey; therefore, engineering site plans with aerial imagery and a GPS was used to determine the boundary. It is important to note this survey boundary was based off of preliminary site plans, which had not been finalized or officially approved by the City at the time of the survey. Therefore, should finalized grading plans include additional areas, those areas would likely need to be assessed for trees meeting the City's criteria. The trees of focus were within the construction envelope (removal) or within 20 feet (encroachment). The preliminary site plan is provided in Attachment 4.

For each tree expected to be impacted, the arborist assigned a tree tag ID number (although tags had been affixed prior to the site visit by someone else, LOA assigned additional tags to ensure all trees were tagged. Both sets of tree tag ID numbers are provided in Attachment 2), identified the tree species, and measured its CBH (Circumference at Breast Height). CBH is defined as the circumference of a tree trunk measured at four and one-half feet above natural grade, except if specified differently due to the tree's growth pattern. Note that the survey timing was late fall/early winter when most deciduous trees were missing all or part of their leaves. Tree growth in the canopy for deciduous trees was determined by branches with budding and no decay or wood dead in appearance.

Additional information was collected including estimated height and canopy diameter in feet, and rating of health, structure, and general condition. Health, structure, and overall condition were rated according to the following percentage scales, using limited visual assessment only:

Health

- Excellent (100- 81%) - High vigor and nearly perfect health with little or no twig dieback, discoloration or defoliation;

- Good (80- 61%) - Vigor is normal for the species. No significant damage due to disease or pests. Any twig dieback, defoliation or discoloration is minor;
- Fair (61- 41%)- Reduced vigor. Damage due to insects or disease may be significant and associated with defoliation but is no likely to be fatal. Twig dieback, defoliation, and discoloration and/or dead branches may compromise up to 50% of the crown;
- Poor (40- 21%) - Unhealthy and declining in appearance. Poor vigor. Low foliage density and poor foliage color are present. Potentially fata pest infestation. Extensive twig and/or branch dieback;
- Very Poor (20- 6%) - Poor vigor. Appears to be dying and in the last stages of life. Little live foliage;
- Dead (5- 0%) - No or little living tissue.

Structure

- Excellent (100- 81%)- Nearly ideal and free of defects;
- Good (80- 61%)- Well-developed structure. Defects are minor and can be corrected;
- Fair (61- 41%)- A single defect of significant nature or multiple moderate defects. Defects are not practical to correct or would require multiple treatments over several years;
- Poor (40- 21%)- A single serious defect or multiple significant defects. Recent change in tree orientation. Observed structural problems cannot be corrected. Failure may occur at any time;
- Very Poor (20- 6%)- Single or multiple sever defects. Failure is probable or imminent;
- Dead (5- 0%)- No or little living tissue.

General Condition

- Excellent - Nearly ideal for the species. Generally symmetric. Consistent with intended use;
- Good - Minor asymmetries/deviations from species norm. Mostly consistent with the intended use. Function and aesthetics are not compromised;
- Fair - Major asymmetries/deviations from species norm and/or intended use. Function and/or aesthetics are compromised;
- Poor - Largely asymmetric/abnormal. Detracts from intended use and/or aesthetics to a significant degree;
- Very Poor - Visually unappealing. Provides little to no function in the landscape;
- Dead - No or little living tissue.

All trees that met the City's criteria were mapped during the site visit using an EOS Arrow 100 Submeter GNNS Receiver, including the trunk location and canopy. The driplines were later edited using recent aerial imagery after the survey was completed and the data was being analyzed. Photos were taken to provide an overview of each tree's location or site issues.

Survey Results

Of the 29 trees inventoried on site, seven meet the criteria for protection described in the City of Gilroy zoning ordinance (Table 1). All trees were provided a number tag. Trees numbered 52 through 57 are located along Murray Avenue and may be within the City Right-of-Way (ROW),


LEGEND
Approximate Project site
Off-Site Improvement Boundary
Tree Canopy
67 Protected Tree (Heritage or Indigenous)
68 Mature Tree (No Protected Designation)
Kishimura Dr
Forest St
Nagareda Dr
Madison Ct
Murray Ave
Garfield Ct
57
56
55
54
53
52
60
58
59
61
71
75
76
77
78
79
80
69
70
68
67
74
72
73
65
66
64
63
62
N
200'
0
100'
200 feet
approximate scale
Aerial Photograph courtesy of Google Earth, 3/2022
LIVE OAK
ASSOCIATES, INC.
Heat Wave Visual HCP
Tree Survey
Date
12/08/2022
Project #
2745-01
Figure #
2

and thus may be considered a street tree. All of the trees on site are located in a ruderal field, mostly along its perimeter. The field appears to be disturbed with some dirt tracts and recent earthwork.

Table 1. Protected Tree Table Summary with Replacement Ratios

Tree Tag #	Scientific Name	Common Name	CBH (in.)	Protected? (Y/N)	Replacement Ratio (Minimum size)
54	*Juglans nigra*	Black walnut	115.3	Y- Heritage	2- 48 in. box trees
58	*Quercus lobata*	Valley oak	159.55	Y- Heritage	2- 48 in. box trees
59	*Quercus lobata*	Valley oak	43.3	Y- Indigenous	2- 24 in. box trees
61	*Quercus lobata*	Valley oak	51.3	Y- Indigenous	2- 24 in. box trees
67	*Pinus radiata*	Monterey pine	100.2	Y- Heritage	2- 48 in. box trees
76	*Quercus lobata*	Valley oak	38.9	Y- Indigenous	2- 24 in. box trees
80	*Quercus lobata*	Valley oak	41.4	Y- Indigenous	2- 24 in. box trees

All 7 trees that meet the criteria for protection are anticipated to be removed. No trees were assessed to be dead. One (1) tree, a Monterey pine (Pinus radiata), was determined to be in good general condition. Five (5) trees, all valley oak (*Quercus lobata*), were determined to be in fair general condition. Lastly, 1 tree, a black walnut (*Juglans nigra*), was determined to be in poor condition. Generally, there were no notable structural defects or severe health issues. The Monterey pine had some wetwood, potentially indicating a boring insect infestation.

Table 2. Summary of Tree Health and Condition Ratings

Rating Scale	General Condition	Health	Structure
Excellent or (100-81%)	0	0	0
Good or (80-61%)	1	4	5
Fair or (60-41%)	5	3	2
Poor or (40-21%)	1	0	0
Very Poor or (20-6%)	0	0	0
Dead or (5-0%)	0	0	0

The last notable observation during the survey was that many of the trees were tagged prior to our survey; previously installed tag ID numbers where visible, are noted in Attachment 2. The full inventory of each protected tree identified within the survey area is included in Attachment 2. This inventory includes the protected tree tag number, species, CBH, tree height, canopy width, health, structure, and condition rating, expected project impacts, and general notes. Figure 2 shows the location for each tree surveyed.

Project Impacts Discussion

Seven protected trees on the project site are expected to be removed due to the location of the proposed construction envelope and associated project activities. The removal of these trees is considered a reasonable use of property for the proposed future development. These trees were not assessed for risk management or other programs since this permit application is not for the removal of hazardous trees.

Two of the seven trees are not native to the City of Gilroy area but meet the size requirement (greater than 90 inches) for a heritage tree and are thus protected. The remaining 5 trees are native oak species and meet the minimum size requirement of 38 inches. Generally, the condition of the majority of these trees is fair, which for their age and location is average. The trees located in the middle of the open field hold the highest value for habitat and aesthetic site conditions. All other trees are located along the boundary of the parcel and have been subject to intense management by the utility companies or have become overcrowded as the trees have matured lowering their aesthetic value and creating potential structural issues for the future.

One protected tree (Tree 54), located along Murray Avenue may be considered a street tree. Additional verification by an engineer or qualified personnel may be required for comparison of the trunk location vs. the street right-of-way. Tree 54 may require a separate approval to remove followed by a varying replacement ratio, if required by the director.

Tree Replacement Plan

For tree replacement, the City requires "Any tree approved for removal under this section shall be replaced. Replacement trees shall be of the same species as the tree that was removed unless otherwise approved by the community development director" (Chapter 30, Article 38, Section 270 (d)). The applicant has included new tree locations on their preliminary site plan that meet the City's requirement for on-site replacement (see Table 1). Seven protected trees are anticipated for removal; therefore 14 trees shall be planted on site as replacement. The City has plant size requirements based on the CBH of the existing tree. These plant sizes are listed in Table 1. The same tree species that are being removed will be the same species used for the replacement planting unless the applicant gets approval from the director for a change. Additionally, any trees that are inventoried in the future due to a potential change to the final site plans will be added to this tree replacement plan and the applicant will expect to plant on site if there is appropriate spacing or pay in-lieu fees.

Conclusion

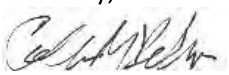
We conclude the project activities will result in the removal of seven protected trees (tagged number 54, 58, 59, 61, 67, 76, and 80) for the reasonable use of property in future site development. The tree replacement plan based on the preliminary site plan, requires the ratio 2:1 for each tree, replaced as the plant size stated in Table 1, and replaced as the same species that is removed unless otherwise approved by the director. Lastly, one protected tree (Tree 54) is located along Murray Avenue and may be considered a street tree. If it meets this definition based on its trunk location and the public right-of-way, then the director may require additional approval or a different replacement plan.

Once the final grading plan has been completed, an arborist shall review it, and any adjustments to the number of protected trees to be removed (or encroached upon) will be added and an updated report will be submitted to the City for a approval. Furthermore, this tree inventory is valid for 2 years due to the varying conditions of trees on the property. If the tree removal permit is applied for more than 2 years from the inventory survey date stated in this report, then the inventory must be updated by a certified arborist.

The basis for this arborist evaluation is limited to the visual examination of accessible parts during the November 2022 tree survey, without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the trees in question may not arise in the future.

Please let us know if you have any questions or require clarification regarding this evaluation.

Sincerely,



Colleen M. Del Vecchio
ISA Certified Arborist, TRAQ, #WE-11788A

Attachment 1: City of Gilroy Protected Trees Code

ARTICLE XXXVIII. LANDSCAPING, WATER EFFICIENCY, AND STORM WATER RETENTION AND TREATMENT

30.38.10 Purpose.

The city promotes the value and benefits of landscapes while recognizing the need to use limited water resources as efficiently as possible. In compliance with applicable state standards and guidelines, and to promote the city's goals and standards regarding sustainable development, this article establishes minimum landscape standards for all uses for enhancing the appearance of developments, reducing heat and glare, controlling soil erosion, enhancing on-site storm water management, conserving water, establishing a buffer and/or screen between residential and nonresidential land uses, and ensuring the ongoing maintenance of landscaped areas. Water conservation measures shall be addressed through landscape and irrigation design. (Ord. No. 2018-06, § 1, 3-19-18)

30.38.20 Applicability.

(a) The provisions of this article shall apply to all of the following landscape projects installed after December 1, 2015:

(1) Projects requiring a building permit or architectural and site permit that include the addition of an aggregate landscape area of five hundred (500) square feet or more;

(2) Projects requiring a building permit or architectural and site permit that include the rehabilitation of an aggregate landscape area of two thousand five hundred (2,500) square feet or more;

(3) Existing landscaped areas shall comply with the provisions specified in section 30.38.240 (Provisions for existing landscapes);

(4) Cemeteries.

a. New and rehabilitated cemeteries shall comply with the provisions specified in sections 30.38.170 (Landscape and irrigation maintenance schedule) and 30.38.180 (Irrigation audit, irrigation survey, and irrigation water use analysis).

b. Existing cemeteries shall comply with the provisions specified in section 30.38.240 (Provisions for existing landscapes).

(b) Projects using treated or untreated graywater (see section 30.38.210) or rainwater captured on site, any parcel within the project that has less than two thousand five hundred (2,500) square feet of landscape area and meets the parcel's landscape water requirement (estimated total water use) entirely with treated or untreated graywater or through stored rainwater captured on site is subject only to Appendix D (Prescriptive Compliance Option), Section (5) of state law.

(c) This article does not apply to:

(1) Registered local, state or federal historical sites;

(2) Ecological restoration projects that do not require a permanent irrigation system;

(3) Mined-land reclamation projects that do not require a permanent irrigation system; or

(4) Existing plant collections, as part of botanical gardens and arboretums open to the public. (Ord. No. 2018-06, § 1, 3-19-18)

30.38.30 Definitions.

"Applied water" means the portion of water supplied by the irrigation system to the landscape.

"Arborist report" means a report prepared by an arborist certified by the International Society of Arboriculture (ISA) or equivalent organization acceptable to the community development director containing specific information on the location, condition, structure, potential impacts of development, and recommended actions and mitigation measures regarding one (1) or more trees on an individual lot or project site.

"Automatic irrigation controller" means a timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers are able to self-adjust and schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.

"Backflow prevention device" means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

"Certificate of completion" means the document required under section 30.38.150 (Certificate of completion).

"Certified irrigation designer" means a person certified to design irrigation systems by an accredited academic institution, a professional trade organization or other program such as the U.S. Environmental Protection Agency's WaterSense irrigation designer certification program and Irrigation Association's certified irrigation designer program.

"Certified landscape irrigation auditor" means a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other program such as the U.S. Environmental Protection Agency's WaterSense irrigation auditor certification program and Irrigation Association's certified landscape irrigation auditor program.

"Check valve or anti-drain valve" means a valve located under a sprinkler head, or other location in the irrigation system, to hold water in the system to prevent drainage from sprinkler heads when the sprinkler is off.

"Common interest developments" means community apartment projects, condominium projects, planned developments, and stock cooperatives per Civil Code Section 1351.

"Community development director" means the City of Gilroy community development director or designee.

"Compost" means a safe and stable product of controlled biologic decomposition of organic materials that is beneficial to plant growth.

"Conversion factor (0.62)" means the number that converts acre-inches per acre per year to gallons per square foot per year.

"Distribution uniformity" means a measure of the uniformity of irrigation water over a defined area.

“Drip irrigation” means any nonspray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

“Dripline” means the outermost edge of the tree’s canopy. When depicted on a map or plan, the dripline is the irregular shaped circle that follows the contour of the tree’s branches as seen from overhead.

“Ecological restoration project” means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

“Effective precipitation or useful rainfall (Eppt)” means the portion of total precipitation which becomes available for plant growth.

“Emitter” means a drip irrigation emission device that delivers water slowly from the system to the soil.

“Established landscape” means the point at which plants in the landscape have developed significant root growth into the soil. Typically, most plants are established after one (1) or two (2) years of growth.

“Established period of the plants” means the first year after installing the plant in the landscape or the first two (2) years if irrigation will be terminated after establishment. Typically, most plants are established after one (1) or two (2) years of growth. Native habitat mitigation areas and trees may need three (3) to five (5) years for establishment.

“Estimated total water use (ETWU)” means total water used for the landscape as described in section 30.38.100 (water efficient landscape worksheet).

“ET adjustment factor (ETAF)” means a factor of 0.55 for residential areas and 0.45 for nonresidential areas, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two (2) major influences upon the amount of water that needs to be applied to the landscape. The ETAF for new and existing (nonrehabilitated) special landscape areas shall not exceed 1.0. The ETAF for existing nonrehabilitated landscapes is 0.8.

“Evapotranspiration rate” means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.

“Flow rate” means the rate at which water flows through pipes, valves and emission devices, measured in gallons per minute, gallons per hour, or cubic feet per second.

“Flow sensor” means an inline device installed at the supply point of the irrigation system that produces a repeatable signal proportional to flow rate. Flow sensors must be connected to an automatic irrigation controller or flow monitor capable of receiving flow signals and operating master valves. This combination flow sensor/controller may also function as a landscape water meter or submeter.

“Friable” means a soil condition that is easily crumbled or loosely compacted down to a minimum depth per planting material requirements, whereby the root structure of newly planted material will be allowed to spread unimpeded.

“Fuel modification plan guideline” means guidelines from a local fire authority to assist residents and businesses that are developing land or building structures in a fire hazard severity zone.

"Graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to, wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers. Health and Safety Code Section 17922.12.

"Hardscaped" means any durable material (pervious and nonpervious).

"Hydrozone" means a portion of the landscaped area having plants with similar water needs and rooting depth. A hydrozone may be irrigated or nonirrigated.

"Infiltration rate" means the rate of water entry into the soil expressed as a depth of water per unit of time (e.g., inches per hour).

"Invasive plant species" means species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive species may be regulated by county agricultural agencies as noxious species. Lists of invasive plants are maintained at the California Invasive Plant Inventory and USDA invasive and noxious weeds database.

"Irrigation audit" means an in-depth evaluation of the performance of an irrigation system conducted by a certified landscape irrigation auditor. An irrigation audit includes, but is not limited to: inspection, system tune-up, system test with distribution uniformity or emission uniformity, reporting overspray or runoff that causes overland flow, and preparation of an irrigation schedule. The audit must be conducted in a manner consistent with the Irrigation Association's landscape irrigation auditor certification program or other U.S. Environmental Protection Agency "WaterSense" labeled auditing program.

"Irrigation efficiency (IE)" means measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The irrigation efficiency factors for purposes of this article are 0.75 for overhead spray devices and 0.81 for drip systems.

"Irrigation survey" means evaluation of an irrigation system that is less detailed than an irrigation audit. An irrigation survey includes, but is not limited to: inspection, system test, and written recommendations to irrigation water use analysis. Analysis of water use data based on meter readings and billing data.

"Landscape architect" means a person who holds a license to practice landscape architecture in the State of California Business and Professions Code, Section 5615.

"Landscape area" means all planting areas, turf areas, and water features in a landscape design plan subject to the maximum applied water allowance calculation. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or nonpervious hardscapes, and other nonirrigated areas designated for nondevelopment (e.g., open spaces and existing native vegetation).

"Landscape contractor" means a person licensed by the State of California to construct, maintain, repair, install, or subcontract the development of landscape systems.

“Landscape documentation package” means documents required under section 30.38.90 (Elements of the landscape documentation package).

“Landscape project” means the total area of landscape in a project as defined in “landscape area” for the purposes of this article, meeting requirements under section 30.38.20 (Applicability).

“Landscape water meter” means an incline device installed at the irrigation supply point that measures the flow of water into the irrigation system and is connected to a totalizer to record water use.

“Lateral line” means a water delivery pipeline that supplies water to the emitters or sprinklers from the valve.

“Local agency” means a city or county, including a charter city or charter county, that is responsible for adopting and implementing the ordinance codified in this article. The local agency is also responsible for the enforcement of this article, including, but not limited to, approval of a permit and plan check or design review of a project.

“Local LAN purveyor” means any entity, including a public agency, city, county, or private water company, that provides retail water service.

“Low volume irrigation” means application of irrigation water at low pressure through a system of tubing or lateral lines and low volume emitters such as drip, driplines, and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

“Low water plant use” means plant species whose demonstrated water needs are compatible with local climate and soil conditions such that regular supplemental irrigation is not required to sustain the plant after it has become established. Species classified as “very low water use” and “low water use” by WUCOLS, having a regionally adjusted plant factor of 0.0 through 0.3, shall be considered low water use plants.

“Main line” means a pressurized pipeline that delivers water from the water source to the valve or outlet.

“Master shut-off valve” means automatic valve installed at the irrigation supply point which controls water flow into the irrigation system. When this valve is closed, water will not be supplied to the irrigation system. A master valve will greatly reduce any water loss due to a leaky station valve.

“Maximum applied water allowance (MAWA)” means the upper limit of annual applied water for the established landscaped area as specified in section 30.38.100 (water efficient landscape worksheet). It is based upon the area’s reference evapotranspiration, the ET adjustment factor, and the size of the landscape area. The estimated total water use shall not exceed the maximum applied water allowance. Special landscape areas, including recreation areas, areas permanently and solely dedicated to edible plants such as orchards and vegetable gardens, and areas irrigated with recycled water are subject to the MAWA with an ETAF not to exceed 1.0. MAWA = (ETo) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)].

“Median” means the area between opposing lanes of traffic that may be unplanted or planted with trees, shrubs, perennials, and ornamental grasses.

“Microclimate” means the climate of a small, specific area that may contrast with the climate of the overall landscape area due to factors such as wind, sun exposure, plant density, or proximity to reflective surfaces.

“Mined-land reclamation projects” means any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.

“Mulch” means any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, or decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.

“New construction” means a new building with a landscape or other new landscape, such as a park, playground, or greenbelt without an associated building.

“Nonresidential landscape” means landscapes in commercial, institutional, industrial and public settings that may have areas designated for recreation or public assembly. It also includes portions of common areas of common interest developments with designated recreational areas.

“Operating pressure” means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.

“Overhead sprinkler irrigation systems or overhead spray irrigation systems” means systems that deliver water through the air (e.g., spray heads and rotors).

“Overspray” means irrigation water which is delivered beyond the target area.

“Parkway” means the area between a sidewalk and the curb or traffic lane. It may be planted or unplanted, and with or without pedestrian egress.

“Permit” means the authorizing document issued by local agencies for new construction or rehabilitated landscapes.

“Pervious” means any surface or material that allows the passage of water through the material and into the underlying soil.

“Plant factor or plant water use factor” means a factor that, when multiplied by ETo, estimates the amount of water needed by plants. For purposes of this article, the plant factor range for very low water use plants is 0 to 0.1, the plant factor range for low water use plants is 0.1 to 0.3, the plant factor range for moderate water use plants is 0.4 to 0.6, and the plant factor range for high water use plants is 0.7 to 1.0. Plant factors cited in this article are derived from the publication “Water Use Classification of Landscape Species.” Plant factors may also be obtained from horticultural researchers from academic institutions or professional associations as approved by the California Department of Water Resources (DWR).

“Planting hole” means a hole in the ground that is dug for landscaping materials such as trees or shrubs.

“Project applicant” means an individual or entity submitting a landscape documentation package required under Section 492.3 of Title 23 of the California Code of Regulations, to request a permit, plan

check, or design review from the local agency. A project applicant may be the property owner or his or her designee.

“Public works director” means the City of Gilroy public works director or designee.

“Rain sensor or rain sensing shutoff device” means a component which automatically suspends an irrigation event when it rains.

“Record drawing or as-builts” means a set of reproducible drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor.

“Recreational area” means areas, excluding private single-family residential areas, designated for active play, recreation or public assembly in parks, sports fields, picnic grounds, amphitheaters or golf course tees, fairways, roughs, surrounds and greens.

“Recycled water, reclaimed water, or treated sewage effluent water” means treated or recycled waste water of a quality suitable for nonpotable uses such as landscape irrigation and water features. This water is not intended for human consumption.

“Reference evapotranspiration (ETo)” means the standard measurement of environmental parameters which affect the water use of plants. ETo is expressed in inches per day, month, or year as represented in Appendix A, and is an estimate of the evapotranspiration of a large field of four (4) to seven (7) inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the maximum applied water allowances so that regional differences in climate can be accommodated.

“Regional water efficient landscape ordinance” means a local ordinance adopted by two (2) or more local agencies, water suppliers and other stakeholders for implementing a consistent set of landscape provisions throughout a geographical region. Regional ordinances are strongly encouraged to provide a consistent framework for the landscape industry and applicants to adhere to.

“Rehabilitated landscapes” means any re-landscaping project that requires a permit, plan check, or design review, meets the requirements of section 30.38.20 (Applicability), and the modified landscape area is equal to or greater than two thousand five hundred (2,500) square feet.

“Residential landscape” means landscapes surrounding single- or multifamily homes.

“Root zone” means a specifically defined area commencing at the trunk and moving outward to form an irregularly shaped circle that follows the contour of the tree canopy and extending beyond the dripline of the tree by five (5) feet or such greater distance determined by the arborist report.

“Runoff” means water which is not absorbed by the surface to which it is applied and flows from the area to a drain, sewer, or stream. For example, runoff may result from water that is applied to landscaping at too great a rate (application rate exceeds infiltration rate) or when there is a slope.

“Soil moisture sensing device or soil moisture sensor” means a device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.

“Soil texture” means classification of soil based on its percentage of sand, silt, and clay.

“Special landscape area (SLA)” means an area of the landscape dedicated solely to edible plants, recreational areas, areas irrigated with recycled water, or water features using recycled water.

“Sprinkler head or spray head” means a device which delivers water through a nozzle.

“Static water pressure” means pipeline or municipal water supply pressure when water is not flowing.

“Station” means area served by one (1) valve or by a set of valves that operate simultaneously.

“Swing joint” means an irrigation component that provides a flexible, leak-free connection between the emission device and lateral pipeline to allow movement in any direction and to prevent equipment damage.

“Submeter” means a metering device to measure water applied to the landscape that is installed after the primary utility water meter.

“Turf” means a groundcover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, perennial ryegrass, red fescue and tall fescue are cool-season grasses. Bermuda grass, Kikuyu grass, seashore paspalum, St. Augustine grass, zoysia grass, and buffalo grass are warm-season grasses.

“Valve” means a device used to control the flow of water in the irrigation system.

“Water conserving plant species” means plant species identified as having a very low or low plant factor.

“Water feature” means a design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls, fountains, artificial streams, spas, and swimming pools (where water is artificially supplied). The surface area of water features is included in the high water use hydrozone of the landscape area. Constructed wetlands used for on-site wastewater treatment or storm water best management practices that are not irrigated and used solely for water treatment or storm water retention are not water features and, therefore, are not subject to the water budget calculation.

“Watering window” means the time of day irrigation is allowed.

“WUCOLS” means Water Use Classification of Landscape Species published by the University of California Cooperative Extension and the Department of Water Resources 2014. (Ord. No. 2018-06, § 1, 3-19-18)

30.38.40 General landscape standards.

(a) General Landscape Design Standards. Landscaping shall be a positive element of the project design. The landscaping shall be designed to protect storm water quality and enhance the aesthetic quality of the development by using the following design standards:

(1) Landscaping shall be used to manage and treat storm water to the maximum extent feasible;

(2) All plant materials shall be installed in compliance with an approved landscape design plan (see section 30.38.120);

(3) Only healthy, well-formed, and vigorous plant materials may be used;

(4) Landscaping shall be located in all yard areas that are not specifically used for parking, driveways, patios, or similar purposes, unless otherwise specified in this article. Sidewalks, pedestrian walks and pathways are permitted in landscaped areas;

(5) Landscape areas shall incorporate varieties of plant textures, colors, geometries, and leaf densities. Year-round visual interest shall be introduced through an appropriate balance of evergreen/deciduous and flowering perennials. Architectural depth and character shall be incorporated through a variety of plant sizes, shapes, and heights;

(6) Dense landscaping shall be incorporated to provide a visual screen from less pleasing features of a development (i.e., around trash enclosures, carports, pool equipment, electric transformers, cable boxes, etc.); however, landscaping shall not be placed to interfere with the accessibility to and maintenance of the structures and/or equipment;

(7) Landscaping shall screen parking areas from adjacent streets;

(8) Landscaping shall be incorporated to reduce monotony of long expanses of building, fence or other structures;

(9) The density and placement of plants are to be determined by the plant size at maturity. When initially installed, groundcover shall give enough coverage for a pleasing appearance on all landscaped areas;

(10) A minimum of fifty percent (50%) of the landscape area shall consist of plant materials consistent with section 30.38.120(b), Landscape Design Requirements. Portions of the landscape area not planted shall be covered with permeable ground coverings, e.g., rock, bark, decomposed granite or similar materials;

(11) Sturdy raised curbs shall protect all landscape areas from driveways and parking areas. Cutouts in curbs may be incorporated when surrounding vegetative drainage swales, storm water retention features and/or other treatment features;

(12) Wheel stops need not be provided in parking areas where the front two (2) feet of the landscape area is planted with low groundcover to accommodate car overhang;

(13) **Trees** of varieties with broad canopies shall be provided to shade walkways and parking areas to temper heat from paved areas, and to screen long structure frontages;

(14) Existing on-site vegetation shall be preserved, unless determined otherwise by the community development director, to maintain on-site water quality and sediment control;

(15) New plant materials requiring permanent irrigation shall not be placed under existing oak **trees**;

(16) All **trees** shall be a minimum size of fifteen (15) gallons when initially installed;

(17) Protected **trees** shall be preserved and enhanced by structure site design, in compliance with subsection (d) of this section;

(18) Deep root irrigation shall be provided to prevent pavement damage where **trees** are planted within three (3) feet of city pavement or sidewalks. Deep root irrigation is strongly encouraged in similar

situations in all private development. When required, deep root irrigation shall be installed in compliance with city standards;

(19) Roof-top runoff shall be directed to vegetated areas;

(20) Landscaping is allowed within cul-de-sacs in conformance with all other city codes;

(21) All plant materials within the city right-of-way (e.g., medians, sound walls, etc.) shall be approved by the director of public works for minimum size and species type;

(22) Green roofs are allowed in conformance to all requirements of city code;

(23) All plant materials shall be maintained in a live and healthy condition, and free of weeds. Except for owners of properties in the R1 zoning district, property owners shall be required to remove weeds and maintain the landscaping in accordance with the approved landscape plan for the life of the property.

(b) New Plant Material. New plant material shall be carefully selected to comply with the following standards:

(1) The overall compatibility of the ultimate form, size, density, and color of **trees**, shrubs, and groundcover at maturity;

(2) The tolerance of the plant materials to existing physical conditions, and resistance to insect pests, and disease; and

(3) The intended use (i.e., shade screening, windbreak, erosion control, storm water treatment and management, etc.) as well as the ease of maintenance.

(4) Indigenous **trees** and other plant materials are encouraged.

(c) City Street **Trees**.

(1) In all zones, the developer or applicant shall install street **trees** in the public right-of-way, in compliance with city street **tree** standards. A properly licensed landscape contractor shall install the street **tree**. A street **tree** permit shall be obtained by the applicant and/or developer prior to issuance of the building permit.

(2) An inspection of the placement and **tree** type is required when a new **tree** is either planted or replaced.

(3) Street **trees** are not required in the RH (residential hillside) zone.

(4) Street **trees** shall be selected and installed in compliance with the following standards:

a. Street **trees** shall be planted in the public right-of-way in compliance with a city standard detail plan;

b. Street **trees** shall be a minimum of fifteen (15) gallons when initially installed. Where an existing street **tree** must be removed to accommodate development, a replacement **tree** of similar size as that removed shall be planted;

c. All street **trees** shall be irrigated with an automatic irrigation system;

d. The developer and/or applicant shall use the **tree** species as designated by the city's master street **tree** planting plan (as authorized under section 26.5-1). The developer and/or applicant may request in writing a substitution of the designated **tree** species, subject to approval by the director of public works;

e. Spacing of **trees** shall be thirty (30) feet on center, unless otherwise approved by the director of public works;

f. Street **trees** shall be spaced at least ten (10) feet from sewer laterals and street lights, and at least five feet from water laterals, gas laterals, fire hydrants, driveway aprons, and telephone/cable/electrical junction boxes;

g. When required, the developer and/or applicant shall install street **trees** adjacent to sound walls and in medians;

h. Deep root irrigation shall be provided for street **trees** in sidewalk cutouts. When required, deep root irrigation and **tree** well coverings shall be installed in compliance with city standard detail plans;

i. No person shall construct or place any concrete, brick, asphalt, wood product, plastic sheeting, or other material impervious to air and water around the base of any street **tree** or within three (3) feet. In addition, no excess soil, mulch, or other organic/inorganic material shall be placed above a **tree**'s root crown within three (3) feet; and

j. Street **trees** planted by the developer and/or applicant shall be guaranteed to remain healthy and grow for a minimum of one (1) year. All workmanship on irrigation systems shall be guaranteed for one (1) year after final acceptance by the city.

(d) Protected **Trees**.

(1) The community development director shall determine if existing **trees** qualify as protected **trees**, a community of protected **trees** or heritage **trees**. Refer to section 30.38.270, Protected **Tree** Removal, for the definitions of "protected **trees**," "a community of protected **trees**" or "heritage **trees**."

(2) An arborist report shall be required for any application for discretionary development approval for which the project site includes existing protected **trees**, as defined in section 30.38.270(b). The arborist report shall include all information specified in section 30.38.270(d). The arborist report shall specify all necessary measures to ensure that protected **trees** identified to remain are protected throughout the construction process. The cost for preparation of the arborist report and city review of it shall be at the sole expense of the applicant. All arborist recommendations shall be listed on the final landscape plans.

(3) The arborist shall sign the final landscape plans certifying that the plan is consistent with the recommendations made in the arborist report.

(4) At least three (3) scheduled inspections shall be made by the city and/or the arborist, at the direction of the city, to ensure compliance with the recommendations of the arborist report. The inspections shall, at a minimum, include the following: (a) initial inspection prior to any construction or grading, (b) after completion of rough grading and/or trenching, and (c) completion of all work including planting and irrigation system installation. Other inspections may be conducted as required by the community development director.

(5) Unless otherwise permitted by the city, no structure, excavation, or impervious surface areas of any kind shall be constructed or installed within the root zone of any protected **tree** or heritage **tree** without mitigating special design, such as post and beam footings that bridge roots. No parking, storing vehicles equipment or other materials shall be permitted within the dripline of any protected **tree** without special design considerations approved by the community development director.

(6) All protected **trees**, community of protected **trees** or heritage **tree**(s) shall be maintained in good health by the property owner, applicant and/or developer until approved for removal by an approved protected **tree** removal permit or other discretionary planning department application. (Ord. No. 2018-06, § 1, 3-19-18)

30.38.70 Industrial zone landscape standards.

Landscaping in industrial zones shall be designed using the following standards and shall enhance the aesthetic quality of the development by using the following requirements:

(a) Landscape the front and side yard areas adjacent to streets, as required by this article, which are not specifically used for parking, driveways, walkways, loading areas, or similar paved access areas;

(b) Landscaping areas located adjacent to the street right-of-way shall be a minimum of twenty-one (21) feet wide (measured from the face of curb);

(c) Paved areas shall not exceed fifty percent (50%) of the total area of setbacks;

(d) All industrial zones shall provide landscape areas that are a minimum of five (5) feet in width along the entire perimeter of the site;

(e) A minimum eight (8) foot wide landscaped buffer is required adjacent to commercial or residential uses;

(f) Fences and walls shall complement the structure architecture and landscaping. Long structure expanse shall be architecturally designed or landscaped to prevent monotony;

(g) Outdoor use areas and loading areas shall be screened by landscaping and/or materials integral with the structure design;

(h) Industrial development visible from US 101 shall be screened from view with dense landscaping;

(i) Three (3) foot high screening shall be located where necessary in industrial parking lots and drive-through uses to block headlights from shining into adjacent residential areas. (Ord. No. 2018-06, § 1, 3-19-18)

30.38.270 Protected tree removal.

(a) Purpose. The city recognizes that existing and future **trees** and **tree** communities located in the city are a valuable and distinctive resource. These **trees** and **tree** communities augment the economic base of the city through encouragement of tourism and enhancement of the living environment. The removal of protected **trees** and diminishing of **tree** communities would reduce property values and the scenic beauty and attractiveness of the city to residents and visitors.

In order to protect this resource, it is the intent of this section to regulate the removal or destruction of protected **trees** and **tree** communities on private property within the city.

(b) Definitions.

(1) Community of Protected **Trees**. Any grouping of protected **trees** which are ecologically or aesthetically related to each other such that the loss of several of them would cause a protected ecological, aesthetic or environmental impact in the immediate area, as determined by a certified arborist. In subsections (d), (e), (g), and (h) of this section, the term "**tree**" shall refer to each and every **tree** in the community of protected **trees** that is proposed for removal.

(2) Heritage **Tree**. A **tree** of any species with a single trunk of ninety (90) inches in circumference or more at a point four and one-half (4-1/2) feet above the ground or with multiple trunks, two (2) of which collectively measure seventy-two (72) inches in circumference or more at a point four and one-half (4-1/2) feet above the ground.

(3) Indigenous **Tree**. A **tree** which is native to the Gilroy region, including oaks (all types), California bay (Umbellularia californica), big leaf maple (Acer macrophyllum), madrone (Arbutus menziesii), California sycamore (Platanus racemosa), California buckeye (Aesculus californica) and alder (Alnus glutinosa).

(4) Protected **Tree**. Any indigenous **tree** characterized by having a single trunk of thirty-eight (38) inches in circumference or more at a point four and one-half (4-1/2) feet above the ground. Nonindigenous **tree** species and orchards (including individual fruit and nut **trees**) are exempt from this definition for the purpose of this section.

(5) **Tree**. A woody perennial plant characterized by having a main stem or trunk, or a multi-stemmed trunk system with a more or less definitely formed crown, and is usually over ten (10) feet high at maturity. This definition shall not include **trees** planted, grown and held for sale by licensed nurseries or the first removal or transplanting of such **trees** pursuant to and as a part of operation of a licensed nursery business.

(c) Permit Required. It is unlawful for any person to cut down, remove, poison or otherwise damage, kill or destroy or cause to be removed any of the following on any private property without first securing a permit as provided in this section:

(1) A protected **tree**.

(2) Greater than twenty-five percent (25%) of the **trees** within the outermost dripline of a community of protected **trees**.

(3) A heritage **tree**.

A separate **tree** removal permit shall not be required for projects which have been approved through a discretionary process by the planning division, planning commission or city council and the removal of protected **trees** or community of **trees** were reviewed to ensure compliance with all requirements of this section and authorized by that approval. Trimming, removal and other activities related to **trees** in the public right-of-way are regulated by Chapter 26.

(d) Application. Any person desiring to cut down, remove, destroy or cause to be removed any protected **tree**, community of protected **trees**, or heritage **tree** shall apply to the planning division for

a **tree** removal permit on forms provided by the division. The application shall include information to describe and justify the removal request and a report from an arborist certified by the International Society of Aboriculture (ISA) or other equivalent organization acceptable to the planning manager. The aborist report shall include all of the following, unless otherwise approved by the planning manager:

(1) Site plan showing location of the **tree** (including buildings, driveways, etc.).

(2) Clear pictures of the **tree** indicating location, details and signs of failure or disease.

(3) Description of species of the **tree**.

(4) Estimated height of the **tree**.

(5) Circumference or diameter at breast height of the **tree**.

(6) Discussion of the general health of the **tree**.

(7) Value of the **tree** according to the ISA **tree** valuation formula.

(8) Discussion of the **tree**'s risk.

(9) Discussion of why the **tree** cannot be saved, including consideration of the following techniques:

a. Discussion of risk management pruning.

b. Discussion of installation of structural support system.

c. Discussion of improving site conditions/cultural conditions.

d. Discussion of implementing integrated pest management programs.

(10) Description of the method to be used for removal of the **tree**.

(11) Reason for removal of the **tree**.

(12) Proposed replacement **tree**, including species, size, location.

(e) Public Notice. The applicant shall cause a notice of the proposed removal to be posted on the affected **tree** and in at least two (2) conspicuous locations on the site clearly visible to and readable from public property on a form provided by the planning division. The notices shall be a minimum of eight and one-half (8-1/2) by eleven (11) inches in size. In addition, the notice shall be mailed to the owners of record of all properties which are immediately adjacent to and directly across the street from the property on which the **tree** is located. The notice shall include the application number, a description of the proposal, including the location of the **tree** to be removed, contact information for the planning division from which additional information may be obtained and the final date for receipt of comments. A minimum of ten (10) days from the date of posting shall be given for comments to be received. No action shall be taken on any application until the applicant has filed an affidavit that such posting has been accomplished and the review period has expired. Emergency situations, as described below, are not subject to this provision.

(f) Application Review and Approval. The planning division shall review the application for removal of protected **tree**, community of protected **trees** or heritage **tree** and shall determine on the basis of the

information provided and the findings listed in subsection (g) of this section whether to approve, approve with conditions or deny the request.

(g) In order to approve an application for **tree** removal, the following findings must be made:

(1) At least one (1) of the following findings must be made:

a. The **tree** is dead, diseased or in danger of falling.

b. The **tree** is determined to be an immediate threat to life or property.

c. The **tree** is determined to be causing damage or reasonably expected to cause damage to existing buildings or interfere with utility services.

d. The retention of the **tree** restricts the economic enjoyment of the property or creates an unusual hardship for the property owner by severely limiting the use of the property in a manner not typically experienced by owners of similarly situated properties, and the applicant has demonstrated to the satisfaction of the community development director that there are no reasonable alternatives to preserve the **tree**.

e. Retention of the **tree** would result in reduction of the permissible building envelope by more than twenty-five percent (25%); and

(2) None of the **tree** management techniques referenced in subsection (d) of this section are deemed feasible to save the **tree**.

In granting any permit pursuant to this section, the community development director may attach reasonable conditions to ensure compliance with the intent and purpose of this section including, but not limited to, planting of replacement **trees**, mitigation of visual impacts and control of erosion.

(h) Replacement. Any **tree** approved for removal under this section shall be replaced. Replacement **trees** shall be of the same species as the **tree** that was removed unless otherwise approved by the community development director. Replacement **tree** shall be planted on the same site as the removed **tree**; however, if the site is inadequate in size to accommodate the replacement **tree**, the replacement **tree** may be planted on public property with the approval of the director of public works. Alternatively, the director of public works, at his/her discretion, may accept an in-lieu payment equal to the value of the replacement **trees** required by Table 1, below. The in-lieu payment shall include funds sufficient for the care of the replacement **trees** during their establishment period as determined by the director of public works. The number and size of replacement **trees** shall be based on the number and size of **trees** approved for removal, as indicated in Table 1, below. If the **tree** being replaced is a **tree** that was required as a part of an approved landscaping plan, the replacement species must be consistent with the landscaping plan. Otherwise, the replacement **tree** may be of any species included on the city's master **tree** planting plan.

Table 1
REPLACEMENT TREE REQUIREMENTS

Trunk Size of Removed Tree (measured at 4-1/2 feet above grade)	**Replacement Ratio Required (per tree removed)**	
Circumference (inches)	**Number of Replacement Trees**	**Minimum Size**
38 to 75	2	24 inch box
Greater than 75	2	36 inch box
Heritage **Trees**	2	48 inch box

If a mitigation measure for removal of a protected **tree**, community of protected **trees** or a heritage **tree** contained in a certified environmental document requires greater numbers or size of replacement **trees** than specified in Table 1, above, that requirement shall supersede the requirements of this section.

(i) Emergency Situations. In emergency situations caused by the hazardous or dangerous condition of a **tree** that poses an immediate threat to the safety of life or property, the minimum necessary actions may be taken to reduce or eliminate the hazard without complying with the other provisions of this section, except that the person responsible for actions taken to reduce the hazard or to remove the **tree** shall report such action to the community development department within five (5) working days of that action. Photographs thoroughly documenting the hazardous or dangerous condition of the **tree** shall be taken prior to any action to reduce the immediate threat. A **tree** removal permit, as specified in this section, shall be submitted prior to removal of the **tree**. The required arborist report shall document the conditions that warrant removal of the **tree**, including the photographs referenced above.

(j) Appeal. Anyone so desiring may appeal the decision of the community development director by written request to the planning commission and payment of the appeal fee within twenty (20) days after the date of the decision of the community development director.

(k) Enforcement—Remedies for Violation. In addition to all other civil remedies set forth in this Code or otherwise provided by law, the following remedies shall be available to the city for violation of this section:

(1) Administrative Penalties. Whenever an enforcement officer charged with the enforcement of this Code determines that a violation of this section has occurred, the enforcement officer shall have the authority to issue an administrative citation to any person, firm, or corporation responsible for causing, committing, allowing, or maintaining the violation, pursuant to Chapter 6A, and in accordance with the notice requirements and hearing procedure contained therein. The administrative citation shall impose a penalty in an amount set forth in the schedule of penalties established by resolution of the city council.

(2) Civil Penalties. As part of a civil action brought by the city, a court may assess against any person who causes, commits, allows, or maintains a violation of any provision of this section a civil penalty in an amount not to exceed five thousand dollars ($5,000) per violation.

(3) Injunctive Relief. Any violation of this section shall constitute a public nuisance, and a civil action may be commenced to abate, enjoin, or otherwise compel the cessation of such violation. Summary abatement of any violation of this section shall be at the expense of the person, firm, or corporation causing, committing, allowing, or maintaining the violation. The city may make the expense of abatement a lien against the property on which it is maintained and a personal obligation against the property owner.

(4) Costs. To the extent the city prosecutes a violation of this section through a nuisance abatement action, the prevailing party shall be entitled to reasonable attorneys' fees, and the city if it prevails shall be entitled to all costs of investigation and preparation for trial, the costs of trial, reasonable expenses including overhead and administrative costs incurred in abating the violation and/or in prosecuting the action. In all other civil actions brought pursuant to this section in which the city prevails, the court shall award to the city reasonable attorneys' fees. (Ord. No. 2018-15, § 1, 11-5-18)

The Gilroy City Code is current through Ordinance 2022-05, passed July 5, 2022.

Disclaimer: The City Clerk's Office has the official version of the Gilroy City Code. Users should contact the City Clerk's Office for ordinances passed subsequent to the ordinance cited above.

City Website: https://www.cityofgilroy.org/
City Telephone: (408) 846-0204

Attachment 2: Tree Inventory Data

Tree Tag #	Scientific Name	Common Name	CBH (in.)	Protected? (Y/N)	Canopy Width (ft.)	Tree Height (ft.)	Health	Structure	General Condition	Anticipated Project Impacts	Additional Notes
52	*Juglans nigra*	Black walnut	42.1	N	18	18	60%	40%	Fair	Removal	Non-indigenous tree, potential street tree, multiple stems (21.05 in., 21.05 in., 21.05 in.), prior tag #358
53	*Olea europea*	Olive	19.8	N	14	14	80%	50%	Fair	Removal	Non-indigenous tree, potential street tree, 1/3rd of tree canopy pruned, prior tag #357
54	*Juglans nigra*	Black walnut	115.3	Y	20	17	50%	40%	Poor	Removal	Heritage tree due to size, species is non-indigenous tree, potential street tree, multiple stems (21.05 in., 94.25 in.) measure 24 in. from ground due to growth structure, prior tag #356
55	*Juglans nigra*	Black walnut	81.6	N	22	33	60%	65%	Fair	Removal	Non-indigenous tree, potential street tree, measured at 36 in. due to growth of tree, cavity present at 4 ft. in main trunk, prior tag #355

Tree Tag #	Scientific Name	Common Name	CBH (in.)	Protected? (Y/N)	Canopy Width (ft.)	Tree Height (ft.)	Health	Structure	General Condition	Anticipated Project Impacts	Additional Notes
56	*Juglans nigra*	Black walnut	65.5	N	26	27	80%	60%	Fair	Removal	Non-indigenous tree, potential street tree, slight lean to south with unbalanced canopy on north side, prior tag #354
57	*Ulmus pumila*	Siberian elm	45.75	N	26	26	70%	60%	Fair	Removal	Non-indigenous tree, potential street tree, prior tag #353
58	*Quercus lobata*	Valley oak	159.55	Y	52	60	80%	65%	Fair	Removal	Heritage tree, unbalanced lean toward SW, co-dominant branching at 15ft., prior tag #351
59	*Quercus lobata*	Valley oak	43.3	Y	22	15	70%	60%	Fair	Removal	Indigenous tree, co-dominant stems (16.1 in., 27.2 in.)
60	*Quercus lobata*	Valley oak	19.8	N	12	18	70%	70%	Fair	Removal	Meets species requirement for indigenous tree, but not size requirement
61	*Quercus lobata*	Valley oak	51.3	Y	30	25	70%	70%	Fair	Removal	Indigenous tree, slight sweep to S, canopy unbalanced to S, prior tag #352

Tree Tag #	Scientific Name	Common Name	CBH (in.)	Protected? (Y/N)	Canopy Width (ft.)	Tree Height (ft.)	Health	Structure	General Condition	Anticipated Project Impacts	Additional Notes
62	*Pyrus calleryana*	Callery pear	43.3	N	25	30	80%	70%	Fair	Removal	Non-indigenous tree, on other side of fence CBH was estimated, co-dominant branching
63	*Pyrus calleryana*	Callery pear	34.5	N	13	15	70%	70%	Good	Removal	Non-indigenous tree
64	*Pyrus calleryana*	Callery pear	43.9	N	16	24	70%	70%	Fair	Removal	Non-indigenous tree, behind fence CBH was estimated
65	*Pinus radiata*	Monterey pine	53.8	N	14	40	80%	90%	Good	Removal	Non-indigenous tree, some seeping of bark, crowded canopy, prior tag #334
66	*Pinus radiata*	Monterey pine	84.1	N	28	46	80%	90%	Good	Removal	Non-indigenous tree, prior tag #335
67	*Pinus radiata*	Monterey pine	100.2	Y	32	47	80%	80%	Good	Removal	Heritage tree due to size, species is non-indigenous tree, DBH taken below lowest union at 24 in., some seeping on bark, co-dominant branching, prior tag #336

Tree Tag #	Scientific Name	Common Name	CBH (in.)	Protected? (Y/N)	Canopy Width (ft.)	Tree Height (ft.)	Health	Structure	General Condition	Anticipated Project Impacts	Additional Notes
68	*Pinus radiata*	Monterey pine	85.3	N	14	39	70%	70%	Fair	Removal	Non-indigenous tree, dieback in lower crown, common ivy climbing trunk, prior tag #337
69	*Prunus* sp.	Ornamental fruit tree	43.9	N	16	20	70%	60%	Fair	Removal	Non-indigenous tree, multi-stem (16.1 in., 27.8 in.), crowded by surrounding trees, prior tag # 338
70	*Prunus* sp.	Ornamental fruit tree	53.1	N	13	12	60	60	Fair	Removal	Non-indigenous tree, multi-stem (29 in., 24.1 in.), crowded by surrounding trees, prior tag # 339
71	*Prunus* sp.	Ornamental fruit tree	40.8	N	14	16	70	70	Fair	Removal	Non-indigenous tree, multi-stem (12.4 in., 14.8 in., 19.8 in., 21 in.), crowded by surrounding trees, prior tag # 341
72	*Prunus* sp.	Ornamental fruit tree	22.3	N	12	17	70	60	Fair	Removal	Non-indigenous tree, leans to N, crowded by surrounding trees, prior tag # 342

Tree Tag #	Scientific Name	Common Name	CBH (in.)	Protected? (Y/N)	Canopy Width (ft.)	Tree Height (ft.)	Health	Structure	General Condition	Anticipated Project Impacts	Additional Notes
73	*Prunus* sp.	Ornamental fruit tree	19.2	N	13	17	70	60	Fair	Removal	Non-indigenous tree, leans to N, crowded by surrounding trees, prior tag # 343
74	*Prunus* sp.	Ornamental fruit tree	21	N	12	16	70	70	Fair	Removal	Non-indigenous tree, leans to N, crowded by surrounding trees
75	*Washingtonia filifera*	Mexican fan palm	54.4	N	6	22	80	90	Good	Removal	
76	*Quercus lobata*	Valley oak	38.9	Y	14	29	60	80	Fair	Removal	Indigenous tree, co-dominant stems (19.1 in., 19.8 in.), thin canopy, prior tag #344
77	*Prunus* sp.	Ornamental fruit tree	32.2	N	12	18	70	70	Fair	Removal	Non-indigenous tree, co-dominant stems (12.4 in., 19.8 in.), crowded by adjacent tree, prior tag #345
78	*Prunus* sp.	Ornamental fruit tree	34	N	14	17	70	70	Fair	Removal	Non-indigenous tree, co-dominant stems (14.8 in., 19.2 in.), crowded by adjacent tree, prior tag #346

Tree Tag #	Scientific Name	Common Name	CBH (in.)	Protected? (Y/N)	Canopy Width (ft.)	Tree Height (ft.)	Health	Structure	General Condition	Anticipated Project Impacts	Additional Notes
79	*Juglans nigra*	Black walnut	42.6	N	20	21	70	60	Fair	Removal	Non-indigenous tree, multi- stem (17.9 in., 24.7 in.), canopy unbalanced to W, prior tag #348
80	*Quercus lobata*	Valley oak	41.4	Y	11	21	60	70	Fair	Removal	Indigenous tree, co-dominant stems (17.3 in., 24.1 in.), unbalanced to the N, prior tag #349

*If any measurements were taken at a different standard than Breast Height (4.5 ft), it is noted

Attachment 3: Photographs of Site Evaluation, November 2022



Photo 1. Overview of Tree 54 near Murray Avenue.



Photo 2. Overview of Tree 58 in middle of ruderal field.



Photo 3. Overview of Tree 59 in middle of ruderal field.



Photo 4. Overview of Trees 61 in middle of ruderal field.



Photo 5. Overview of Tree 67 near east central boundary.

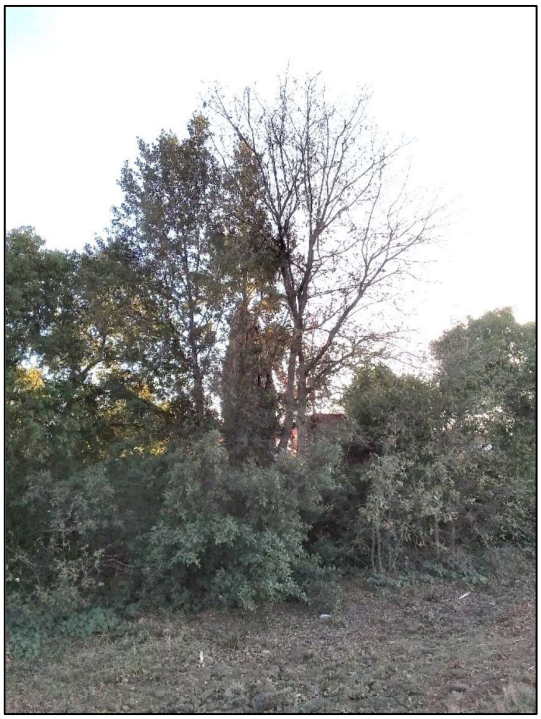


Photo 6. Overview of Tree 76 near east central boundary.



Photo 7. Overview of Tree 80 near southern boundary.

Attachment 4: Project Preliminary Site Plans

FOREST AVE INDUSTRIAL

8875 Murray Ave
Gilroy, CA 95020

DRG APPLICATION

SCOPE OF WORK

CONSTRUCTION OF NEW INDUSTRIAL PARK IN THREE PHASES. FIRST PHASE TO INCLUDE THE CONSTRUCTION OF A NEW OFFICE/WAREHOUSE BUILDING AND ASSOCIATED SITE WORK FOR HEAT WAVE VISUAL'S HEADQUARTERS.

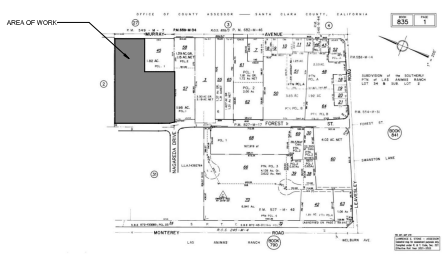
PROJECT DIRECTORY

CLIENT: HEAT WAVE VISUAL
8840 FOREST ST,
GILROY, CA 95020
Justin Hertel
E: justin@heatwavevisual.com

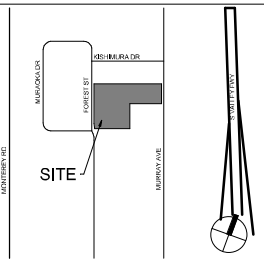
ARCHITECT: E2 ARCHITECTURE
1501 THE ALAMEDA, STE. 105
SAN JOSE, CA 95126
JEFFREY EATON, AIA
P: (408) 691-8998
E: jeffrey@e2studio.com

CIVIL ENGINEER: RJA
8405 CAMINO ARROYO
GILROY, CA 95020
ROSS DOYLE
P: (408) 848-0300
E: RDoyle@jp-gpa.com

PARCEL MAP



SITE



SHEET INDEX

GENERAL INFORMATION
SU-0 COVER SHEET

CIVIL
C0 EXISTING CONDITIONS EXHIBIT

ARCHITECTURAL
SD-1 PROPOSED SITE PLAN - PHASE 1
SD-2 PROPOSED SITE PLAN - PHASE 2
SD-3 PROPOSED SITE PLAN - PHASE 3

PROPOSED VIEW OF HEAT WAVE HEADQUARTERS



APPROVAL STAMPS

e2 ARCHITECTURE
JEFFREY EATON ARCHITECT, INC
1501 The Alameda Ste 105
San Jose, CA. 95126
TEL 408.691.8998
A CALIFORNIA CORPORATION

FOREST AVE INDUSTRIAL
8875 Murray Ave
Gilroy, CA 95020
CLIENT: HEAT WAVE

Rev. #	Description	Date

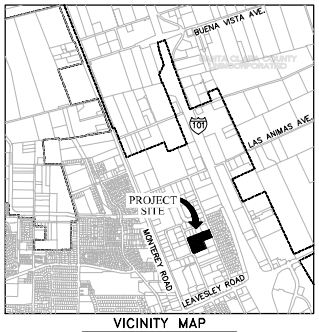
Project Number: 21048
Date: FEB 4, 2022
Drawn by: JD
Checked by: JE

Sheet Title:
COVER SHEET

SD-0

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VICINITY MAP

SITE INFORMATION

ADDRESS/APN	LAND ONLY (NO PHYSICAL ADDRESS) APN: 835-01-059 ±7.29 AC (GROSS)
GP DESIGNATION	INDUSTRIAL PARK
ZONING	M-I (LIMITED INDUSTRIAL) + MURRAY LAS ANIMAS OVERLAY

DEVELOPMENT STANDARDS

BUILDING COVERAGE	60% OF LOT AREA
SETBACKS	
FRONT	41' (FROM FACE OF CURB)
REAR	NONE
SIDE	NONE
SIDE/CORNER	31' (FROM FACE OF CURB)
HEIGHT	35' (2 STORIES)
PRIME FARMLAND	NO

HCP LAND COVER FEE ZONE B

GENERAL NOTES

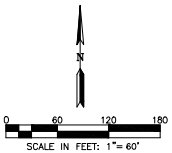
1. THE BOUNDARY DEPICTED HEREIN IS RECORD ONLY AND IS SUBJECT TO REFINEMENT.
2. AERIAL INFORMATION PROVIDED BY GOOGLE EARTH (9/2020) AND IS "BEST FIT" TO KNOWN DIMENSIONS.
3. EXISTING UTILITIES ARE BASED ON RECORD INFORMATION AND NOT FIELD SURVEYED.



1 FOREST STREET



2 MURRAY AVENUE



SCALE IN FEET: 1"= 60'

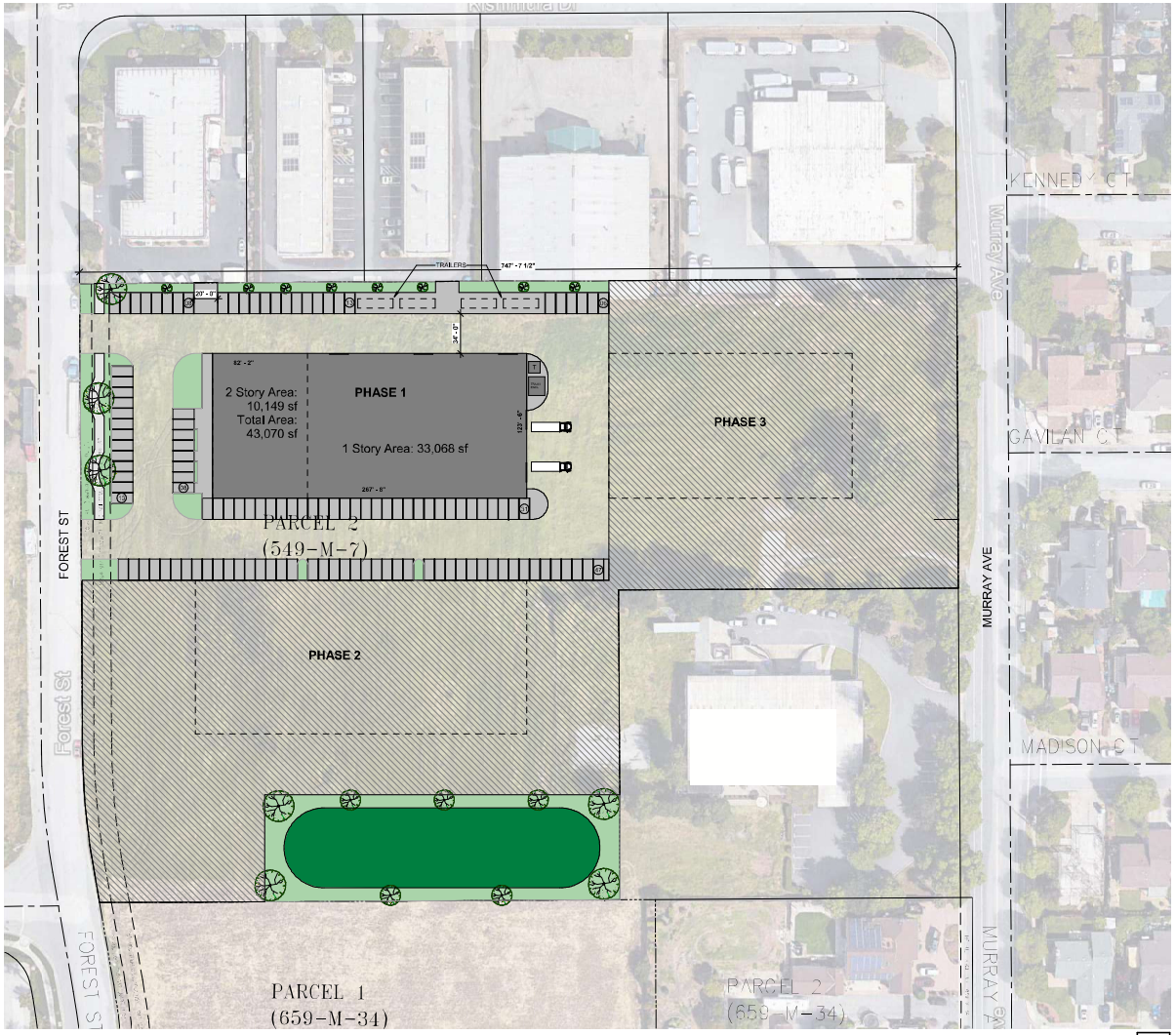
HEATWAVE

EXISTING CONDITIONS EXHIBIT

GILROY, CALIFORNIA
02/02/2022
JOB - 212030

RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
8055 CAMINO ARROYO GILROY, CA 95020
PHONE: (408) 848-0300 FAX: (408) 848-0302

M:\JOBS\ 212030 - HEATWAVE, GILROY\ DRAWINGS\ PRELIM (CURRENT)\ EXISTING.DWG 02-02-22



PROPOSED SITE PLAN 1

1" = 40'-0"

LEGEND

PROPERTY LINE

SITE TABULATIONS

SITE AREA: 317,531 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
BUILDING COVERAGE	0 SF	33,068 SF	0 %	10.5%
LANDSCAPE COVERAGE	317,531 SF	229,638 SF	100 %	72.5%
HARDSCAPE COVERAGE	0 SF	54,826 SF	0 %	17 %
BUILDING AREA	0 SF	43,070 SF		

F.A.R: $\frac{43,070}{317,531} = 0.14$

PARKING TABULATIONS

PARKING RATIO: Manufacturing and assembly, light, medium, heavy - 1 per 350 sq. ft. of floor area plus 1 per company vehicle

$\frac{43,070}{350} = 123$ stalls Current stalls shown = 124 stalls

ARCHITECTURE
JEFFREY EATON ARCHITECT, INC
1501 The Alameda Ste 105
San Jose, CA. 95126
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FOREST AVE INDUSTRIAL
8875 Murray Ave
Gilroy, CA 95020
CLIENT:
HEAT WAVE

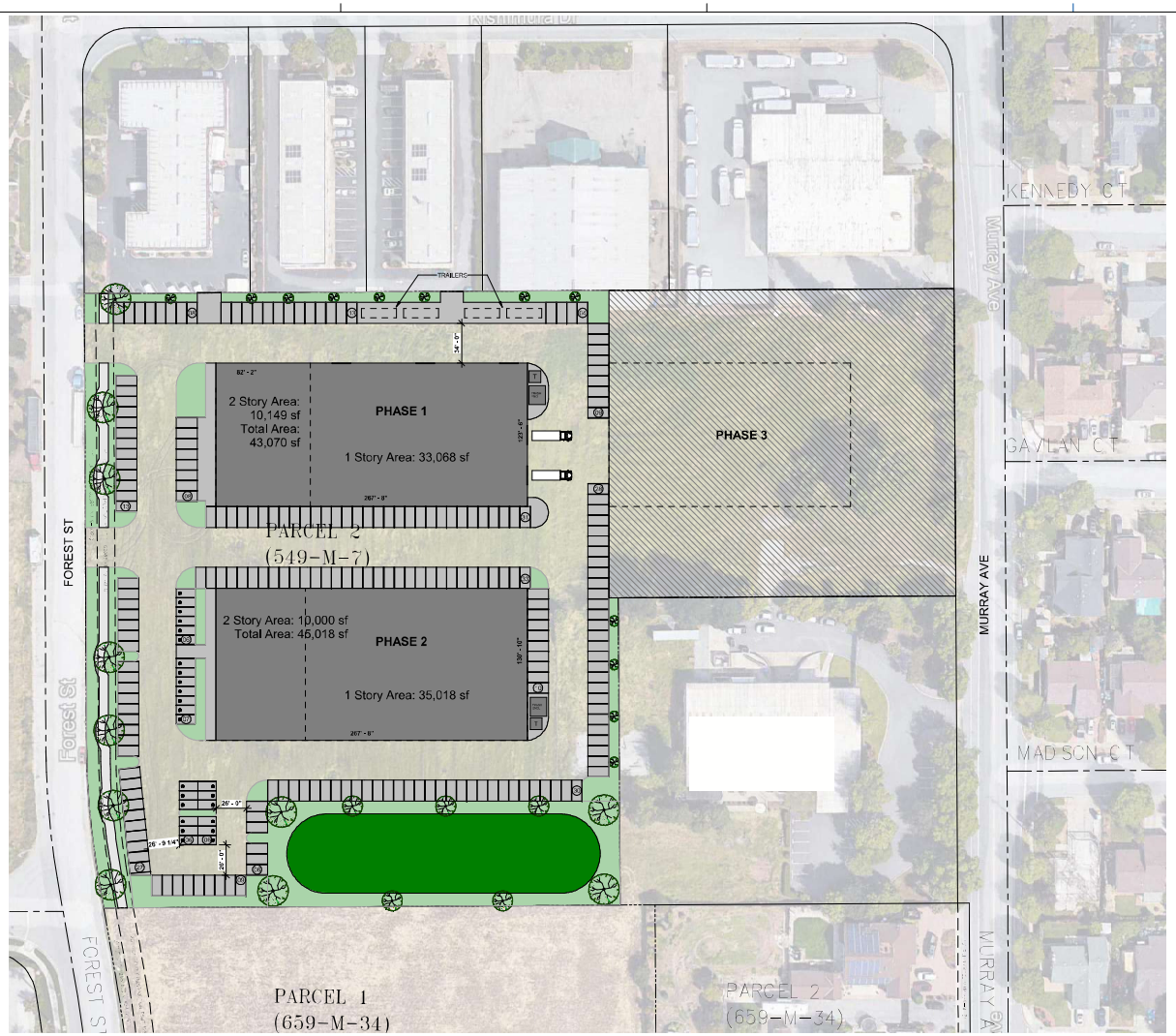
Rev. #	Description	Date

Project Number: 21048
Date: FEB 4, 2022
Drawn by: JD
Checked by: JE

Sheet Title:
PROPOSED SITE PLAN - PHASE 1

SD-1

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PROPOSED SITE PLAN - PHASE 2 — 1" = 40'-0"

LEGEND

PROPERTY LINE

SITE TABULATIONS

SITE AREA: 317,531 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
BUILDING COVERAGE	0 SF	68,086 SF	0 %	21.5%
LANDSCAPE COVERAGE	317,531 SF	144,110 SF	100 %	45.5%
HARDSCAPE COVERAGE	0 SF	105,336 SF	0 %	33 %
BUILDING AREA	0 SF	68,086 SF		

F.A.R: $\frac{68,086}{317,531} = 0.27$

PARKING TABULATIONS

PARKING RATIO: Manufacturing and assembly, light, medium, heavy: 1 per 350 sq. ft. of floor area plus 1 per company vehicle

$\frac{88,089}{350} = 252$ stalls Current stalls shown = 252 stalls

ARCHITECTURE
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CLIENT:
HEAT WAVE

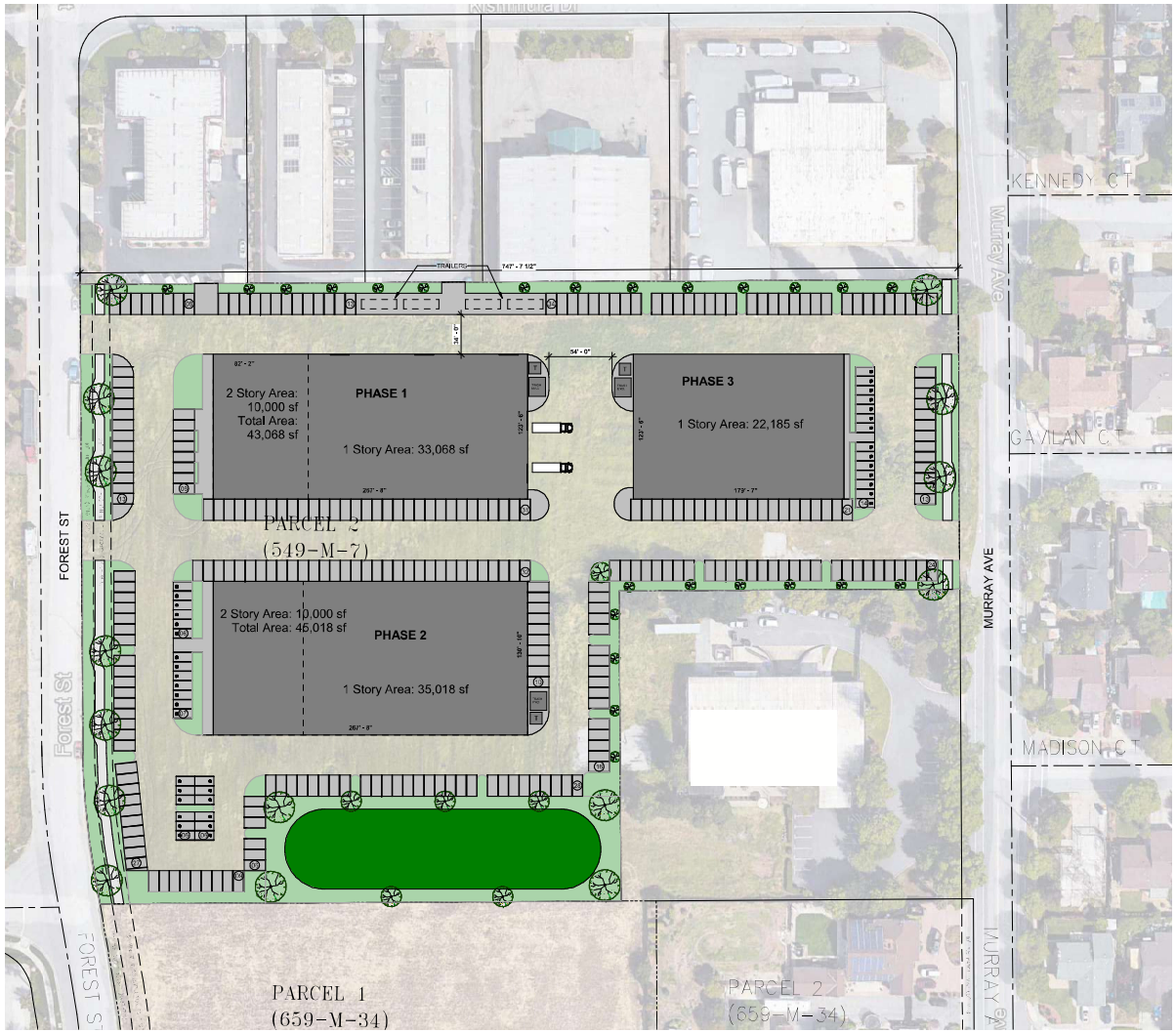
Rev. #	Description	Date

Project Number: 21048
Date: FEB 4, 2022
Drawn by: DC
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Sheet Title:
PROPOSED SITE PLAN - PHASE 2

SD-2

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PROPOSED SITE PLAN - PHASE 3

1" = 40'-0"

1

LEGEND

PROPERTY LINE

SITE TABULATIONS

SITE AREA: 317,531 SF	SQUARE FEET		PERCENTAGE OF SITE	
	EXISTING	PROPOSED	EXISTING	PROPOSED
BUILDING COVERAGE	0 SF	90,271 SF	0 %	28.5%
LANDSCAPE COVERAGE	0 SF	74,260 SF	100 %	23.5%
HARDSCAPE COVERAGE	0 SF	152,906 SF	0 %	48 %
BUILDING AREA	0 SF	110,271 SF		

F.A.R: $\frac{110,271}{317,531} = 0.35$

PARKING TABULATIONS

PARKING RATIO: Manufacturing and assembly, light, medium, heavy - 1 per 350 sq. ft. of floor area plus 1 per company vehicle

$\frac{110,271}{350} = 315$ stalls

Current stalls shown = 332 stalls

ARCHITECTURE

JEFFREY EATON ARCHITECT, INC

1501 The Alameda Ste 105
San Jose, CA. 95126

TEL 408.691.8998

A CALIFORNIA CORPORATION

FOREST AVE INDUSTRIAL

8875 Murray Ave
Gilroy, CA 95020

CLIENT:
HEAT WAVE

Rev. #	Description	Date

Project Number: 21048
Date: FEB 4, 2022
Drawn by: DC
Checked by: JD

Sheet Title:
PROPOSED SITE PLAN - PHASE 3

SD-3

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Appendix E Geotechnical Engineering Report

Stevens Ferrone & Bailey
Engineering Company, Inc

Geotechnical Engineering
Engineering Geology
Storm Water Management
Construction Observation & Testing Services

September 19, 2022

GEOTECHNICAL INVESTIGATION
8875 MURRAY AVENUE
GILROY, CALIFORNIA
SFB PROJECT NO. 989-1

Prepared For:

Heat Wave Visual
8840 Forest Street
Gilroy, CA 95020

Prepared By:

Stevens, Ferrone & Bailey Engineering Company, Inc.

Taiming Chen, P.E., G.E.
Civil/Geotechnical Engineer

Kenneth C. Ferrone, P.E., G.E., C.E.G.
Civil/Geotechnical Engineer
Certified Engineering Geologist







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FIGURES

1 Vicinity Map

2 Site Plan

APPENDICES

A Field Exploration
Figure A-1, Key to Exploratory Boring Logs
Exploratory Boring Logs (B-1 through B-5)
Test Pit Logs (T-1 through T-4)
Field Infiltration Tests

B Laboratory Testing

C GBA Guidelines for Geotechnical Report

1.0 INTRODUCTION

This report presents the results of our geotechnical investigation for the proposed office and light industrial development to be located at 8875 Murray Avenue in Gilroy, California as shown on the Vicinity Map, **Figure 1**, and Site Plan, **Figure 2**. The purpose of our investigation was to evaluate the geotechnical conditions at the site and provide recommendations regarding the geotechnical engineering aspects of the project.

According to the information shown on the project site plan prepared by e2 Architecture and dated July 7, 2022, we understand that the project will consist of developing an about 7.3-acre vacant parcel for three, at-grade, one- to two-story buildings. The new buildings will include offices, warehouses, and manufacturing spaces with a total floor area of about 133,130 square feet. Other improvements will include underground utilities, paved access ways and parking lots, landscaping features, and stormwater treatment facilities. Nominal grading is anticipated.

The conclusions and recommendations provided in this report are based upon the information presented above; Stevens, Ferrone & Bailey Engineering Company, Inc. (SFB) should be consulted if any changes to the project occur to assess if the changes affect the validity of this report.

2.0 SCOPE OF WORK

Our investigation of this site included the following scope of work:

- Reviewing published and unpublished geotechnical and geological literature relevant to the site;
- Reviewing historical aerial images and topographic maps of the site and surrounding area;
- Performing a reconnaissance of the site and surrounding area;
- Performing a subsurface exploration program to log and sample five exploratory borings to a maximum depth of about 21-1/2 feet;
- Performing double-ring infiltrometer tests at four test pit locations at depths of about 3 to 5 feet;
- Performing laboratory testing of samples retrieved from the borings;
- Performing engineering analysis of the field and laboratory data; and
- Preparing this report.

The data obtained and the analyses performed were for the purpose of providing geotechnical design and construction criteria for site earthwork, underground utility, drainage, building foundation, retaining wall/soundwall, flatwork, and pavement. Evaluating flooding potential and toxicity potential of onsite materials or groundwater (including mold) were beyond our scope of work.

3.0 SITE INVESTIGATION

3.1 Field Exploration

Our geotechnical field exploration program for the project consisted of performing five exploratory borings (B-1 through B-5) to a maximum depth of about 21-1/2 feet on August 30, 2022. The approximate locations of the borings are shown on the Site Plan, **Figure 2**. The borings were performed by West Coast Exploration of Escalon, California by using a truck-mounted Mobile B-24 drill rig equipped with 4-inch diameter, continuous flight, solid stem augers and a 140-pound safety hammer.

Our field engineer continuously logged the soils encountered in the borings. The soils are classified in general accordance with the Unified Soil Classification System (ASTM D2487 and D2488). Logs of the borings as well as a key for the classification of the soil (**Figure A-1**) are included in **Appendix A**. Upon completion of our field exploration, the borings were backfilled with lean cement grout in accordance with Santa Clara Valley Water District requirements.

The approximate locations of our borings were determined by pacing, measurements, and/or alignment from landmark references, and should be considered accurate only to the degree implied by the method used. Latitude and longitude of boring locations shown on the boring logs are estimated from online map data from Microsoft; actual locations were not surveyed.

Representative samples were obtained from our exploratory borings at selected depths appropriate to the investigation. Relatively undisturbed samples were obtained using a 3-inch O.D. Modified California split barrel sampler with liners, and disturbed samples were obtained using a 2-inch O.D. Standard Penetration Test (SPT) split spoon sampler without liners. All samples were transported to our geotechnical laboratory for evaluation and appropriate testing. Both sampler types are indicated in the "Sampler" column of the boring logs as designated in **Figure A-1**.

Resistance blow counts (N-value) were obtained in our borings with the samplers by dropping a 140-pound safety hammer through a 30-inch fall with rope and cathead. The sampler was driven 18 inches and the number of blows were recorded for each 6 inches of penetration. The blows per foot recorded on the boring logs represent the accumulated number of blows that were required to drive the last 12 inches, or the number of inches indicated where hard resistance was encountered. Blow counts recorded on the boring logs have been converted to equivalent SPT field blow counts. A sampler barrel size correction factor of 0.6 was applied to the blow counts from the Modified California sampler. The recorded blow counts have not been corrected for other factors, such as hammer efficiency, borehole diameter, rod length, overburden pressure, and fines content.

It should be noted that changes in the surface and subsurface conditions can occur over time as a result of either natural processes or human activity and may affect the validity of the conclusions and recommendations in this report. In addition, our attached exploration logs and related information show our interpretation of the subsurface conditions at the dates and locations indicated, and it is not warranted that they are representative of subsurface conditions at other locations and times.

3.2 Field Infiltration Tests

In conjunction with our subsurface exploration, on August 30, 2022 we performed double-ring infiltrometer tests in accordance with ASTM D3385 guidelines at four test pit locations (T-1 through T-4) selected by Ruggeri-Jensen-Azar (RJA), the project Civil Engineer. The approximate locations of the tests are shown on **Figure 2**. The infiltration test locations were excavated and prepared by using a CASE 580 backhoe with a 36-inch wide bucket to depths of about 3 to 5 feet.

The bottoms of both test rings were pre-soaked for about an hour prior to testing. After the pre-soak, water was added to the level of the test water head and a water level reading was taken from the inner ring approximately every 10 minutes. Water was refilled to the same test water head level after each reading. Our test pit logs, field test results, and estimated infiltration rates are included in **Appendix A**. Upon the completion of the tests, the test pits were be backfilled with soil spoils and the ground surface was wheel-rolled by the backhoe. At the time of construction, these pits will require over-excavation and re-compaction to the standards described in this report.

3.3 Laboratory Testing

Our laboratory testing program for the project was directed toward a quantitative and qualitative evaluation of the physical and mechanical properties of the soils underlying the site. This program included the following testing:

- Five water content and dry unit weight determinations per ASTM D2937.
- Two Atterberg Limits determinations (plastic and liquid limits) per ASTM D4318.
- Four sieve analysis and hydrometer tests per ASTM D422.
- Four unconfined compressive strength tests per ASTM D2166.

All tests were performed by our geotechnical laboratory in Concord, California. The results of the testing are included on the boring logs and plotted laboratory results are also included in Appendix B.

Two selected onsite soil samples were tested by CERCO Analytical, Inc. in Concord, California for pH (ASTM D4972), chlorides (ASTM D4327), sulfates (ASTM D4327), sulfides (ASTM D4658M), resistivity at 100% saturation (ASTM G57), and Redox potential (ASTM D1498). The test results and a brief evaluation summary report prepared by CERCO regarding the onsite soils' potential for corrosion on concrete and buried metal such as utilities and reinforcing steel are included under a separate cover. We recommend these corrosion test results be forwarded to your concrete contractor, underground contractor, pipeline designer, and foundation designer and contractor.

3.3 Site Development History and Surface Conditions

At the time of our investigation and as shown on **Figure 2**, the site was bounded by Murray Avenue on the northeast, an existing office development and undeveloped land on the southeast, Forest Street on the southwest, and existing office and light industrial developments on the northwest.

The site was an L-shape, generally level, and had a plan area of about 7.3 acres with maximum dimensions of about 750 feet by 530 feet. The site was vacant except for several large and small diameter trees that were generally located within the northeastern portion of the site. At the time of our field exploration, most of the ground surface had been disked or tilled. The surface soils were dry and loose. Some small soil stockpiles were also observed within the site.

Based on our review of historical aerial photos and topographic maps, it appears the site was agricultural farm and orchard land prior to the 1980's. The existing office development to the southeast was constructed in the 1970's. The adjacent Forest Street was built in the late 1980's or in the 1990's. The existing office and light industrial developments to the northwest were constructed in the 1990's and 2000's.

3.4 Subsurface Conditions

The subsurface soil materials encountered in our borings and test pits generally consisted of stiff to hard clays that extended to depths of about 8 to 16 feet. However, the upper about 2 to 3 feet of surficial soils were dry, soft or loose, and weak due to the annual disking and tilling. Below the surficial clay layers, medium dense to very dense sands and gravels with variable fines contents (soil particles passing No. 200 sieve) were encountered to the maximum depth explored of about 21-1/2 feet. A shallower clayey and gravelly sand layer was also encountered in Boring B-1 at depths between about 2 and 8 feet.

According to the results of laboratory testing, the near-surface more clayey soils have a high plasticity and high expansion and shrinkage potential. Detailed descriptions of soils encountered

in our exploratory borings are presented on the exploration logs in **Appendix A**. Results of laboratory testing of retrieved onsite soils are included in **Appendix B**.

3.5 Groundwater

No groundwater was encountered in our borings to the maximum depth explored of about 21-1/2 feet. It should be noted that our borings might not have been left open for a sufficient period of time to establish equilibrium groundwater conditions. In addition, fluctuations in the groundwater level could occur due to change in seasons, variations in rainfall, water pumping in nearby wells, and other factors.

3.6 Hydrologic Soil Group and Infiltration Rate

The surface soils of the site have been mapped by the USDA Natural Resource Conservation Services (NRCS) Web Soil Survey (WSS)[1] and categorized as the Pleasanton loam, 0 to 2 percent slopes, MLRA 14 (Unit PoA). This soil unit has been assigned to Hydrologic Soil Group C and is estimated to have moderately high transmission rates (approximately 0.2 to 0.6 inch per hour). Group C soils are defined as having a slow infiltration rate when thoroughly wet and may consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. According to the results of field borings, pits, and laboratory testing, the site is generally blanketed at the surface by highly plastic clayey soils a which have a low infiltration rate. The soils below the highly plastic clays generally become sandier and gravellier which typically result in higher infiltration rates.

The infiltration rate readings taken during the final testing period of our field Double-Ring Infiltrometer Tests at the four locations (T-1 to T-4) within the site depths of about 3 to 5 feet deep are tabulated below.

Double-Ring Infiltrometer Tests			
Test No.	Test Depth	Soil Type at Test Location	Infiltration Rate (inches/hour)
T-1	3 feet	Silty Clay some Sand	1-1/2
T-2	5 feet	Silty Clay with Sand	15

[1]USDA NRCS, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx, accessed 9/13/2022.

T-3	5 feet	Silty Clay some Sand	15
T-4	5 feet	Clayey and Silty Sand with Gravel	18

Due to the limited size of the test areas relative to the size of the proposed stormwater treatment facilities, the actual field infiltration rates of the facilities may differ from the results of our field tests. The actual rates will depend on the in-situ moisture conditions, relative density, gradation, and the fines content of the soils, and whether any water impeding clay layers exist within the sands and gravels.

3.7 Geology and Seismicity

According to Wentworth, et al. (1999)[2], the site is underlain by upper Pleistocene alluvial fan deposits that are composed of tan to reddish brown, crudely bedded gravels in a clayey and sandy matrix.

The project site is in the San Francisco Bay Area, which is considered one of the most seismically active regions in the United States. Significant earthquakes have occurred in the region and are believed to be associated with crustal movements along a system of sub-parallel fault zones that generally trend in a northwesterly direction. According to the Alquist-Priolo Earthquake Fault Zones Map of the Gilroy Quadrangle (1982)[3], the site is not located in an earthquake fault zone as designated by the State of California. In addition, according to Santa Clara County Geologic Hazard Zones Map No. 67 (2012)[4], the site is also not located in a fault rupture hazard zone as designated by the County. Therefore, it is our opinion that the potential for ground surface rupture due to a fault crossing the site is low.

Earthquake intensities will vary throughout the region, depending upon numerous factors including the magnitude of earthquake, the distance of the site from the causative fault, and the type of materials underlying the site. The U.S. Geological Survey (2016)[5] indicated that there is a 72 percent chance of at least one magnitude 6.7 or greater earthquake striking the San Francisco Bay region between 2014 and 2043. Therefore, the site will be subjected to earthquakes that cause strong ground shaking.

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[2]Wentworth, Blake, McLaughlin, and Graymer, 1999, Preliminary Geologic Map of The San Jose 30 X 60-Minute Quadrangle, California, USGS Open File Report 98-795.
[3]State of California, Earthquake Fault Zones, Gilroy Quadrangle, Revised Official Map, Effective: January 1, 1982.
[4]County of Santa Clara, Geologic Hazard Zones, Version: October 26, 2012.
[5]Aagaard, Blair, Boatwright, Garcia, Harris, Michael, Schwartz, and DiLeo, 2016, Earthquake Outlook for the San Francisco Bay Region 2014–2043, USGS Fact Sheet 2016–3020 (ver. 1.1, August 2016).

According to the 2019 CBC/ASCE 7-16, the site geometric mean peak ground acceleration (PGA_M) from a Maximum Considered Earthquake (MCE) event is estimated to be about 0.70g based on a stiff soil condition (Site Class D). The MCE peak ground acceleration generally has a 2% probability of being exceeded in 50 years (a mean return period of 2,475 years), except where deterministically capped along highly active faults. The actual ground surface acceleration might vary depending upon the local seismic characteristics of the underlying bedrock and the overlying soils.

3.8 Liquefaction

Soil liquefaction is a phenomenon primarily associated with saturated cohesionless soil layers. These soils can dramatically lose strength due to increased pore water pressure during cyclic loading, such as imposed by earthquakes. During the loss of strength, the soils acquire mobility sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated sands that lie close to the ground surface; although, liquefaction can also occur in fine-grained soils, such as low-plasticity silts.

As of the date of this report, the liquefaction potential of the site and surrounding area has not been evaluated by the State of California[6]. According to Santa Clara County Geologic Hazard Zones Map No. 67 (2012), the site is not located in a liquefaction hazard zone as designated by the County. The site and surrounding areas are mapped by Witter et al. (2006)[7]as being within an area having a low susceptibility to liquefaction hazard.

Based on our review of available geologic literature and the results of field explorations at the site, it is our opinion that the potential for ground surface damage at the site resulting from liquefaction is low.

[6]Seismic Hazards Mapping Act, 1990.
[7]Witter, Knudsen, Sowers, Wentworth, Koehler, and Randolph, 2006, Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region, California, U.S. Geological Survey Open File Report 2006-1037.

4.0 CONCLUSIONS AND RECOMMENDATIONS

It is our opinion that the site is suitable for the proposed project from a geotechnical engineering standpoint. The conclusions and recommendations presented in this report should be incorporated in the design and construction of the project to reduce soil or foundation related issues. The following are the primary geotechnical considerations for development of the site.

WEAK SOIL MATERIALS: As described previously, the upper about 2 to 3 feet of surficial soils at the site are dry, soft or loose, and weak due to the annual disking and tilling. In order to reduce the potential for damaging differential settlement of overlying improvements (such as structural fill, building foundations, driveways, exterior flatwork, and pavements), we recommend these weak soils be over-excavated and re-compacted. The process can consist of over-excavating to a depth of 2 feet below the existing ground surface, scarifying, moisture conditioning and compacting the bottom of the over-excavation in-place to a depth of about 12 inches, and placing well-blended, moisture conditioned, and properly compacted fill over the properly prepared subgrade. Deeper removal may be needed if deeper weak soils are encountered during grading.

Test pits were performed at the approximate locations shown on **Figure 2**. Upon the completion of the tests, the test pits were be backfilled with soil spoils and the ground surface was wheel-rolled by the backhoe. At the time of construction, these pits will require over-excavation and re-compaction to the standards described in this report. The over-excavation should extend to the depth the test pit.

Over-excavation and re-compaction should extend at least 5 feet beyond building footprints and at least 3 feet beyond exterior flatwork (including driveways) and pavement wherever possible. Where the over-excavation limits abut adjacent property, SFB should be consulted to determine the actual vertical and lateral extent of over-excavation so that adjacent property is not adversely impacted. Over-excavations should be performed so that no more than 5 feet of differential fill thickness exists below proposed building foundations. The extent of the removal and re-compaction may vary across the site and should be determined in the field by SFB at the time of the earthwork operation. The removed soil materials can be used as new fill provided they are placed and compacted in accordance with the recommendations presented in this report.

EXPANSION POTENTIAL: The onsite more clayey, highly expansive soil materials will be subjected to volume changes during seasonal fluctuations in moisture content. To reduce the potential for post-construction distress to the proposed structures resulting from swelling and shrinkage of these materials, we recommend that the proposed buildings be supported on deepened footing foundations that are designed to reduce the impact of the onsite expansive soils. We also

recommend at least 18-inches of non-expansive engineered fills be provided below the building interior slabs-on-grade. It should be noted that special design considerations will be required for exterior slabs.

CORROSION POTENTIAL: Two onsite soil samples were tested for pH (ASTM D4972), chlorides (ASTM D4327), sulfates (ASTM D4327), sulfides (ASTM D4658M), resistivity at 100% saturation (ASTM G57), and Redox potential (ASTM D1498) for use in evaluating the potential for corrosion on concrete and buried metal, such as utilities and reinforcing steel. The results of these tests and a brief evaluation summary of the results are included under a separate cover. We recommend these test results and brief evaluation summary be forwarded to your concrete contractor, underground contractor, pipeline designer, and foundation designer and contractor so they can design and install corrosion protection measures.

Please be aware that we are not corrosion protection experts; we recommend corrosion protection measures be designed and constructed so that all concrete and metal, including foundation reinforcement, are protected against corrosion. We also recommend additional testing be performed if the test results are deemed insufficient by the designer and installer of the corrosion protection. Landscaping soils typically contain fertilizers and other chemicals that can be highly corrosive to metals and concrete; landscaping soils commonly are in contact with foundations. Consideration should be given to testing the corrosion potential characteristics of proposed landscaping soils and other types of imported or modified soils in order to design and provide protection against corrosion for the foundation and pipelines.

ADDITIONAL RECOMMENDATIONS: Detailed site earthwork, underground utility, drainage, building foundation, retaining wall/soundwall, flatwork, and pavement recommendations for use in design and construction of the project are presented below. We recommend SFB review the design and specifications to verify that the recommendations presented in this report have been properly interpreted and implemented in the design, plans, and specifications. We also recommend SFB be retained to provide consulting services and to perform construction observation and testing services during the construction phase of the project to observe and test the implementation of our recommendations, and to provide supplemental or revised recommendations in the event conditions different than those described in this report are encountered. We are not responsible for misinterpretation of our recommendations.

It is the responsibility of the contractors to provide safe working conditions at the site at all times. We recommend all OSHA regulations be followed, and excavation safety be ensured at all times. It is beyond our scope of work to provide excavation safety designs.

4.1 Earthwork

4.1.1 Clearing and Site Preparation

The site should be cleared of all obstructions, including existing soil stockpiles, designated trees and their associated entire root systems, and debris. Holes resulting from the removal of underground obstructions extending below the proposed finish grade should be cleared and backfilled with fill materials as specified in **Section 4.1.4, *Fill Material,*** and compacted to the requirements in **Section 4.1.5, *Compaction***. Tree roots may extend to depths of about 3 to 4 feet. Wells and septic systems, if they exist, should be abandoned in accordance with the Santa Clara County standards.

From a geotechnical standpoint, any existing trench backfill materials, clay or concrete pipes, pavements, baserock, and concrete that are removed can be used as new fill onsite provided debris is removed and it is broken up to meet the size requirement for fill material in **Section 4.1.4, *Fill Material***. We recommend fill materials composed of broken up concrete or asphalt concrete not be located within 3 feet of the ground surface in yard areas. Consideration should be given to placing these materials below pavements, directly under the building footprint, or in deeper excavations. We recommend backfilling operations for any excavations be performed under the observation and testing of SFB. Crushed concrete materials from building demolition can be re-used onsite as aggregate base or subbase if they meet current Caltrans specifications for aggregate base or subbase based on laboratory testing results.

After clearing, areas containing heavy surface vegetation should be stripped to an appropriate depth to remove these materials. Stripped materials should be removed from the site or stockpiled for later use in landscaping, if desired.

4.1.2 Weak Soil Re-Compaction

We recommend the weak soils the blanket the site be over-excavated and re-compacted. The process can consist of over-excavating to a depth of 2 feet below the existing ground surface, scarifying, moisture conditioning and compacting the bottom of the over-excavation in-place to a depth of about 12 inches, and placing well-blended, moisture conditioned, and properly compacted fill over the properly prepared subgrade. Deeper removal may be needed if deeper weak soils are encountered during grading.

Test pits were performed at the approximate locations shown on **Figure 2** and were loosely backfilled upon completion. At the time of construction, the backfill of these pits will require

over-excavation and re-compaction to the standards described in this report. The over-excavation should extend to the depth of the test pit. Test pit logs are included in **Appendix A**.

Over-excavation and re-compaction should extend at least 5 feet beyond building footprints and at least 3 feet beyond exterior flatwork (including driveways) and pavement wherever possible. There would be no need to over-excavate and re-compact the soils within areas that do not support improvements, such as within open spaces. Where the over-excavation limits abut adjacent property, SFB should be consulted to determine the actual vertical and lateral extent of over-excavation so that adjacent property is not adversely impacted. Over-excavations should be performed so that no more than 5 feet of differential fill thickness exists below proposed building foundations. The extent of the removal and re-compaction may vary across the site and should be determined in the field by SFB at the time of the earthwork operation.

Removed soil materials may be used as new fills onsite provided they satisfy the recommendations provided in **Section 4.1.4, *Fill Material***. Compaction should be performed in accordance with the recommendations in **Section 4.1.5, *Compaction***.

4.1.3 Subgrade Preparation

After the completion of clearing, site preparation, and weak soil and fill re-compaction (including the over-excavation and re-compaction of the test pit backfill), soil and fill exposed in areas to receive improvements (such as engineered fill, building foundation, flatwork, and pavement) should be scarified to a depth of about 12 inches, moisture conditioned to approximately 3 to 5 percent over optimum water content, and compacted to the requirements for structural fill. Subgrade preparation would not be necessary in areas where over-excavation and re-compaction of the weak surface soils and fills has occurred.

If building pad and/or pavement subgrade are allowed to remain exposed to sun, wind, or rain for an extended period of time, are disturbed by borrowing animals or vehicles, or have vegetation growth, the exposed subgrade may need to be reconditioned (moisture conditioned and/or scarified and recompacted) prior to new construction. SFB should be consulted on the need for subgrade reconditioning when the conditions listed above occur.

4.1.4 Fill Material

From a geotechnical and mechanical standpoint, onsite soils and fills having an organic content of less than 3 percent by volume can be used as fill. Fill should not contain rocks or lumps larger than 6 inches in greatest dimension with not more than 15 percent larger than 2.5 inches. General imported fill (fill not used below buildings) should have a plasticity index of 25 or less. Imported,

"non-expansive" fill should be predominantly granular, have a plasticity index not exceeding 12, and have a significant fines content.

In addition to the mechanical property specifications, all imported fill material should have a resistivity (100% saturated) no less than the resistivity for the onsite soils, a pH of between approximately 6.0 and 8.5, a total water-soluble chloride concentration less than 300 ppm, and a total water-soluble sulfate concentration less than 500 ppm. We recommend import samples be submitted for corrosion and geotechnical testing at least two weeks prior to being brought onsite.

4.1.5 Compaction

Within the upper 5 feet of the finished ground surface, we recommend structural fill be compacted between 88 to 92 percent relative compaction, and structural fill below a depth of 5 feet be compacted to at least 90 percent relative compaction, as determined by ASTM D1557 (latest edition). We recommend the new fill be moisture conditioned approximately 3 to 5 percent over optimum water content. The upper 6 inches of subgrade soils beneath pavements should be compacted to at least 95 percent relative compaction. Fill material should be spread and compacted in lifts not exceeding approximately 8 to 12 inches in un-compacted thickness.

4.1.6 Utility Trench Backfill

Pipeline trenches should be backfilled with fill placed in lifts of approximately 8 inches in uncompacted thickness. Thicker lifts can be used provided the method of compaction is approved by SFB and the required minimum degree of compaction is achieved. Backfill should be placed by mechanical means only. Jetting is not permitted.

Onsite trench backfill should be compacted to at least 90 percent relative compaction. Imported sand trench backfill should be compacted to at least 95 percent relative compaction and sufficient water is added during backfilling operations to prevent the soil from "bulking" during compaction. The upper 3 feet of trench backfill in foundation, slab, and pavement areas should be entirely compacted to at least 95 percent relative compaction. To reduce piping and settlement of overlying improvements, we recommend rock bedding and rock backfill (if used) be completely surrounded by a filter fabric such as Mirafi 140N (or equivalent); alternatively, filter fabric would not be necessary if Caltrans Class 2 permeable material is used in lieu of rock bedding and rock backfill.

Sand or gravel backfilled trench laterals that extend toward driveway, exterior slab, or under the building foundation, and are located below irrigated landscaped areas such as lawn or planting strip, should be plugged with low strength concrete or sand/cement slurry. The plug for the trench lateral should be located below the edge of pavement or slab, and under the perimeter of the

foundation. The plug should be at least 24 inches thick, extend the entire width of the trench, and extend from the bottom of the trench to the top of the sand or gravel backfill.

We also recommend installing the plugs every 50 feet on center along any utility trenches that are sloped 5 percent or steeper to reduce soil piping from water seepage that may cause trench surface settlement. Where used, these plugs should extend to within 1 foot of the finished ground surface or to the base of the pavement section.

4.1.7 Exterior Flatwork

We recommend that exterior slabs (including driveway, patio, and walkway) be placed directly on the properly compacted fills. We do not recommend using aggregate base, gravel, or crushed rock below these improvements. If imported granular materials are placed below these elements, subsurface water can seep through the granular materials and cause the underlying soils to saturate, pipe, and/or heave upward. Prior to placing concrete, subgrade soils should be moisture conditioned to increase their moisture content to approximately 3 to 5 percent above laboratory optimum moisture (ASTM D-1557).

The expansive soils at the site could be subjected to volume changes during fluctuations in moisture content. As a result of these volume changes, some vertical movement of exterior slabs should be anticipated. This movement could result in damage to the exterior slabs and might require periodic maintenance or replacement. Adequate clearance should be provided between the exterior slabs and building elements that overhang these slabs, such as window sills or doors that open outward.

We recommend reinforcing exterior slabs with steel bars in lieu of wire mesh. To reduce potential crack formation, the installation of #4 bars spaced at approximately 18 inches on center in both directions should be installed. Score joints and expansion joints should be used to control cracking and allow for expansion and contraction of the concrete slab. We recommend appropriate flexible, relatively impermeable fillers be used at all cold/expansion joints. The installation of dowels at all expansion and cold joints will reduce differential slab movements; the dowels should be at least 30 inches long and should be spaced at a maximum lateral spacing of 18 inches. Although exterior slabs that are adequately reinforced will still crack, trip hazards requiring replacement of the slabs will be reduced if the slab are properly reinforced.

We do not recommend the use of flatwork having permeable joints (such as pavers or tiles with sand or gravel infilled joints) unless the underlying clayey subgrade is protected against water seepage or ponding. If not protected, the underlying subgrade will heave and/or pipe and cause damage to the overlying improvements.

4.1.8 Construction During Wet Weather Conditions

If construction proceeds during or shortly after wet weather conditions, the moisture content of the onsite soils could be significantly above optimum. Consequently, subgrade preparation, placement and/or reworking of onsite soil or fills as structural fill might not be possible. Alternative wet weather construction recommendations can be provided by our representative in the field at the time of construction, if appropriate. All the drainage measures recommended in this report should be implemented and maintained during and after construction, especially during wet weather conditions.

4.1.9 Surface Drainage, Irrigation, and Landscaping

Ponding of surface water must not be allowed on pavements, adjacent to foundations, at the top or bottom of slopes, and at the top or adjacent to retaining walls. Ponding of water should also not be allowed on the ground surface adjacent to or near exterior slabs, including driveways, walkways, and patios. Surface water should not be allowed to flow over the top of slopes, down slope faces, or over retaining walls.

We recommend positive surface gradient of at least 2 percent for a minimum distance of 5 feet be provided adjacent to structure foundations to direct surface water away from the foundations and toward suitable discharge facilities. Roof downspouts and landscaping drainage inlets should be connected to solid pipes that discharge the collected water into appropriate water collection facilities. We recommend the surface drainage be designed in accordance with the latest edition of the California Building Code.

In order to reduce differential foundation movements, landscaping should be placed uniformly adjacent to structure foundation and exterior slabs. We recommend trees be no closer to structures or exterior slabs than half the mature height of the tree; in no case should tree roots be allowed to extend near or below the foundations or exterior slabs.

Landscaping drainage inlets and/or drainage swales must be provided and maintained around structures at all times that adequately collect irrigation and storm water and direct the water onto pavement or into storm water collection systems. Drainage inlets should be provided within enclosed planter areas and the collected water should be discharged onto pavement, into drainage swales, or into an enclosed storm drain system. The drainage inlets and associated swales should be designed and constructed so that the moisture content of the soils surrounding structure foundations do not become elevated and no ponding of water occurs. The inlets should be kept free of debris and be lower in elevation than the adjacent ground surface. We recommend lining

enclosed planters when there is a potential for water ponding within the planters or if there is a potential for water causing heave of the underlying soils.

We recommend regular maintenance of drainage systems be performed, including maintenance prior to rainstorms. The inspection should include checking drainage patterns to make sure they are performing properly, making sure drainage systems and inlets are functional and not clogged, and checking that erosion control measures are adequate for anticipated storm events. Immediate repairs should be performed if any of these measures appears to be inadequate.

Irrigation should be performed in a uniform, systematic manner as equally as possible on all sides of structure foundations and exterior slabs to maintain moist soil conditions. Over-watering must be avoided. To reduce moisture changes in the soils and fills in landscaped areas, we recommend that drought resistant plants and low flow watering systems be used. All irrigation systems should be inspected for leakage regularly.

4.1.10 Storm Water Treatment Facilities

To satisfy local and state permit requirements, most new development projects must control pollutant sources and reduce, detain, retain, and/or treat specified amounts of storm water runoff. The intent of these types of storm water treatment facilities is to conserve and incorporate on-site natural features, together with constructed hydrologic controls, to more closely mimic pre-development hydrology and watershed processes. These facilities include bio-retention swales and basins, porous paver and pavement, water detention basins, and any proprietary underground storage and treatment systems.

In general, we recommend the portion of the storm water treatment facilities that are within 10 feet of structure foundations and improvements (such as building foundations, exterior flatwork, and pavements) be lined with a relatively impermeable membrane to reduce water seepage and the potential for damage and distress to the adjacent structures and improvements. The lining can consist of a relatively impermeable membrane such as STEGO Wrap 15-mil or equivalent. The membrane should be lapped and sealed in accordance with the manufacturer's specifications, including taping joints where pipes penetrate the membrane.

Soil filter/bio-mix materials within basins and swales will consolidate over time causing long-term ground surface settlement. Additional filling within the basins and swales over time will be needed to maintain design surface elevations. The soil filter/bio-mix materials, infiltration testing and procedures, and associated compaction requirements should be specified by the Civil Engineer and shown in detail on the grading and improvement plans.

Soil filter/bio-mix materials provide little to no lateral restraint of excavation side walls. Sidewalls of bio-retention swale and basin excavations (excavations made prior to the installation of the soil filter/bio-mix) steeper than 2:1 (horizontal to vertical) will experience downward and lateral movements that can cause distresses to adjacent improvements such as foundations, utilities, pavements, driveways, walkways, and curbs and gutters. The magnitude and rate of movement depend upon the swale and basin backfill material type and compaction. To reduce the potential for damaging movements, we recommend 2:1 or flatter excavation sidewall slopes be used for bio-retention swales and basins, sidewalks be setback at least 3 feet from the top of slopes, and creep sensitive improvements (such as roadway curbs) be setback at least 5 feet from the top of slopes. If the above sidewall slope and setback distance cannot be met, considerations should be given to using below-grade concrete sidewalls that are designed and constructed as retaining walls. Alternatively, deepened sidewalk slab edge or roadway curbs can be used and designed to resist lateral earth pressures and act as a retaining wall. SFB should be consulted to evaluate the need for sidewall restraint when swales or basins are planned. We also recommend SFB observe and document the installation of liners, subdrain pipes, and soil filter/bio-mix materials during construction for conformance to the recommendations in this report and the development's plans and specifications. Retaining wall recommendations are provided in **Section 4.2.3** of this report.

Where used, proprietary underground storage and treatment systems should be installed and maintained in accordance with the manufacturer's specifications. In addition, the manufacturer should be consulted for vertical and lateral bearing capacities and anticipated deformations of these systems if they will also support exterior slabs and pavements that are subjected to vehicular traffic.

4.1.11 Future Maintenance

In order to reduce water related issues, we recommend regular maintenance of the site be performed, including maintenance prior to rainstorms. Maintenance should include the re-compaction of loosened soils, collapsing and infilling holes with compacted soils or low strength sand/cement grout, removal and control of digging animals, modifying storm water drainage patterns to allow for sheet flow into drainage inlets or ditches rather than concentrated flow or ponding, removal of debris within drainage ditches and inlets, and immediately repairing any erosion or soil flow. The inspection should include checking drainage patterns, making sure drainage systems are functional and not clogged, and erosion control measures are adequate for anticipated storm events. Immediate repair should be performed if any of these measures appear to be inadequate. Temporary and permanent erosion and sediment control measures should be installed over any exposed soils immediately after repairs are made.

Differential movement of exterior slabs can occur over time as a result of numerous factors. We recommend the development owners perform inspections and maintenance of slabs, including

infilling significant cracks, providing fillers at slab offsets, and replacing slabs if they are severely damaged.

4.1.12 Additional Recommendations

We recommend the drainage, irrigation, landscaping, and maintenance recommendations provided in this report be forwarded to your designers and contractors, and also be included in disclosure statements given to the owners and their maintenance associations.

4.2 Foundation Support

4.2.1 Footing Foundations

We recommend the buildings be supported on footings that are embedded at least 36 inches below the lowest adjacent finished grade. An 18-inch thick layer of non-expansive engineered fill will be needed below interior slabs-on-grade that are used in conjunction with the footing foundations. The footing dimension and reinforcement should be designed by the Structural Engineer; however, continuous and isolated spread footings should have minimum widths of 12 and 18 inches, respectively.

The portion of the foundations located within 10 feet (as measured laterally) of the nearest slope face should be neglected in the vertical bearing and lateral resistance analyses. Also, the portions of the foundations located above an imaginary 1:1 (horizontal to vertical) plane extending upward from the bottom edges of any adjacent footings and utility trenches should also be neglected in the vertical bearing and lateral resistance analyses. Alternatively, the foundation reinforcing could be increased to span the area defined above assuming no soil support is provided or the bottom of foundation could be deepened to bear below the area defined above.

Our recommended allowable spread footing bearing pressures are provided below. These allowable bearing pressures are net values; therefore, the weight of the footing can be neglected for design purposes.

ALLOWABLE SPREAD FOOTING BEARING PRESSURES		
Load Condition	Allowable Bearing Pressures (psf)	Factor of Safety
Dead Load	2,500	3.0
Dead plus Live Loads	3,750	2.0
Total Loads (including Wind or Seismic)	5,000	1.5

We estimate the maximum total settlement of the footing foundations using the recommended allowable bearing pressures to be on the order of 1 inch or less. Differential static settlement between similarly loaded footings is estimated to be approximately 1/2 inch or less.

Lateral loads may be resisted by a combination of friction between the foundation bottoms and the supporting subgrade and by passive resistance acting against the vertical faces of the foundations. A coefficient of sliding friction of 0.3 is considered applicable. In addition, an equivalent fluid weight of 300 pounds per cubic foot (pcf) acting against the side of the foundation may be used where the foundation concrete is poured neat against undisturbed subgrade. This passive resistance assumes a deflection of approximately 1/2 inch in order to fully mobilize the passive resistance. Passive resistance in the upper 36 inches of soil should be neglected unless the area adjacent the footing is protected from disturbance by concrete or pavement. The allowable friction coefficient and passive resistance may be used concurrently without reduction provided the foundation concrete is poured neat against undisturbed subgrade.

Any visible cracks in the bottoms of the footing excavations should be closed by wetting prior to construction of the foundations. We should observe the footing excavations prior to placing reinforcing steel or concrete to check that footings are founded on appropriate materials. All foundation excavations should be cleaned of loose materials and should be free of water. The footing excavations should be kept moist prior to concrete placement.

4.2.2 Interior Slabs-On-Grade

Where interior slabs-on-grade will be used in conjunction with footings, we recommend the interior slabs be at least 5 inches thick and reinforced with a minimum of #4 bars on 18-inch centers (both ways). We recommend the slabs be supported on imported, predominantly granular, “non-expansive” engineered fills at least 18 inches thick that meet the requirements presented in this report.

Slab-on-grade subgrade surfaces should be proof-rolled to provide a smooth, unyielding surface for slab support. Floor slab control joints can be used to reduce damage due to shrinkage cracking. The actual thickness, reinforcing, and jointing of the slabs should be designed by the project Structural Engineer based upon the actual use and loading of the slabs.

We recommend a 4-inch layer of 3/4-inch, clean, crushed, uniformly graded gravel be placed between the bottom of the slabs and the recommended non-expansive engineered fill layer. Where the slabs will be subjected to vehicular loading, a 6-inch layer of Caltrans Class 2 aggregate baserock should be used instead of the 4-inch layer of gravel. The gravel and/or aggregate baserock can be considered part of the non-expansive engineered fill layer.

We recommend that the interior slabs-on-grade (other than garage or vehicular slabs) be poured monolithically with the footings. The edge of garage or vehicular slabs should be structurally separated (disconnected) from the surrounding footings/grade beams; a relatively impermeable and flexible filler should be used in the joint between the garage/vehicular slabs and the surrounding grade beams. We recommend a grade beam be provided directly below garage openings. Both the driveway and garage slabs should be doweled to the grade beam below the opening with rebars to reduce the potential for differential movements.

We recommend a vapor retarder be placed between the bottom of the slabs-on-grade and top of the gravel and/or baserock layer. We recommend the vapor retarder consist of a single layer of Stego Wrap Vapor Barrier 15 mil Class A or equivalent provided the equivalent satisfies the following criteria: a permeance as tested before and after mandatory conditioning of less than 0.01 Perms and strength of Class A as determined by ASTM E 1745 (latest edition), and a thickness of at least 15 mils. Installation of the vapor retarder should conform to the latest edition of ASTM E 1643 and the manufacturers requirements, including lapping and all joints at least 6 inches and sealing with Stego Tape or equal in accordance with the manufacturer's specifications. Protrusions where pipes or conduit penetrate the membranes should be sealed with either one or a combination of Stego Tape, Stego Mastic, Stego Pipe Boots, or a product of equal quality as determined by the manufacturer's instructions and ASTM E 1643. Care must be taken to protect the membrane from tears and punctures during construction. We do not recommend placing sand or gravel over the membrane. We recommend the vapor retarder membrane extend about 12 inches into the interior side of the footing foundation trench.

Concrete slabs retain moisture and often take many months to dry. Any water added during the concrete pour further increases the curing time. If the slabs are not allowed to completely cure prior to constructing the super-structure, the concrete slabs will expel water vapor which will be

trapped under impermeable flooring. The concrete mix design for slabs should have a maximum water/cement ratio of 0.45; the actual water/cement ratio may need to be reduced if the concentration of soluble sulfates or chlorides in the supporting subgrade is detrimental to the concrete. If a higher water/cement ratio is being considered, we recommend higher vapor transmission be taken into account in the design and construction of the buildings. We recommend the foundation designer determine if corrosion protection is needed for the foundation concrete and reinforcing steel. The results of sulfate and chloride testing of onsite soil samples are included under a separate cover; the foundation designer should determine if additional testing is needed. In addition, we recommend you consult with your concrete slab designers and concrete contractors regarding methods to reduce the potential for differential concrete curing.

During the curing process, concrete slabs will shrink in volume resulting in cracks developing in the slab. Curing of concrete can take many months (or possibly longer) to complete. These concrete cracks may be visible on the surface of the slab during and after the curing process. In order to reduce the potential for crack propagation through overlying brittle surfaces such as tile or stone flooring, we recommend appropriate crack isolation measures be used between the concrete slab and flooring to reduce the potential for slab cracks to propagate into these brittle flooring surfaces.

4.2.3 Retaining Walls and Soundwalls

If segmental block walls with geogrid (MSE walls) will be used at the site, SFB should be contacted to provide block wall and geogrid designs and specifications. Any walls that retain soils should be designed to resist both lateral earth pressures and any additional lateral loads caused by roadway surcharging, earthquake loading, and hydrostatic pressure if wall back-drainage is not provided.

If walls are allowed to deflect or rotate (unrestrained walls), they can be designed to resist active pressures. If no movement is allowed at the top of walls (restrained walls), at-rest pressures should be used in wall design. The recommended active and at-rest lateral earth pressures under both drained and undrained conditions are provided in the table below.

LATERAL EARTH PRESSURES FOR RETAINING STRUCTURES				
Wall Condition	Backfill and Toe Condition	Drained Equivalent Fluid Pressure (pcf)	Undrained Equivalent Fluid Pressure (pcf)	Incremental Seismic Pressure (pcf)
Unrestrained (Active Pressure)	Level	50	85	33
Restrained (At-rest Pressure)		75	100	66*

*Note: For restrained walls, use the static active pressure plus the seismic increment in the seismic loading design.

For retaining walls that need to resist earthquake induced lateral loads from nearby foundations, walls that are to be designed to resist earthquake loads, and any retaining walls that are higher than 6 feet (as required by the 2019 CBC), we recommend the walls be designed to also resist an incremental seismic lateral earth pressure listed in the above table, using a triangular fluid pressure distribution (not inverted). This seismic induced earth pressure is in addition to the static active pressures listed above. The seismic lateral earth pressure increments for unrestrained and restrained walls were estimated, respectively, based on 50% and 100% of the peak ground acceleration (PGA_M) from a Maximum Considered Earthquake (MCE) earthquake per ASCE 7-16/2019 CBC. Due to the transient nature of the seismic loading, a factor of safety of at least 1.1 can be used in the design of the walls when they resist seismic lateral loads. Some movement of the walls may occur during moderate to strong earthquake shaking and may result in distress as is typical for all structures subjected to earthquake shaking.

Walls with inclined backfill should be designed for an additional equivalent fluid pressure of 1 pound per cubic foot for every 2 degrees of slope inclination. Any surcharge loads located within an imaginary 1:1 (horizontal to vertical) plane projected upward from the base of the walls will increase the lateral earth pressures on the wall. Walls subjected to surcharge loads should be designed for an additional uniform lateral pressure (rectangular distribution) equal to one-third (0.33) and one-half (0.5) the anticipated surcharge load for unrestrained and restrained walls, respectively. Walls adjacent to areas subject to vehicular traffic should be designed for a 2-foot equivalent soil surcharge (250 psf). We should be consulted to provide load contributions from other particular surcharges located behind walls if needed.

It should be noted the lateral earth pressures depend upon the water content of the retained soils to be constant over time; if the water content of the retained soils will fluctuate or increase compared to the moisture content at time of construction, then SFB should be consulted and provide written modifications to this design criteria.

The above recommended drained lateral earth pressures assume walls are fully back drained to prevent the build-up of hydrostatic pressures. If drainage behind the wall is omitted, the wall should be designed for undrained condition. Wall back-drainage can be accomplished by using 1/2- to 3/4-inch crushed, uniformly graded gravel entirely wrapped in filter fabric, such as Mirafi 140N or equal (an overlap of at least 12 inches should be provided at all fabric joints). The gravel and fabric should be at least 12 inches wide and extend from the base of the wall to within about 1 foot of the finished grade at the top (Class 2 permeable material per Caltrans Specification Section 68 may be used in lieu of gravel and filter fabric). The upper 1 foot of cover backfill should consist of relatively impervious material.

Where wall back-drainage is used, a 4-inch diameter, perforated, PVC SDR-35 pipe (smooth walled) should be installed at the base and centered within the gravel. The perforated pipe should be connected to a solid collector pipe that transmits the water directly to suitable discharge facilities. If weep holes are used in the wall, the perforated pipe within the gravel is not necessary provided the weep holes are kept free of animals and debris, are located no higher than approximately 6 inches from the lowest adjacent grade and are able to function properly. Weepholes can be spaced at about 10 to 15 feet apart. As an alternative to using gravel, pre-fabricated drainage panels (such as AWD SITEDRAIN Sheet 94 for walls or equal) may be used behind the walls in conjunction with perforated pipe (connected to solid collector pipe), weep holes, or strip drains (such as SITEDRAIN Strip 6000 or equal).

If heavy compaction equipment is used behind the walls, the walls should be appropriately designed to withstand loads exerted by the heavy equipment and/or temporarily braced. Fill placed behind walls should conform to the recommendations provided in **Section 4.1.4, *Fill Material***, and **Section 4.1.5, *Compaction***.

Retaining walls can be supported on drilled, cast-in-place, straight shaft friction piers that develop their load carrying capacity in the materials underlying the site. The piers should have a minimum diameter of 12 inches and a center-to-center spacing of at least three times the shaft diameter. We recommend that piers be at least 6 feet long. Pier reinforcing should be based on structural requirements, but in no case should less than two #4 bars for the entire length of the pier be used.

The actual design depth of the piers should be determined using an allowable skin friction of 500 pounds per square foot (psf) for dead plus live loads, with a one-third increase for all loads including wind or seismic. Eighty percent of the skin friction value can be used to resist uplift. Lateral load resistance can be developed in passive resistance for pier foundations. We recommend an allowable soil passive resistance (which includes a factor of safety of 1.5) equal to an equivalent fluid weighing 300 pounds per cubic foot be used for pier foundations. This value can be used up to a maximum value of 3,600 psf. The passive resistance can be applied against twice the projected diameter of pier shaft if the piers are spaced center-on-center at least 3 times of the pier shaft diameter.

The upper 3 feet of pier embedment should be neglected in the vertical and passive resistance design as measured from finished grade unless it is confined by a pavement or concrete slab. The portion of the pier shaft located within 10 feet (as measured laterally) of the nearest slope face or above an imaginary 1:1 (horizontal to vertical) plane extending upward from the bottom of any adjacent walls or utility trenches should also be ignored in both the vertical bearing and passive resistance designs.

The bottom of pier excavation should be relatively dry and free of all loose cuttings or slough prior to placing reinforcing steel and concrete. Any accumulated water in pier excavation should be removed prior to placing concrete. We recommend that the excavation of all piers be performed under the direct observation of SFB to confirm that the pier foundations are founded in suitable materials and constructed in accordance with the recommendations presented herein. Preliminarily, we recommend concrete pour of pier excavations be performed within 24 hours of excavation and prior to any rainstorms. Where caving or high groundwater conditions exist, additional measures such as using dewatering, casing, slurry, tremie methods, and/or pouring concrete immediately after excavating may be necessary. SFB should be consulted for additional measures for pier construction as needed during construction.

As an alternative to using pier foundations to support the walls, footings may be used. Footing foundation recommendations are included in **Section 4.2.1, *Footing Foundations***.

4.2.4 Seismic Design Criteria

Based on the site geology and subsurface soil conditions encountered at the site, the site can be characterized as Site Class “D”, a “stiff soil” profile. For seismic designs using the 2019 CBC and ASCE 7-16, we recommend the following seismic design parameters be used. These parameters were calculated using the U.S. Seismic Design Map program[8], and are based on the site being

[8]SEAONC/OSHPD, https://seismicmaps.org/, accessed 9/13/2022.

located at approximate latitude 37.025582°N and longitude 121.573226°W. We assumed the proposed project structures are categorized as Risk Category II, and the *Exception Number (2) of ASCE 7-16 Section 11.4.8 – Site Specific Ground Procedure* will be taken by the Structural Engineer for the project. We should be contacted if any of these assumptions are incorrect or a site-specific ground motion hazard analysis is required.

SEISMIC PARAMETER	DESIGN VALUE
Site Class	D
S_S	1.529
S_1	0.600
S_{MS}	1.529
S_{M1}	See Section 11.4.8 of ASCE 7-16*
S_{DS}	1.019
S_{D1}	See Section 11.4.8 of ASCE 7-16*
SDC	See Section 11.4.8 of ASCE 7-16*
F_a	1.000
F_v	See Section 11.4.8 of ASCE 7-16*
PGA	0.638
F_{PGA}	1.100
PGA_M	0.701
T_L	12

*Note: The values of F_v, S_{M1}, S_{D1}, and Seismic Design Category (SDC) should be determined by the Structural Engineer based on the ASCE 7-16 Section 11.4.8 requirements.

4.3 Pavements

Based on the soils encountered in our borings and results of laboratory testing, we recommend that an R-value of 5 be used in preliminary asphalt concrete pavement design. We recommend R-value tests be performed once the pavement subgrade is established to confirm the R-value used in the design. Pavement subgrade completely composed of sandy and gravelly fills will result in higher R-values and thinner pavement sections.

We developed the following alternative preliminary pavement sections using Topic 608 of the State of California Department of Transportation Highway Design Manual, the recommended R-value, and typical traffic indices for residential developments. The project's Civil Engineer or appropriate public agency should determine actual traffic indices. The pavement thicknesses

shown below are SFB's recommended minimum values; governing agencies may require pavement thicknesses greater than those shown.

PRELIMINARY PAVEMENT DESIGN ALTERNATIVES SUBGRADE R-VALUE = 5			
Location	Pavement Components		Total Thickness (inches)
	Asphalt Concrete (inches)	Class 2 Aggregate Base (inches)	
T.I. = 4.5 (auto & light truck parking)	3.0	9.0	12.0
T.I. = 5.0 (access ways/courts)	3.0	11.0	14.0
T.I. = 6.0 (primary roadways)	3.0	14.0	17.0

If the pavements are planned to be placed prior to or during construction, the traffic indices and pavement sections may not be adequate for support of what is typically more frequent and heavier construction traffic. If the pavement sections will be used for construction access by heavy trucks or construction equipment (especially fork lifts with support footings), SFB should be consulted to provide recommendations for alternative pavement sections capable of supporting the heavier use and heavier loads. If requested, SFB can provide recommendations for a phased placement of the asphalt concrete to reduce the potential for mechanical scars caused by construction traffic in the finished grade. Preliminary pavement sections should be revised, if necessary, when actual traffic indices are known and pavement subgrade elevations are determined.

We recommend the pavement materials and construction conform to Caltrans Standard Specifications. Pavement aggregate base and asphalt concrete should be compacted to at least 95 percent relative compaction as determined by ASTM D1557 or Caltrans Test Method 375. The asphalt concrete compacted unit weight should be determined using Caltrans Test Method 308-A or ASTM Test Method D1188. Asphalt concrete should also satisfy the S-value requirements by Caltrans.

We recommend regular maintenance of the asphalt concrete be performed at approximately five-year intervals. Maintenance may include slurry sealing, crack filling, and chip seals as necessary. If regular maintenance is not performed, the asphalt concrete layer could experience premature degradation requiring more extensive repairs.

5.0 CONDITIONS AND LIMITATIONS

SFB is not responsible for the validity or accuracy of information, analyses, test results, or designs provided to SFB by others or prepared by others. The analysis, designs, opinions, and recommendations submitted in this report are based in part upon the data obtained from our field work and upon information provided by others. Site exploration and testing characterizes subsurface conditions only at the locations where the explorations or tests are performed; actual subsurface conditions between explorations or tests may be different than those described in this report. Variations of subsurface conditions from those analyzed or characterized in this report are not uncommon and may become evident during construction. In addition, changes in the condition of the site can occur over time as a result of either natural processes (such as earthquakes, flooding, or changes in groundwater levels) or human activity (such as construction adjacent to the site, dumping of fill, or excavating). If changes to the site's surface or subsurface conditions occur since the performance of the field work described in this report, or if differing subsurface conditions are encountered, we should be contacted immediately to evaluate the differing conditions to assess if the opinions, conclusions, and recommendations provided in this report are still applicable or should be amended.

We recommend SFB be retained to provide geotechnical services during design, reviews, earthwork operations, and foundation installation to confirm and observe compliance with the design concepts, specifications and recommendations presented in this report. Our presence will also allow us to modify design if unanticipated subsurface conditions are encountered or if changes to the scope of the project, as defined in this report, are made.

This report is a design document that has been prepared in accordance with generally accepted geological and geotechnical engineering practices for the exclusive use of Heat Wave Visual and their consultants for specific application to the proposed development project at 8875 Murray Avenue in Gilroy, California, and is intended to represent our design recommendations to Heat Wave Visual for specific application to the project. The conclusions and recommendations contained in this report are solely professional opinions. It is the responsibility of Heat Wave Visual to transmit the information and recommendations of this report to those designing and constructing the project. We will not be responsible for the misinterpretation of the information provided in this report. We recommend SFB be retained to review geological and geotechnical aspects of the construction calculations, specifications, and plans; we should also be retained to participate in pre-bid and pre-construction conferences to clarify the opinions, conclusions, and recommendations contained in this report.

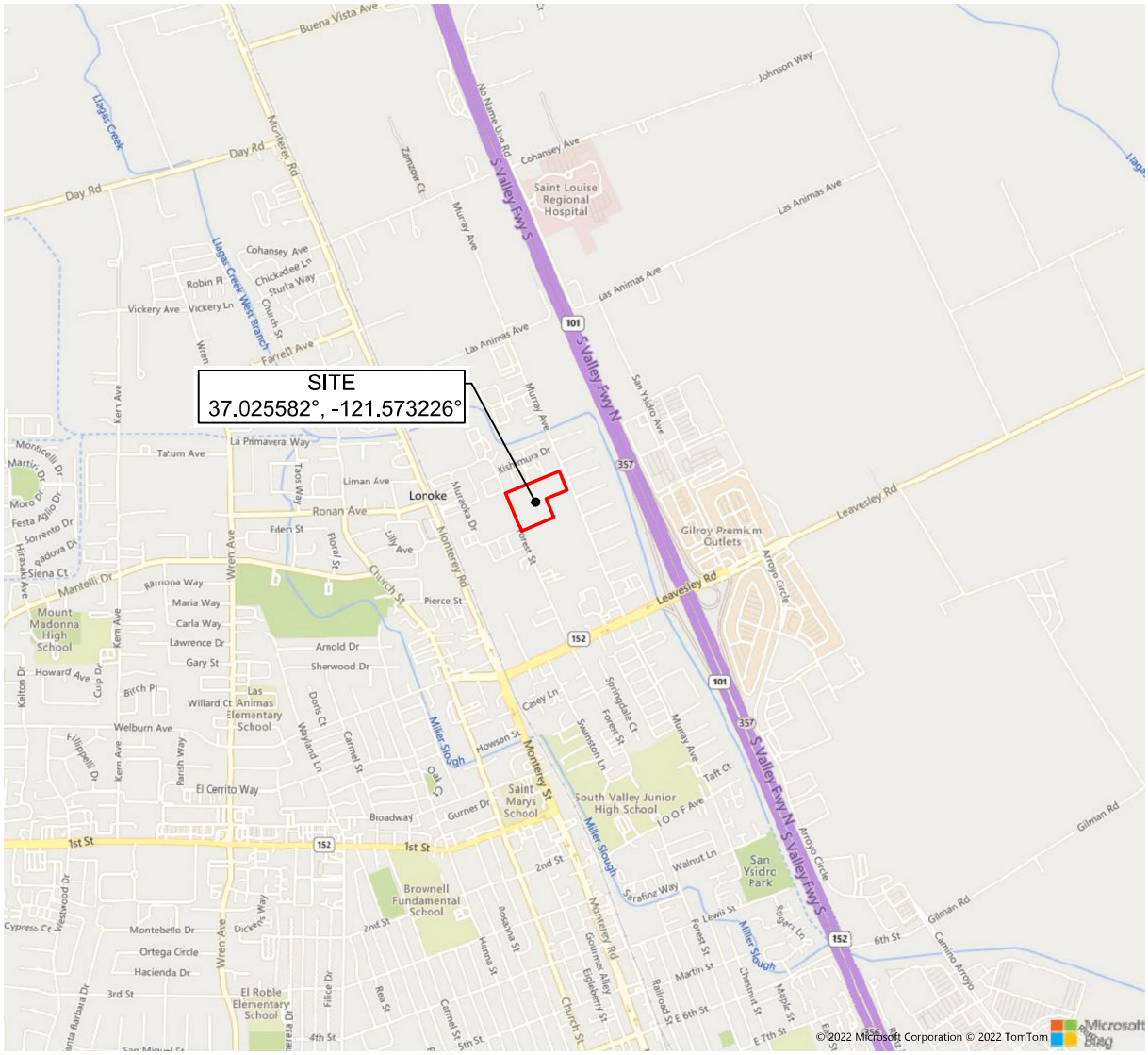
It should be understood that advancements in the practice of geotechnical engineering and engineering geology, or discovery of differing surface or subsurface conditions, may affect the validity of this report and are not uncommon. SFB strives to perform its services in a proper and professional manner with reasonable care and competence but we are not infallible. Geological engineering and geotechnical engineering are disciplines that are far less exact than other engineering disciplines; therefore, we should be consulted if it is not completely understood what the limitations to using this report are.

In the event that there are any changes in the nature, design or location of the project, as described in this report, or if any future additions are planned, the conclusions and recommendations contained in this report shall not be considered valid unless we are contacted in writing, the project changes are reviewed by us, and the conclusions and recommendations presented in this report are modified or verified in writing. The opinions, conclusions, and recommendations contained in this report are based upon the description of the project as presented in the introduction section of this report.

This report does not necessarily represent all of the information that has been communicated by us to Heat Wave Visual and their consultants during the course of this engagement and our rendering of professional services to Heat Wave Visual. Reliance on this report by parties other than those described above must be at their own risk unless we are first consulted as to the parties' intended use of this report and only after we obtain the written consent of Heat Wave Visual to divulge information that may have been communicated to Heat Wave Visual. We cannot accept consequences for use of segregated portions of this report.

Please refer to Appendix C for Geoprofessional Business Association (GBA) guidelines regarding use of this report.

FIGURES



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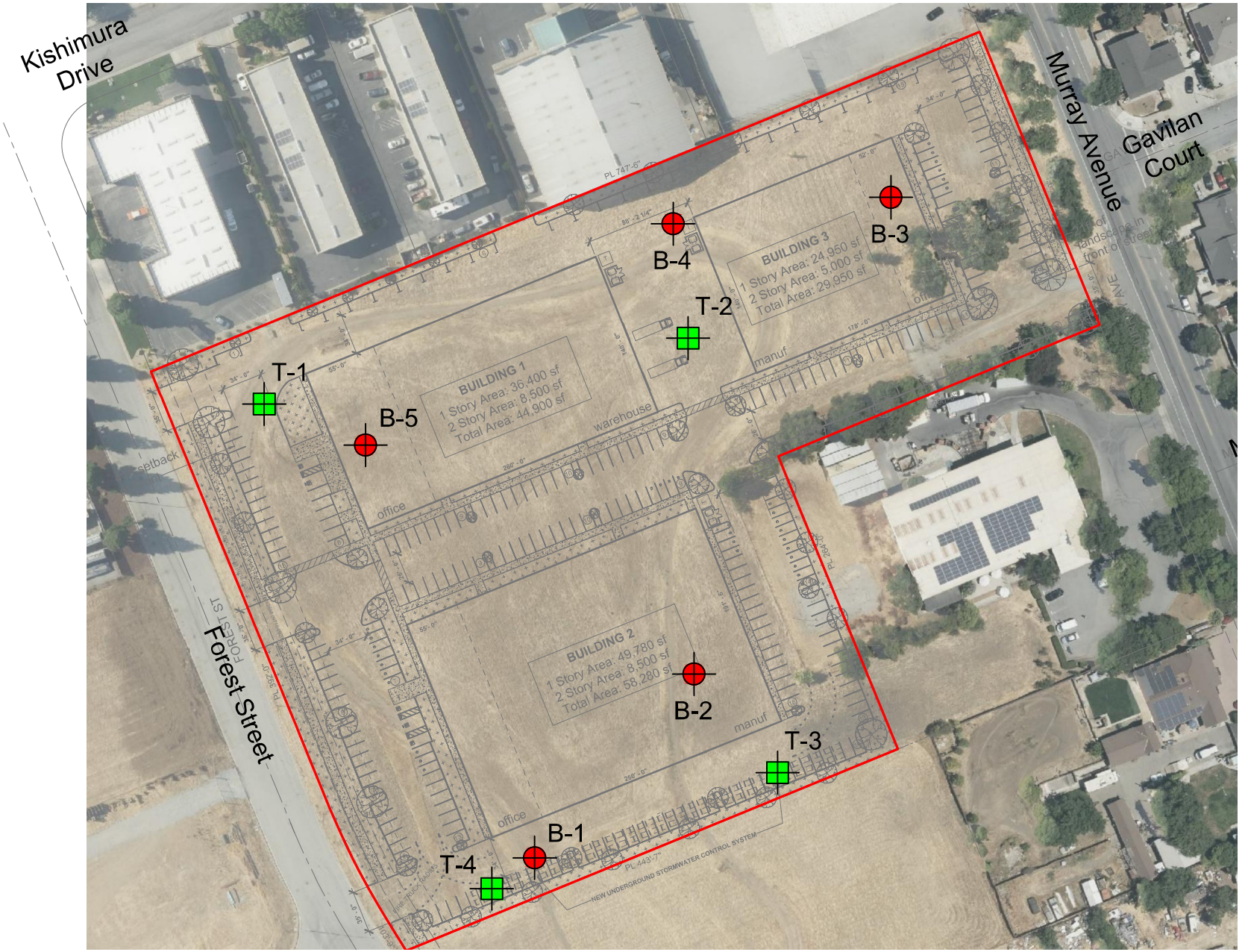
APPROXIMATE SCALE: 1" = 2,000'

0 2,000' 4,000'

NOTE: Basemap from Microsoft/TomTom 2022.

DATE			VICINITY MAP	FIGURE
September 2022	Stevens Ferrone & Bailey Engineering Company, Inc	1600 Willow Pass Court Concord, CA 94520 Tel 925.688.1001 Fax 925.688.1005 www.SFandB.com	8875 MURRAY AVENUE Gilroy, California	1
PROJECT NO.				
989-1				

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Printed: 8/26/2022



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APPENDIX A

Field Exploration

Stevens Ferrone Bailey Engineering
1600 Willow Pass Court
Concord, CA 94520
Tel: (925) 688-1001

KEY TO EXPLORATORY BORING LOGS

PROJECT:
8875 MURRAY AVENUE
Gilroy, California

PROJECT NO: **989-1**

FIGURE NO: **A-1**

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		GRAPHIC LOG	GROUP SYMBOL	DESCRIPTION
COARSE-GRAINED SOILS (More than 50% of material is larger than #200 sieve)	CLEAN GRAVELS (Less than 5% fines)		GW	Well-graded gravels or gravel-sand mixtures, little or no fines
			GP	Poorly-graded gravels or gravel-sand mixtures, little or no fines
	GRAVELS WITH FINES (More than 12% fines)		GM	Silty gravels or gravel-sand-silt mixtures
			GC	Clayey gravels or gravel-sand-clay mixtures
	CLEAN SANDS (Less than 5% fines)		SW	Well-graded sands or gravelly sands, little or no fines
			SP	Poorly-graded sands or gravelly sands, little or no fines
	SANDS WITH FINES (More than 12% fines)		SM	Silty sands or sand-silt mixtures
			SC	Clayey sands or sand-clay mixtures

MAJOR DIVISIONS		GRAPHIC LOG	GROUP SYMBOL	DESCRIPTION
FINE-GRAINED SOILS (More than 50% of material is smaller than #200 sieve)	SILTS AND CLAYS (Liquid Limit less than 50%)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts of low to medium plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and clays of low plasticity
	SILTS AND CLAYS (Liquid Limit 50% or greater)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts of high plasticity
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic silts and clays of medium to high plasticity
HIGHLY ORGANIC SOILS			PT	Peat and other highly organic soils

GRAIN SIZES

U.S. STANDARD SERIES SIEVE: #200 | #40 | #10 | #4
CLEAR SQUARE SIEVE OPENINGS: 3/4" | 3" | 12"

SILTS AND CLAYS	SANDS			GRAVELS		COBBLES	BOULDERS
	Fine	Medium	Coarse	Fine	Coarse		

RELATIVE DENSITY

SANDS AND GRAVELS	BLOWS/FOOT*
Very Loose	0 - 4
Loose	4 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	Over 50

CONSISTENCY

SILTS AND CLAYS	BLOWS/FOOT*	UCS (KSF)**
Very Soft	0 - 2	0 - 1/2
Soft	2 - 4	1/2 - 1
Firm	4 - 8	1 - 2
Stiff	8 - 16	2 - 4
Very Stiff	16 - 32	4 - 8
Hard	Over 32	Over 8

*Number of blows for a 140-pound hammer falling 30 inches to drive a 2" O.D. (1-3/8" I.D.) split spoon sampler.
**Unconfined Compressive Strength.

SYMBOLS AND NOTES

- Standard Penetration Test Sampler (2" O.D. Split Barrel)
- Modified California Sampler (3" O.D. Split Barrel)
- California Sampler (2.5" O.D. Split Barrel)
- Shelby Tube
- Pitcher Barrel
- HQ Core
- Groundwater Level During Drilling
- Groundwater Level at End of Drilling

INCREASING VISUAL MOISTURE CONTENT: Saturated, Wet, Moist, Damp, Dry

CONSTITUENT PERCENTAGE

trace	< 5%
some	5 - 15%
with	16 - 30%
-y	31 - 49%

KEY TO EXPLORATORY BORING LOGS STEVENS FERRONE & BAILEY

Stevens Ferrone Bailey Engineering
1600 Willow Pass Court
Concord, CA 94520
Tel: (925) 688-1001

EXPLORATORY BORING B-1

PROJECT NO: 989-1	SURFACE ELEVATION: --
LOGGED BY: M. Mendoza	DATE STARTED: 08/30/22
DRILL RIG: Mobile B-24	DATE FINISHED: 08/30/22
DRILLING METHOD: 4-inch Solid Flight Auger	DEPTH TO INITIAL WATER: Not Encountered
HAMMER METHOD: Rope and Cathead	DEPTH TO FINAL WATER: Not Encountered
HAMMER WEIGHT / DROP: 140 pounds / 30 inches	
BORING LOCATION: See Site Plan, Figure 2 (37.024781°, -121.573454°)	

PROJECT:
8875 MURRAY AVENUE
Gilroy, CA

DESCRIPTION AND REMARKS	CONSIST	DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UCS (KSF)	OTHER TESTS AND NOTES
CLAY (CL), brown, with to sandy (fine- to coarse-grained), trace gravel (fine, subangular), dry.	soft very stiff	0		25				
SAND (SC)/GRAVEL (GC), mottled gray brown, fine- to coarse-grained, with to gravelly (fine, angular to subrounded), with clay and silt, dry to damp.	medium dense very dense			50				
		5		42	15.5	106.3		At 6 feet: Fine Gravel = 23% Coarse Sand = 16% Medium Sand = 25% Fine Sand = 12% Fines = 24%
CLAY (CL), mottled gray brown, silty, dry to damp.	very stiff							
		10		28				
Sandy (fine- to medium-grained).		15		33				
GRAVEL (GC)/SAND (SC), mottled gray brown, fine to coarse, angular to subrounded, sandy (fine- to coarse-grained), with clay and silty, damp.	dense							
		20		44				
Bottom of Boring = 21.5 feet Notes: Stratification is approximate, variations must be expected. Blow counts converted to SPT N-values. See report for additional details.		25						

EXPLORATORY BORING LOG 989-1 B-1.fdat6 STEVENS FERRONE & BAILEY 9/16/2022

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Concord, CA 94520
Tel: (925) 688-1001

EXPLORATORY BORING B-2

PROJECT NO: 989-1	SURFACE ELEVATION: --
LOGGED BY: M. Mendoza	DATE STARTED: 08/30/22
DRILL RIG: Mobile B-24	DATE FINISHED: 08/30/22
DRILLING METHOD: 4-inch Solid Flight Auger	DEPTH TO INITIAL WATER: Not Encountered
HAMMER METHOD: Rope and Cathead	DEPTH TO FINAL WATER: Not Encountered
HAMMER WEIGHT / DROP: 140 pounds / 30 inches	
BORING LOCATION: See Site Plan, Figure 2 (37.025202°, -121.572999°)	

PROJECT:
8875 MURRAY AVENUE
Gilroy, CA

DESCRIPTION AND REMARKS	CONSIST	DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UCS (KSF)	OTHER TESTS AND NOTES
CLAY (CL), mottled dark gray brown, some sand (fine- to coarse-grained), dry.	soft	0						
	very stiff			16	16.5	108.4	12.3	At 2 feet: Liquid Limit = 45 Plasticity Index = 30 Medium Sand = 2% Fine Sand = 8% Fines = 90% Corrosion Tests
With white mottles at 3.5 feet.				27				
CLAY (CL), mottled gray brown, silty, some sand (fine- to medium-grained), dry to damp.	very stiff	5		18				
Change color to mottled gray yellowish brown.		10		34				
GRAVEL (GM), mottled gray brown, fine to coarse, angular to subrounded, sandy (fine- to coarse-grained), with silt, damp.	very dense	15		53				
Bottom of Boring = 16.5 feet Notes: Stratification is approximate, variations must be expected. Blow counts converted to SPT N-values. See report for additional details.		20						
		25						

EXPLORATORY BORING LOG 989-1 B-2.fdat9 STEVENS FERRONE & BAILEY 9/16/2022

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Concord, CA 94520
Tel: (925) 688-1001

EXPLORATORY BORING B-3

PROJECT NO: 989-1	SURFACE ELEVATION: --
LOGGED BY: M. Mendoza	DATE STARTED: 08/30/22
DRILL RIG: Mobile B-24	DATE FINISHED: 08/30/22
DRILLING METHOD: 4-inch Solid Flight Auger	DEPTH TO INITIAL WATER: Not Encountered
HAMMER METHOD: Rope and Cathead	DEPTH TO FINAL WATER: Not Encountered
HAMMER WEIGHT / DROP: 140 pounds / 30 inches	
BORING LOCATION: See Site Plan, Figure 2 (37.026294°, -121.572426°)	

PROJECT:
8875 MURRAY AVENUE
Gilroy, CA

DESCRIPTION AND REMARKS	CONSIST	DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UCS (KSF)	OTHER TESTS AND NOTES
CLAY (CL), brown, silty, with to sandy (fine-grained), very dry.	soft	0						
	very stiff			17	18.9	103.5	12.8	At 2 feet: Liquid Limit = 45 Plasticity Index = 26 Medium Sand = 2% Fine Sand = 22% Fines = 76%
Dry at 3 feet.	hard			40				
		5		37				At 3.5 feet: Corrosion Test
SAND (SP-SM), mottled gray brown, fine- to coarse-grained, with to gravelly (fine, angular to subrounded), some silt, dry.	very dense							
		10		30/6"				
		15		51				
Gravelly (fine to coarse, angular to subrounded).	dense	20		47				
Bottom of Boring = 21.5 feet Notes: Stratification is approximate, variations must be expected. Blow counts converted to SPT N-values. See report for additional details.		25						

EXPLORATORY BORING LOG 989-1 B-3.fdat9 STEVENS FERRONE & BAILEY 9/16/2022

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Concord, CA 94520
Tel: (925) 688-1001

EXPLORATORY BORING B-4

PROJECT NO: 989-1	SURFACE ELEVATION: --
LOGGED BY: M. Mendoza	DATE STARTED: 08/30/22
DRILL RIG: Mobile B-24	DATE FINISHED: 08/30/22
DRILLING METHOD: 4-inch Solid Flight Auger	DEPTH TO INITIAL WATER: Not Encountered
HAMMER METHOD: Rope and Cathead	DEPTH TO FINAL WATER: Not Encountered
HAMMER WEIGHT / DROP: 140 pounds / 30 inches	
BORING LOCATION: See Site Plan, Figure 2 (37.026234°, -121.573058°)	

PROJECT:
8875 MURRAY AVENUE
Gilroy, CA

DESCRIPTION AND REMARKS	CONSIST	GRAPHIC LOG	DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UCS (KSF)	OTHER TESTS AND NOTES
CLAY (CL), brown, silty, some to with sand (fine-grained), very dry.	soft		0						
	very stiff				16				
Dry at 3 feet.					30				
	hard		5		32	16.4	108.9	9.2	At 6 feet: Fine Gravel = 1% Coarse Sand = 1% Medium Sand = 3% Fine Sand = 14% Fines = 81%
Some to with sand (fine- to medium-grained), dry to damp.									
SAND (SM)/SILT (ML), yellowish brown, fine- to medium-grained, silty, trace clay, dry to damp.	very dense		10		41/10"				
SAND (SP-SM), mottled gray brown, fine- to coarse-grained, gravelly (fine, subangular to subrounded), some silt, dry.	dense		15		42				
Bottom of Boring = 16.5 feet Notes: Stratification is approximate, variations must be expected. Blow counts converted to SPT N-values. See report for additional details.			20						
			25						

EXPLORATORY BORING LOG 989-1 B-4.idat8 STEVENS FERRONE & BAILEY 9/16/2022

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Concord, CA 94520
Tel: (925) 688-1001

EXPLORATORY BORING B-5

PROJECT NO: 989-1	SURFACE ELEVATION: --
LOGGED BY: M. Mendoza	DATE STARTED: 08/30/22
DRILL RIG: Mobile B-24	DATE FINISHED: 08/30/22
DRILLING METHOD: 4-inch Solid Flight Auger	DEPTH TO INITIAL WATER: Not Encountered
HAMMER METHOD: Rope and Cathead	DEPTH TO FINAL WATER: Not Encountered
HAMMER WEIGHT / DROP: 140 pounds / 30 inches	
BORING LOCATION: See Site Plan, Figure 2 (37.025727°, -121.573937°)	

PROJECT:
8875 MURRAY AVENUE
Gilroy, CA

DESCRIPTION AND REMARKS	CONSIST	DEPTH (FEET)	SAMPLER	SPT N-VALUE	WATER CONTENT (%)	DRY DENSITY (PCF)	UCS (KSF)	OTHER TESTS AND NOTES
CLAY (CL), mottled gray brown, some to with sand (fine-grained), dry.	soft	0						
	very stiff			19	18.1	106.8	8.1	
Dry to damp.	hard			36				
		5						
Sandy (fine- to medium-grained).				31				
GRAVEL (GC), mottled gray brown, fine to coarse, angular to subrounded, sandy (fine- to coarse-grained), clayey and silty, damp.	hard	10		30/6"				
	very stiff	15		32				
Bottom of Boring = 16.5 feet Notes: Stratification is approximate, variations must be expected. Blow counts converted to SPT N-values. See report for additional details.		20						
		25						

EXPLORATORY BORING LOG 989-1 B-5.idat9 STEVENS FERRONE & BAILEY 9/16/2022

Stevens Ferrone Bailey Engineering
1600 Willow Pass Court
Concord, CA 94520
Tel: (925) 688-1001

TEST PIT T-1

PROJECT NO: 989-1	SURFACE ELEVATION: --
LOGGED BY: R. Ceraolo	DATE STARTED: 08/30/22
EXCAVATOR TYPE: Case 580	DATE FINISHED: 08/30/22
BUCKET WIDTH: 36-inch	DEPTH TO INITIAL WATER: Not Encountered
PIT LOCATION: See Site Plan, Figure 2 (37.025820°, -121.574227°)	DEPTH TO FINAL WATER: Not Encountered

PROJECT:
8875 MURRAY AVENUE
Gilroy, CA

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	WATER CONTENT (%)	DRY DENSITY (PCF)	POCKET PEN. (KSF)	TORVANE (TSF)	OTHER TESTS AND NOTES
DESCRIPTION AND REMARKS	CONSIST	GRAPHIC LOG							
CLAY (CL), dark brown, silty, some sand (fine- to medium-grained), dry.	soft to stiff		0						
Change color to brown, sandy (fine- to medium-grained) at 3 feet.									At 3 feet: Double Ring Infiltration Tests
Bottom of Pit = 3 feet Groundwater was not encountered during excavation. Notes: Stratification is approximate, variations must be expected. See report for additional details.			5 10 15 20 25						

EXPLORATORY PIT LOG 989-1 T-1.ldat8 STEVENS FERRONE & BAILEY 9/16/2022

Stevens Ferrone Bailey Engineering
1600 Willow Pass Court
Concord, CA 94520
Tel: (925) 688-1001

TEST PIT T-2

PROJECT NO: 989-1	SURFACE ELEVATION: --
LOGGED BY: R. Ceraolo	DATE STARTED: 08/30/22
EXCAVATOR TYPE: Case 580	DATE FINISHED: 08/30/22
BUCKET WIDTH: 36-inch	DEPTH TO INITIAL WATER: Not Encountered
PIT LOCATION: See Site Plan, Figure 2 (37.025971°, -121.573015°)	DEPTH TO FINAL WATER: Not Encountered

PROJECT:
8875 MURRAY AVENUE
Gilroy, CA

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	WATER CONTENT (%)	DRY DENSITY (PCF)	POCKET PEN. (KSF)	TORVANE (TSF)	OTHER TESTS AND NOTES
DESCRIPTION AND REMARKS	CONSIST	GRAPHIC LOG							
CLAY (CL), dark brown, silty, some sand (fine- to medium-grained), dry.	soft to stiff		0						
Change color to brown, with sand (fine- to medium-grained) at 3 feet.									At 5 feet: Double RIng Infiltration Tests
Bottom of Pit = 5 feet Groundwater was not encountered during excavation. Notes: Stratification is approximate, variations must be expected. See report for additional details.			5 10 15 20 25						

EXPLORATORY PIT LOG 989-1 T-2.ldat6 STEVENS FERRONE & BAILEY 9/16/2022

Stevens Ferrone Bailey Engineering
1600 Willow Pass Court
Concord, CA 94520
Tel: (925) 688-1001

TEST PIT T-3

PROJECT NO: 989-1	SURFACE ELEVATION: --
LOGGED BY: R. Ceraolo	DATE STARTED: 08/30/22
EXCAVATOR TYPE: Case 580	DATE FINISHED: 08/30/22
BUCKET WIDTH: 36-inch	DEPTH TO INITIAL WATER: Not Encountered
PIT LOCATION: See Site Plan, Figure 2 (37.024976°, -121.572760°)	DEPTH TO FINAL WATER: Not Encountered

PROJECT:
8875 MURRAY AVENUE
Gilroy, CA

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	WATER CONTENT (%)	DRY DENSITY (PCF)	POCKET PEN. (KSF)	TORVANE (TSF)	OTHER TESTS AND NOTES
DESCRIPTION AND REMARKS	CONSIST	GRAPHIC LOG							
CLAY (CL), mottled gray brown, silty, some sand (fine- to medium-grained), dry. With carbonates at 3 feet.	soft to stiff		0						
CLAY (CL), mottled brown, silty, some sand (fine- to medium-grained), dry to damp.	stiff		5						At 5 feet: Double RIng Infiltration Tests
Bottom of Pit = 5 feet Groundwater was not encountered during excavation. Notes: Stratification is approximate, variations must be expected. See report for additional details.			10 15 20 25						

EXPLORATORY PIT LOG 989-1 T-3.ldat6 STEVENS FERRONE & BAILEY 9/16/2022

Stevens Ferrone Bailey Engineering
1600 Willow Pass Court
Concord, CA 94520
Tel: (925) 688-1001

TEST PIT T-4

PROJECT NO: 989-1	SURFACE ELEVATION: --
LOGGED BY: R. Ceraolo	DATE STARTED: 08/30/22
EXCAVATOR TYPE: Case 580	DATE FINISHED: 08/30/22
BUCKET WIDTH: 36-inch	DEPTH TO INITIAL WATER: Not Encountered
PIT LOCATION: See Site Plan, Figure 2 (37.024710°, -121.573577°)	DEPTH TO FINAL WATER: Not Encountered

PROJECT:
8875 MURRAY AVENUE
Gilroy, CA

DESCRIPTION AND CLASSIFICATION			DEPTH (FEET)	SAMPLER	WATER CONTENT (%)	DRY DENSITY (PCF)	POCKET PEN. (KSF)	TORVANE (TSF)	OTHER TESTS AND NOTES
DESCRIPTION AND REMARKS	CONSIST	GRAPHIC LOG							
CLAY (CL), brown, silty, with sand (fine- to coarse-grained), dry to damp.	firm to stiff		0						
SAND (SC), mottled gray brown, fine- to coarse-grained, clayey and silty, with to gravelly (fine, subangular to subrounded), dry.	medium dense		5						At 5 feet: Double RIng Infiltration Test
Bottom of Pit = 5 feet Groundwater was not encountered during excavation. Notes: Stratification is approximate, variations must be expected. See report for additional details.			10 15 20 25						

EXPLORATORY PIT LOG 989-1 T-4.tdat6 STEVENS FERRONE & BAILEY 9/16/2022

Stevens Ferrone & Bailey Engineering Company, Inc

FIELD INFILTRATION TESTS

SFB 989-1, 8875 Murray Avenue, Gilroy, CA

Double Ring Infiltrometer Tests

Test Date: 8/30/2022

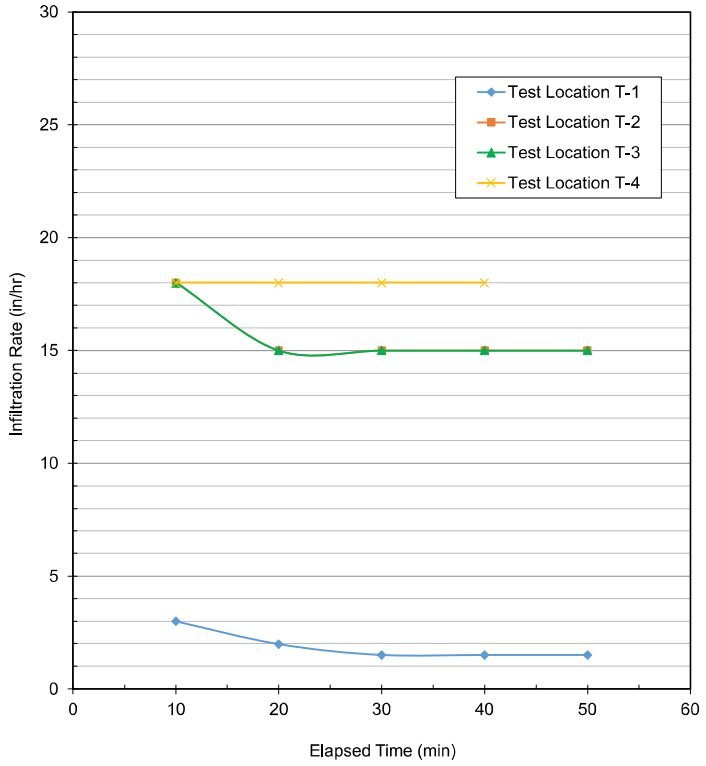
Test Performed by: R. Ceraolo

Test Location T-1	Test Depth = 3 ft	Test Water Head = 14 in		
Reading No.	Water Drop (in)	Test Period (min)	Elapsed Time (min)	Infiltration Rate (in/hr)
Pre-Soak	2.0	30	-	4.0
Pre-Soak	2.0	30	-	4.0
1	0.5	10	10	3.0
2	0.33	10	20	2.0
3	0.25	10	30	1.5
4	0.25	10	40	1.5
5	0.25	10	50	1.5
6	0.25	10	60	1.5

Test Location T-2	Test Depth = 5 ft	Test Water Head = 16 in		
Reading No.	Water Drop (in)	Test Period (min)	Elapsed Time (min)	Infiltration Rate (in/hr)
Pre-Soak	16.0	30	-	32.0
Pre-Soak	7.0	30	-	14.0
1	3.0	10	10	18.0
2	2.5	10	20	15.0
3	2.5	10	30	15.0
4	2.5	10	40	15.0
5	2.5	10	50	15.0
6	2.5	10	60	15.0

Test Location T-3	Test Depth = 5 ft	Test Water Head = 16 in		
Reading No.	Water Drop (in)	Test Period (min)	Elapsed Time (min)	Infiltration Rate (in/hr)
Pre-Soak	13.0	30	-	26.0
Pre-Soak	4.0	30	-	8.0
1	3.0	10	10	18.0
2	2.5	10	20	15.0
3	2.5	10	30	15.0
4	2.5	10	40	15.0
5	2.5	10	50	15.0

Test Location T-4	Test Depth = 5 ft	Test Water Head = 16 in		
Reading No.	Water Drop (in)	Test Period (min)	Elapsed Time (min)	Infiltration Rate (in/hr)
Pre-Soak	7.5	30	-	15.0
Pre-Soak	7.0	30	-	14.0
1	3.0	10	10	18.0
2	3.0	10	20	18.0
3	3.0	10	30	18.0
4	3.0	10	40	18.0



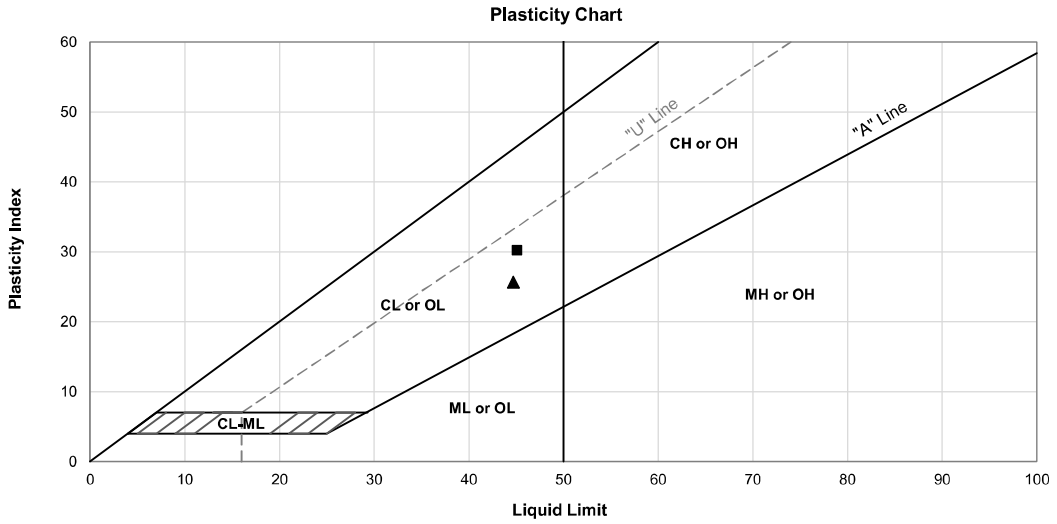
APPENDIX B

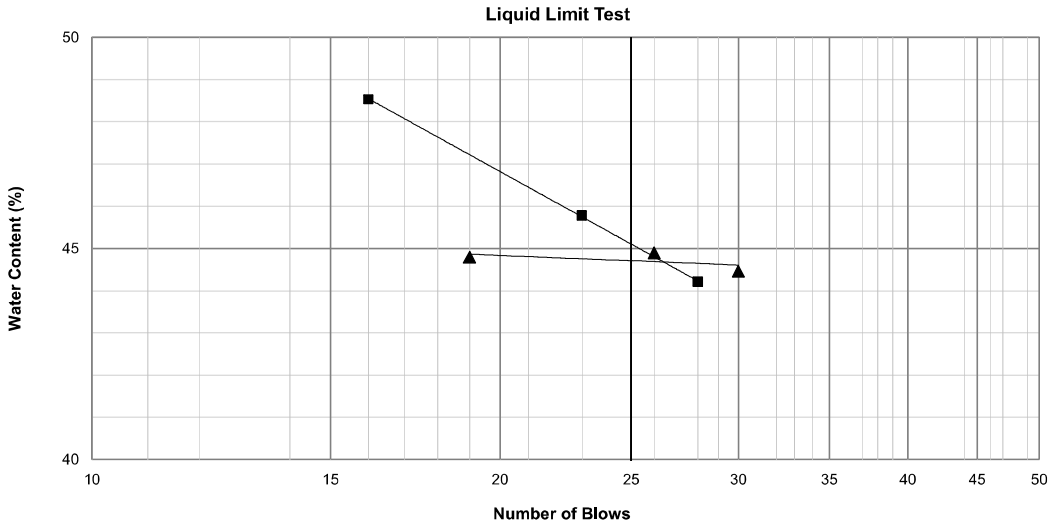
Laboratory Testing

Stevens Ferrone & Bailey Engineering Company, Inc

ATTERBERG LIMITS

ASTM D4318





Test Results

Symbol	Sample Source	Sample Description	LL	PL	PI	%≤ #200	USCS
■	Boring B-2 at 2 ft	Dark brown silty CLAY some sand	45	15	30	90.2	CL
▲	Boring B-3 at 2 ft	Brown silty CLAY with sand	45	19	26	75.7	CL

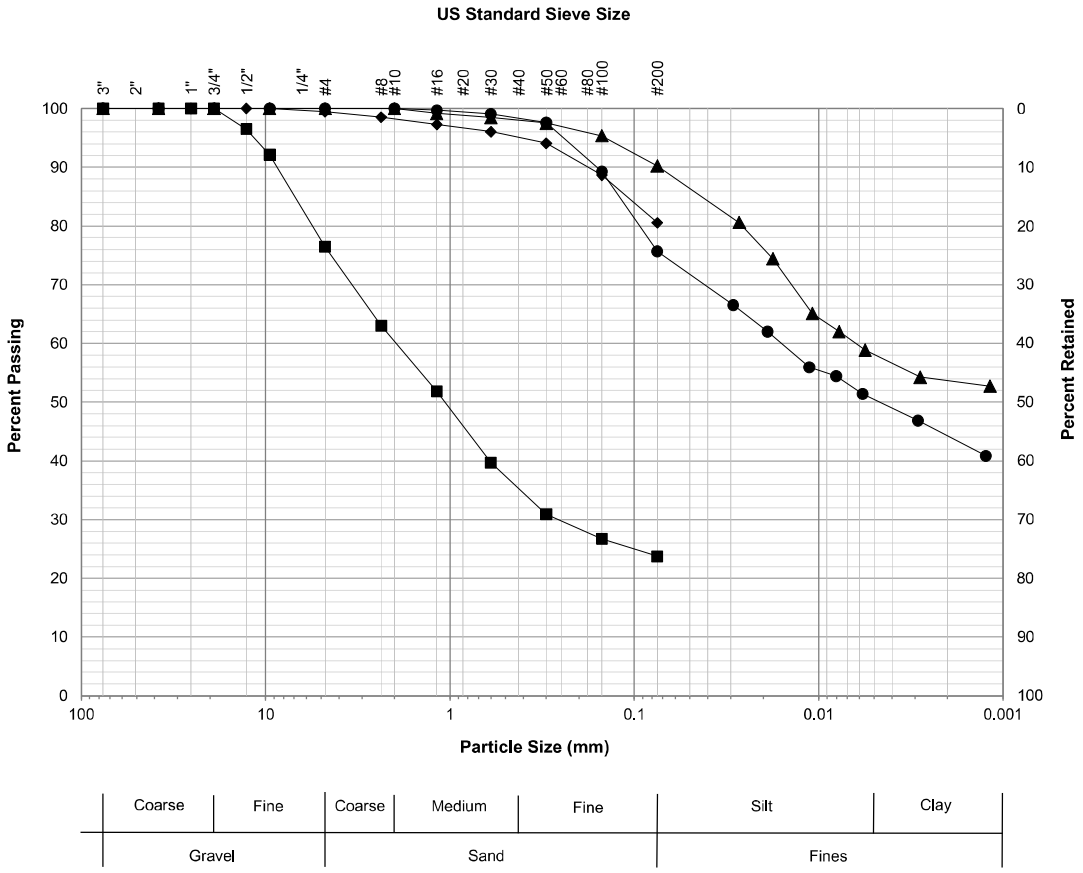
Project Info

Project Number: 989-1
Test Report Date: 9/15/2022
Project Name: 8875 Murray Avenue
Project Location: Gilroy, CA
Tested by: R. Tuazon
Checked by: T. Chen

Stevens Ferrone & Bailey Engineering Company, Inc

PARTICLE SIZE DISTRIBUTION

ASTM C136, D422 & D1140



	Symbol	% >3"	% Gravel		% Sand			% Fines		D_{60}	D_{30}	D_{10}	C_u	C_c
			Coarse	Fine	Coarse	Medium	Fine	Silt	Clay					
Test Results	■	0.0	0.0	23.5	16.1	25.0	11.6	23.7		1.957	0.257			
	▲	0.0	0.0	0.0	0.0	2.0	7.7	90.2		0.006				
	●	0.0	0.0	0.0	0.0	1.7	22.7	75.7		0.016				
	♦	0.0	0.0	0.5	1.3	3.1	14.5	80.6						

	Symbol	Sample Source	Sample Description	USCS
Sample Info	■	Boring B-1 at 6 ft	Brown SAND with clay and gravel	SC
	▲	Boring B-2 at 2 ft	Dark brown silty CLAY some sand	CL
	●	Boring B-3 at 2 ft	Brown silty CLAY with sand	CL
	♦	Boring B-4 at 6 ft	Brown silty CLAY with sand	CL

Project Info

Project Number: 989-1

Test Report Date: 9/15/2022

Project Name: 8875 Murray Avenue

Project Location: Gilroy, CA

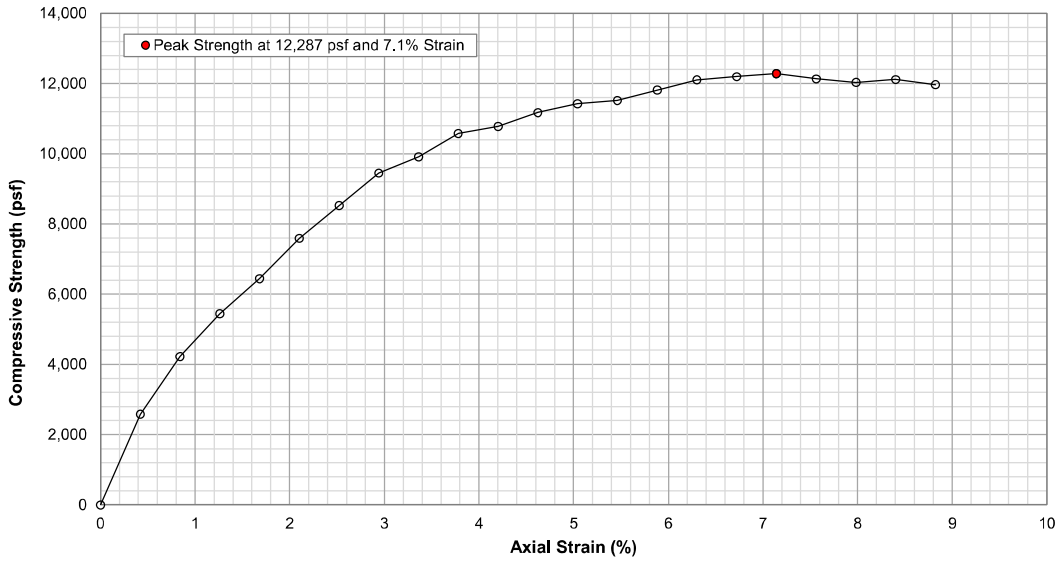
Tested by: R. Tuazon

Checked by: T. Chen

Stevens Ferrone & Bailey Engineering Company, Inc

UNCONFINED COMPRESSIVE STRENGTH

ASTM D2166



Sample Images

Before Test



After Test



After Test



Sample Properties

Sample Description:	Dark brown silty CLAY (CL)	
Diameter:	2.42	in
Height:	5.95	in
Height/Diameter:	2.46	
Wet Unit Weight:	126.3	pcf
Water Content:	16.5	%
Dry Unit Weight:	108.4	pcf

Test Results

Test Date:	9/6/2022	
Compressive Strength:	12,287	psf
Axial Strain at Failure:	7.1	%
Test Strain Rate:	0.05	in/min
Test Time to Failure:	8.5	min
Remarks:		

Project Info

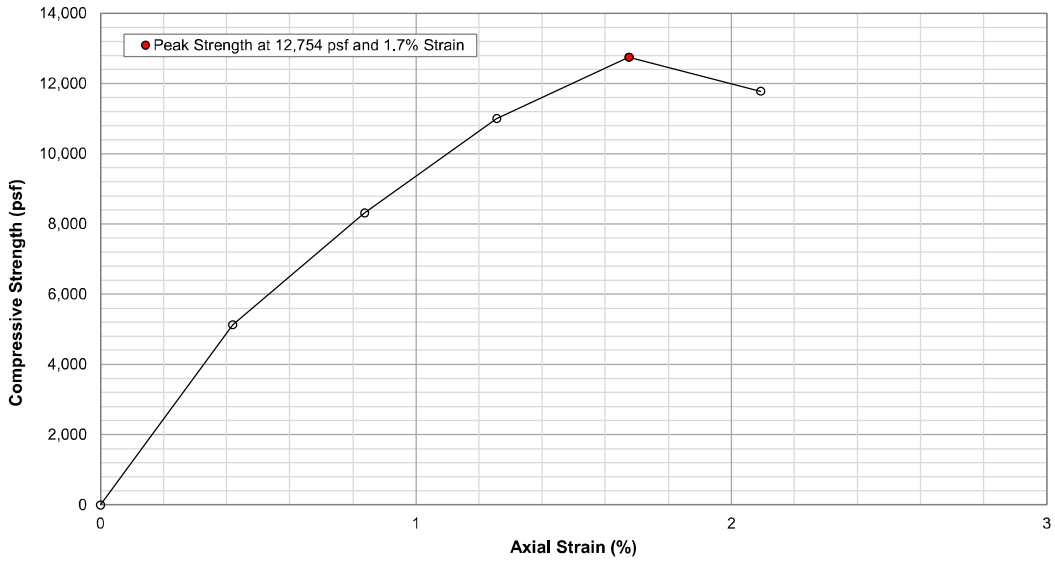
Project Number:	989-1
Project Name:	8875 Murray Avenue
Project Location:	Gilroy, CA
Sample Source/No.:	Boring B-2
Sample Depth:	2 ft
Tested by:	R. Tuazon
Checked by:	T. Chen

Test Report Date: 9/15/2022

Stevens Ferrone & Bailey Engineering Company, Inc

UNCONFINED COMPRESSIVE STRENGTH

ASTM D2166



Sample Images

Before Test



After Test



After Test



Sample Properties

Sample Description:	Brown silty CLAY with sand (CL)	
Diameter:	2.42	in
Height:	5.97	in
Height/Diameter:	2.47	
Wet Unit Weight:	123.1	pcf
Water Content:	18.9	%
Dry Unit Weight:	103.5	pcf

Test Results

Test Date:	9/6/2022	
Compressive Strength:	12,754	psf
Axial Strain at Failure:	1.7	%
Test Strain Rate:	0.05	in/min
Test Time to Failure:	2	min
Remarks:		

Project Info

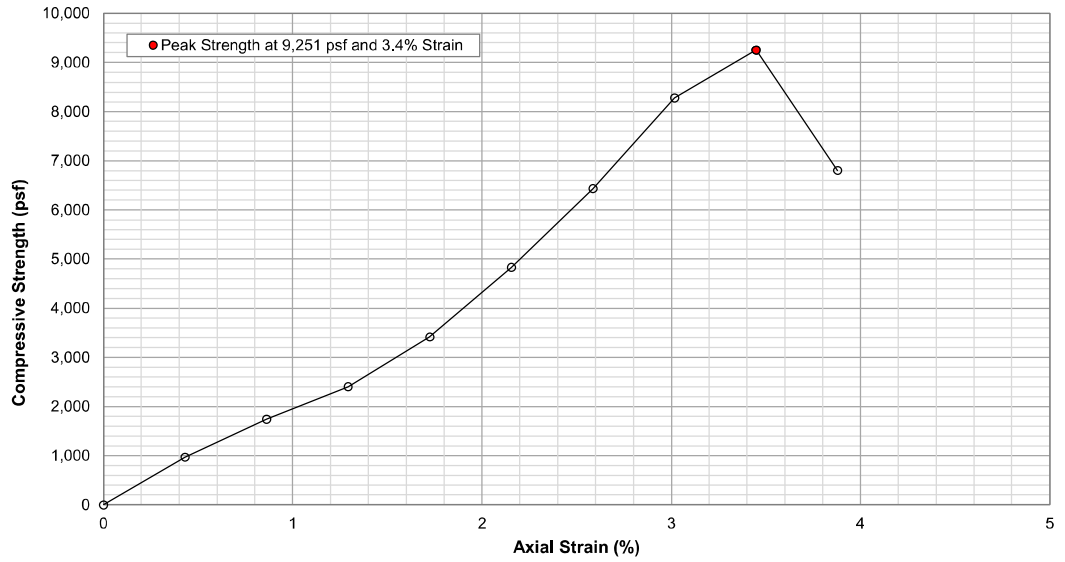
Project Number:	989-1
Project Name:	8875 Murray Avenue
Project Location:	Gilroy, CA
Sample Source/No.:	Boring B-3
Sample Depth:	2 ft
Tested by:	R. Tuazon
Checked by:	T. Chen

Test Report Date: 9/15/2022

Stevens Ferrone & Bailey Engineering Company, Inc

UNCONFINED COMPRESSIVE STRENGTH

ASTM D2166



Sample Images

Before Test



After Test



After Test



Sample Properties

Sample Description:	Brown silty CLAY with sand (CL)	
Diameter:	2.42	in
Height:	5.8	in
Height/Diameter:	2.40	
Wet Unit Weight:	126.8	pcf
Water Content:	16.4	%
Dry Unit Weight:	108.9	pcf

Test Results

Test Date:	9/6/2022	
Compressive Strength:	9,251	psf
Axial Strain at Failure:	3.4	%
Test Strain Rate:	0.05	in/min
Test Time to Failure:	4	min
Remarks:		

Project Info

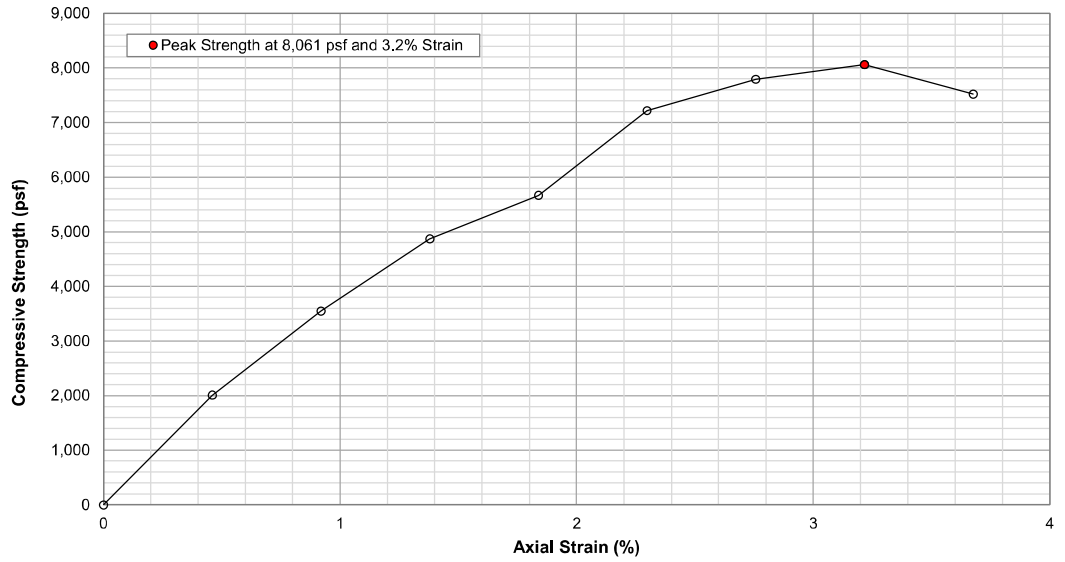
Project Number:	989-1
Project Name:	8875 Murray Avenue
Project Location:	Gilroy, CA
Sample Source/No.:	Boring B-4
Sample Depth:	6 ft
Tested by:	R. Tuazon
Checked by:	T. Chen

Test Report Date: 9/15/2022

Stevens Ferrone & Bailey Engineering Company, Inc

UNCONFINED COMPRESSIVE STRENGTH

ASTM D2166



Sample Images

Before Test



After Test



After Test



Sample Properties

Sample Description:	Brown silty CLAY some sand (CL)	
Diameter:	2.42	in
Height:	5.44	in
Height/Diameter:	2.25	
Wet Unit Weight:	126.1	pcf
Water Content:	18.1	%
Dry Unit Weight:	106.8	pcf

Test Results

Test Date:	9/6/2022	
Compressive Strength:	8,061	psf
Axial Strain at Failure:	3.2	%
Test Strain Rate:	0.05	in/min
Test Time to Failure:	3.5	min
Remarks:		

Project Info

Project Number:	989-1
Project Name:	8875 Murray Avenue
Project Location:	Gilroy, CA
Sample Source/No.:	Boring B-5
Sample Depth:	2 ft
Tested by:	R. Tuazon
Checked by:	T. Chen

Test Report Date: 9/15/2022

APPENDIX C

GBA Guidelines for Geotechnical Report

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are <u>not</u> final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals' plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for information purposes only.* To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are <u>Not</u> Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer's services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will <u>not</u> of itself be sufficient to prevent moisture infiltration. Confront the risk of moisture infiltration*** by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are <u>not</u> building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

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Appendix F Transportation Analysis Report

HEXAGON TRANSPORTATION CONSULTANTS, INC.

Heatwave Industrial Development

Transportation Analysis

Prepared for:

Stantec

February 21, 2025

Hexagon Transportation Consultants, Inc.

Hexagon Office: 8070 Santa Teresa Boulevard, Suite 230
Gilroy, CA 95020
Hexagon Job Number: 23GD02
Phone: 408.846-7410

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Areawide Circulation Plans **Corridor Studies** Pavement Delineation Plans **Traffic Handling Plans** Impact Fees **Interchange Analysis** Parking **Transportation Planning** Traffic Calming **Traffic Control Plans** Traffic Simulation **Traffic Impact Analysis** Traffic Signal Design **Travel Demand Forecasting**

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Executive Summary

The purpose of this transportation analysis is to evaluate the potential transportation impacts associated with the proposed Heatwave Industrial Development in conformance with the requirements of the California Environmental Quality Act (CEQA) and the City of Gilroy.

The project, as proposed, would develop three light industrial buildings on a vacant 7.29-acre site located at 8875 Murray Avenue. Upon buildout of the project site, the project site would include 20,330 s.f. of office space, 25,266 s.f. of warehouse land use, and 75,190 s.f. of light industrial land use.

Scope of Study

This transportation analysis has been prepared in accordance with the standards and methodologies set forth by the City of Gilroy, the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program's *Transportation Impact Guidelines* (October 2014), and by the California Environmental Quality Act (CEQA).

In 2013, the State of California passed Senate Bill (SB) 743, which requires jurisdictions to stop using congestion and delay metrics, such as Level of Service (LOS), as the measurement for CEQA transportation analysis. Therefore, in adherence to SB 743, the effects and impacts to the transportation network as the result of the proposed project were evaluated based on VMT.

However, the City of Gilroy currently uses LOS as their adopted methodology for the evaluation of the effects of new development and land use changes on the local transportation network. In addition, the City is still required to conform to the requirements of the VTA, which establishes a uniform program for evaluating the transportation impacts of land use decisions on the designated CMP Roadway System. Therefore, in addition to the evaluation of VMT, this transportation study also includes a level of service analysis to evaluate the effects of the project on the citywide transportation system, including intersections, freeway segments, and freeway ramps. The level of service analysis is presented to determine conformance to General Plan transportation goals and policies. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis.

CEQA VMT Evaluation Results

The VTA's VMT tool was used to estimate VMT for the proposed project.

For the purpose of this analysis, and for consistency with the City of Gilroy General Plan, the VMT analysis considers OPR's recommended impact threshold of 15% below the existing citywide average VMT per job, which equates to 15.97 VMT per job.

The results of the VMT evaluation using the VTA's VMT Evaluation Tool indicate that the existing average daily VMT for employment uses in the vicinity of the project site is 16.97 VMT per job, which is less than the existing citywide average VMT per job (18.79). The results also indicate that the proposed development is projected to generate average daily per-job VMT equal to 16.92, which although is lower than the citywide average VMT per job, would exceed the identified impact threshold of 15.97 VMT per job. Therefore, the proposed project would result in an impact on the transportation system based on OPR's 15% below existing average VMT impact threshold.

The VMT results for the proposed project are presented in Table ES-1.

Table ES 1
VMT Analysis Summary

	Citywide		No Project	With Project			
Project	Average Daily VMT per Job	15% Below Base Threshold	Average Daily VMT per Job	Average Daily VMT per Job	Impact?	Max Reduction Possible[1]	With Proposed TDM Program[2]
Heatwave Industrial Development							
Base Year 2023	18.79	15.97	16.97	16.92	Yes	13.58	15.75

Source: VTA's VMT Evaluation Tool, January 2024.
[1]Assumes all applicable TDM measures.
[2]Assumes the proposed TDM program, which includes telecommuting and alternative work schedule and ride-sharing program.

Project Impact and Mitigation Measures

Applying OPR's 15% below existing average VMT impact threshold, the project would need to implement VMT reduction measures to achieve a minimum of 6% reduction (or approximately 0.95 miles per employee/job, from 16.92 to 15.97) in its VMT per job for the proposed project to reduce its impact to less than significant levels. The project's VMT per job could be reduced with the implementation of Travel Demand Management (TDM) strategies.

Per the VMT tool, the project's VMT per worker could be reduced to a maximum of 13.58 with the implementation of TDM strategies, including the following:

- TP04 – CTR Marketing and Education: Implement a marketing campaign targeting all project employees and visitors that encourages the use of transit, shared rides, and active modes. Marketing strategies may include new employee orientation on alternative commute options, event promotions, and publications. Providing information and encouragement to use transit, share ride modes, and active modes, reducing drive-alone trips and thereby reducing VMT; **and**
- TP06 – Employee Parking Cash-Out: Require project employers to offer employee parking "cash-out." Providing "cash-out" options give employees the choice to forgo subsidized/free parking for cash payment equivalent to the cost that the employer would otherwise pay for the parking space. Providing an alternative to subsidized/free parking encourages commuters to travel via walking, biking, carpooling, and transit, thereby reducing VMT; **and**
- TP07 – Subsidized Transit Program: Provide fully (100%) subsidized transit passes for all project employees. Providing subsidies for transit use encourages people to use transit rather than driving, thereby reducing VMT; **and**

- TP08 – Telecommunicating and Alternative Work Schedule: Allow and encourage employees to shift work schedules such that employees work slightly longer days resulting in fewer days in the office in a one-week or two-week period. This strategy reduces commute trips, thereby reducing VMT; **and**
- TP13 – Ride-Sharing Programs: Organize a program to match individuals interested in carpooling who have similar commute patterns. This strategy encourages the use of carpooling, reducing the number of vehicle trips and thereby reducing VMT.

The project applicant is proposing to implement a TDM program that will include telecommuting and alternative work schedule (TP08 above) and a ride-sharing program (TP13 above). Implementing these two TDM measures with a minimum 10% participation rate each, the VMT tool calculates that the proposed project's VMT could be reduced to 15.75 miles per worker, reducing the project VMT below the identified impact threshold and thus reducing the project impact to less than significant.

Roadway Capacity Analysis Results

Intersection Level of Service Analysis Results

A summary of the results of the intersection level of service analysis conducted for the study intersections is provided in Table ES-2. The results of the intersection level of service analysis indicate that all of the study intersections are projected to continue to operate at acceptable levels of service during the peak hours under both background plus project and cumulative plus project conditions. Therefore, the proposed project is not projected to have or contribute to an adverse effect on any of the study intersections.

Intersection Operations Analysis Results

The operations analysis results are described below and summarized in Table ES-3.

The results of the queue analysis show that the proposed project would contribute to the projected queue length storage capacity deficiency for the following turn-movement:

4. Murray Avenue and Leavesley Road

Southbound Left-Turn Movement

The maximum queue length for the southbound left-turn movement at the *Murray Avenue/Leavesley Road* intersection is projected to exceed the existing queue storage capacity for this movement during the PM peak-hour under background plus project conditions. The addition of project traffic to this turn-movement is projected to increase the 95th percentile vehicle queue length from 7 vehicles per lane under background conditions to 8 vehicles per lane under project conditions, exceeding the existing storage capacity by a total of 1 vehicle (25 feet) per lane. This is considered a project deficiency, according to the City of Gilroy definition of queue deficiencies.

Project Deficiency: PM peak-hour
Queue Length Deficiency: 1 vehicle (25 feet) per lane

Intersection Deficiencies and Possible Improvements

Described below are deficiencies that are projected to occur with implementation of the proposed project. The project's contribution to the projected deficiencies and/or possible improvements to improve operating conditions also are described below.

Level of Service Deficiencies

The proposed project is not projected to have an adverse effect on any of the study intersections.

Queue Storage Deficiencies

4. Murray Avenue and Leavesley Road

Movement: Southbound left-turn
Project deficiency: PM peak-hour
Available queue storage: 175 feet (7 vehicles) per lane
Change in queue length: from 7 vehicles per lane under background conditions to 8 vehicles per lane under project conditions
Queue length deficiency: 1 vehicle (25 feet) per lane

The projected queue storage deficiency for this turn-movement could be improved by extending the existing southbound left-turn lanes an additional 25 feet each. Extending the existing southbound left-turn pockets could be accomplished by restriping Murray Avenue, however, it could also require the removal of some on-street parking to continue to accommodate the existing lane configuration and bike lanes.

Freeway Segment Evaluation

A review of the project trip assignment indicates that the maximum number of project trips in any direction on the subject freeway segments would be no more than 28 trips during the peak-hour. Since the number of project trips on US 101 are estimated to be less than the one-percent threshold, the project would not cause a significant increase in traffic on the freeway segments in the study area, and a freeway level of service analysis is not required.

The freeway capacity analysis is summarized on Table ES-4.

Other Transportation Issues

Access Roadway/Driveways Geometrics

As proposed, the project driveways would satisfy the 35-foot minimum width requirement for commercial driveways.

Recommendation: The roadway improvements along the project frontage, including the transitions from the improved section of Murray Avenue to the existing narrower section to the south, should be designed to meet City of Gilroy design standards.

Recommendation: As part of the site design process, a review of turning templates within the site shall be conducted to determine the adequacy of the site access (driveway width) and on-site circulation (drive aisle width and turn radii) for truck traffic. This analysis should be conducted using turning templates for the largest truck allowed on Murray Avenue.

Operations at the Project Driveways

Because of the relatively low project traffic volumes estimated to access the project site driveways, in addition to the relative low traffic volumes along both Forest Street and Murray Avenue, traffic operations at the project site driveways are anticipated to be adequate.

Sight Distance

The sight distance from all project site driveways is beyond the 250 feet minimum distance requirement for Forest Street (local roadway with 35 mph design speed) and 360 feet minimum distance requirement for Murray Avenue (arterial roadway with 45 mph design speed). Therefore, sight distance from all project site driveways would be adequate.

Recommendation: The design of the project site should ensure that design features, such as the landscaping, signage, and other physical features, along the project site frontage and at the project site driveways, would not interfere with the sight distance at the proposed site driveways.

Emergency Vehicle Access and Circulation

The site plan shows all drive aisles within the project site to be 26 to 35 feet wide. All project driveways would be 35 feet wide, providing the minimum width requirement for emergency vehicle access and circulation.

Truck Access and Circulation

Recommendation: The project must ensure that all trucks utilize Murray Avenue, the designated truck route, to access the project site, including under Phase I when project site access would be provided via Forest Street only. Under Phase I, trucks would utilize Murray Avenue and Kishimura Drive to access the project site via Forest Street.

Recommendation: As part of the site design process, a review of turning templates within the site shall be conducted to determine the adequacy of the site access (driveway width) and on-site circulation (drive aisle width and turn radii) for truck traffic. Additionally, turning templates shall be checked at intersections leading to the project site, such as Murray Avenue/Leavesley Road and the Kishimura Drive intersections with Forest Street and Murray Avenue, to verify the adequacy of these intersections to serve the anticipated project truck traffic. This analysis should be conducted using turning templates for the largest truck allowed on Murray Avenue. Required improvements for adequate truck travel to and from the project site shall be identified, if any.

Pedestrian Access and Circulation

Currently, most roadways fronting undeveloped and industrial use parcels in the vicinity of the project site have missing sidewalks, including along the project site frontages on Forest Street and Murray Avenue.

Even with implementing sidewalks along the project site frontages on Forest Street and Murray Avenue, the existing pedestrian network in the project area would continue to be limited.

Recommendation: The design of the proposed sidewalk along the project site frontage on Forest Street and Murray Avenue must adhere to City of Gilroy design guidelines for sidewalks in industrial areas. Additionally, curb ramps must be ADA-compliant.

Parking

The site plan shows a total of 293 parking stalls would be provided on site. Of the provided on-site parking, the project proposes 7 ADA accessible stalls and 29 electric vehicle (EV) charging spaces. The proposed number of parking stalls satisfies the City's parking requirements.

Freeway Ramp Analysis Results

The results of the freeway ramp analysis are summarized in Table ES-5.

Based on the calculated V/C ratios, all of the study freeway ramps currently have adequate capacity and would continue to have adequate capacity to continue to serve the projected demand with the project. All study freeway ramps are projected to operate at LOS C or better under existing and background conditions, and at LOS D or better under background plus project conditions.

Project's Effect on Bicycle Facilities

The proposed projects could increase the demand for bicycle facilities in the vicinity of the project site. The potential demand could be served by the various bicycle facilities available in the project site area, including the bike lanes along Murray Avenue (which would provide direct access to the project site), Leavesley Road, and Monterey Road. With implementation of the planned bicycle facilities, the exiting bicycle network would be enhanced providing additional connections and opportunities for project trips to be made by bicycle. Therefore, potential project-generated bicycle traffic could be accommodated by the existing/proposed bicycle facilities in the project area.

Based on the recommended VTA bicycle rates for the proposed land uses and the sizes of the projects, a minimum of 17 long-term and 34 short-term bicycle parking spaces are recommended for the project. However, it should be noted that the VTA guidelines do not specify parking rates for warehouse land use and only provide a rate for industrial sites/campus employment centers, which might not be a good representation of the proposed project.

Following recommendations from the California Green Building Standards Code (CALGreen) on bicycle parking requirements for non-residential structures, the project must provide at least 5 long-term and 11 short-term bicycle parking spaces.

The project proposes to provide a total of 15 short-term bicycle parking spaces and 9 long-term bicycle parking spaces, adequately satisfying the CALGreen bicycle parking requirements.

Project's Effect on Pedestrian Facilities

It can be expected that new pedestrian traffic would be generated by the proposed project. The project is proposing to provide sidewalks along its frontages on Forest Street and Murray Avenue. However, the lack of sidewalks would continue to exist in the project area.

City standards require a minimum sidewalk width of 6 feet in industrial areas. They also require development projects to install (or upgrade existing) pedestrian crossings and ADA-compliant curb ramps at intersections.

Project's Effect on Transit Services

Although no reduction to the project trip generation estimates was applied due to transit services, it can be assumed that some of the project trips could be made by public transportation. Applying an estimated two percent transit mode share, which is probably the highest that could be expected for the

project, to the project trips equates to approximately 2 new transit riders generated by the project added to the local transit service during the busiest peak-hour. The estimated number of new transit riders to the proposed project could be served by the existing bus line currently serving the project site area. However, the limited-service area covered by the existing transit route and the hour-long headways could discourage potential transit users from using public transportation to access the sites.

Table ES 2
Intersection Level of Service Summary

Study Int. Number	Intersection	Intersection Control	LOS Standard	Peak Hour	Count Date	Existing		Background		Background Plus Project			Cumulative No Project		Cumulative Plus Project		
						Delay	LOS	Delay	LOS	Delay	LOS	Delay Change[1]	Delay	LOS	Delay	LOS	Delay Change[1]
1	Monterey Road	Signal	C	AM	03/29/23	14.9	B	14.8	B	14.8	B	+0.0	14.6	B	14.6	B	+0.0
	and Las Animas Avenue			PM	03/29/23	16.0	B	16.0	B	16.0	B	+0.0	15.2	B	15.2	B	+0.0
2	Monterey Road	Signal	C	AM	03/29/23	26.9	C	27.3	C	27.5	C	+0.2	29.5	C	29.8	C	+0.3
	and Welburn Avenue/Leavesley Road*			PM	03/29/23	29.3	C	30.5	C	30.6	C	+0.1	34.1	C	34.2	C	+0.1
3	Forest Street	Signal	C	AM	03/29/23	14.9	B	13.2	B	13.4	B	+0.2	12.8	B	13.0	B	+0.2
	and Leavesley Road			PM	03/29/23	11.6	B	10.5	B	11.2	B	+0.7	11.5	B	12.1	B	+0.6
4	Murray Avenue and Leavesley Road	Signal	C	AM	03/29/23	26.0	C	25.3	C	25.2	C	-0.1	24.7	C	24.5	C	-0.2
				PM	03/29/23	30.3	C	29.7	C	30.1	C	+0.4	29.2	C	29.7	C	+0.5
5	US 101 Southbound Ramps	Signal	D	AM	03/29/23	17.4	B	17.5	B	17.8	B	+0.3	18.0	B	18.3	B	+0.3
	and Leavesley Road			PM	03/29/23	27.0	C	27.5	C	27.6	C	+0.1	28.0	C	28.1	C	+0.1
6	US 101 Northbound Ramps	Signal	D	AM	03/29/23	26.4	C	26.7	C	26.8	C	+0.1	27.0	C	27.1	C	+0.1
	and Leavesley Road/San Ysidro Avenue			PM	03/29/23	29.0	C	29.6	C	29.6	C	+0.0	30.3	C	30.3	C	+0.0

Notes:
[1] Change in delay, expressed in seconds, for background plus project conditions is measured relative to background conditions.
Change in delay for cumulative plus project conditions is measured relative to cumulative no project conditions.
* = CMP intersection

Table ES 3
Intersection Vehicle Queue Analysis Summary – Poisson Probability

Measurement	Monterey Road/ Leavesley Road		Forest Street/ Leavesley Road		Murray Avenue/ Leavesley Road				US 101 SB Ramps/ Leavesley Road	
	Southbound Left		Southbound Right		Southbound Left		Westbound Through/Right		Southbound Through/Right	
	SBL AM	SBL PM	SBR AM	SBR PM	SBL AM	SBL PM	WBT/R AM	WBT/R PM	SBT/R AM	SBT/R PM
Existing Conditions										
Cycle Length/Control Delay (sec)[1]	80	92	92	92	100	120	100	120	100	135
Lanes	1	1	1	1	2	2	3	3	2	2
Volume (vphpl)	193	254	13	37	59	111	310	434	240	269
95th %. Queue (veh/ln.)	8	11	1	3	4	7	14	21	11	16
95th %. Queue (ft./ln)[2]	200	275	25	75	100	175	350	525	275	400
Storage (ft./ ln.)	425	425	100	100	175	175	485	485	450	450
Adequate (Y/N)	YES	YES	YES	YES	YES	YES	YES	**NO**	YES	YES
Background Conditions										
Cycle Length/Control Delay (sec)[1]	80	92	92	92	100	120	100	120	100	135
Lanes	1	1	1	1	2	2	3	3	2	2
Volume (vphpl)	200	282	14	42	59	111	343	482	258	297
95th %. Queue (veh/ln.)	8	12	2	3	4	7	15	23	12	17
95th %. Queue (ft./ln)[2]	200	300	50	75	100	175	375	575	300	425
Storage (ft./ ln.)	425	425	100	100	175	175	485	485	450	450
Adequate (Y/N)	YES	YES	YES	YES	YES	YES	YES	**NO**	YES	YES
Background Plus Project										
Cycle Length/Control Delay (sec)[1]	80	92	92	92	100	120	100	120	100	135
Lanes	1	1	1	1	2	2	3	3	2	2
Volume (vphpl)	212	284	18	66	62	129	360	485	272	299
95th %. Queue (veh/ln.)	9	12	2	4	4	8	15	23	12	17
95th %. Queue (ft./ln)[2]	225	300	50	100	100	200	375	575	300	425
Storage (ft./ ln.)	425	425	100	100	175	175	485	485	450	450
Adequate (Y/N)	YES	YES	YES	YES	YES	**NO**	YES	**NO**	YES	YES

Notes:
Vehicle queue calculated using the Poisson probability distribution and 95-percent confidence level.
NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound, R = Right, T = Through, L = Left.
Right-turn movements with overlapping protected left-turn phasing were adjusted manually to account for the right-turns on red.
[1] Vehicle queue calculations based on cycle length for signalized intersections and control delay for unsignalized intersections.
[2] Assumes 25 feet per vehicle in the queue.

Table ES 3 (Continued)
Intersection Vehicle Queue Analysis Summary – Synchro

Scenario	Queue Length (ft)			
	Forest Street and Leavesley Road		Swanston Lane and Leavesley Road	
	Eastbound Left-Turn		Westbound Left-Turn	
	AM	PM	AM	PM
Existing Conditions				
Field Observation [1]	75	75	25	25
Synchro [2]	75	75	25	25
Storage (ft/lane)	125	125	100	100
Adequate (Y/N)	YES	YES	YES	YES
Background Conditions				
Synchro [2]	100	75	25	25
Storage (ft/lane)	125	125	100	100
Adequate (Y/N)	YES	YES	YES	YES
Background Plus Project Conditions				
Synchro [2]	100	75	25	25
Storage (ft/lane)	125	125	100	100
Adequate (Y/N)	YES	YES	YES	YES

Notes:
[1] Peak-hour field observations conducted on September 17, 2024.
[2] Evaluated using *Synchro (Version 12)* which uses Highway Capacity Manual (HCM) methodology. 95th-percentile queue length, rounded to the nearest car-length (25 feet).

Table ES 4
Freeway Segment Level of Service Results

Freeway Segment	Direction	Peak Hour	# of Lanes[1]	Capacity[2] (vph)	1% of Capacity	Project Trips Added	LOS Analysis Required?
US 101 from Pacheco Pass Highway to Leavesley Road	NB	AM	3	6,900	69	12	No
	NB	PM	3	6,900	69	2	No
US 101 from Leavesley Road to Masten Avenue	NB	AM	3	6,900	69	4	No
	NB	PM	3	6,900	69	24	No
US 101 from Masten Avenue to Leavesley Road	SB	AM	3	6,900	69	28	No
	SB	PM	3	6,900	69	5	No
US 101 from Leavesley Road to Pacheco Pass Highway	SB	AM	3	6,900	69	2	No
	SB	PM	3	6,900	69	10	No

[1] Information obtained from the Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2018.
[2] Based on a capacity of 2,300 vehicles per hour per lane (vphpl) for freeway sections with six or more lanes, and 2,200 vphpl for freeway sections with four lanes.

Table ES 5
Freeway Ramp Analysis Results

Interchange/Ramp	Peak Hour	Ramp Type		Constraint Point[1]	Control	Capacity[2] (vph)	Existing Conditions Volume[3] (vph)	Existing Conditions V/C	Existing Conditions LOS[4]	Background Conditions Volume (vph)	Background Conditions V/C	Background Conditions LOS[4]	Background Plus Project Conditions Volume (vph)	Background Plus Project Conditions V/C	Background Plus Project Conditions LOS[4]
US 101 at Leavesley Road															
Southbound Off-Ramp	AM	Diagonal	Off	1	Signal	1,800	746	0.414	A	789	0.438	A	817	0.454	A
	PM				Signal	1,800	1,017	0.565	A	1,084	0.602	B	1,089	0.605	B
Southbound On-Ramp	AM	Diagonal	On	1	Meter-Off	1,800	461	0.256	A	514	0.286	A	516	0.287	A
	PM				Meter-On	900	639	0.710	C	712	0.791	C	722	0.802	**D**
Northbound Off-Ramp	AM	Diagonal	Off	1	Signal	1,800	646	0.359	A	704	0.391	A	716	0.398	A
	PM				Signal	1,800	628	0.349	A	695	0.386	A	697	0.387	A
Northbound On-Ramp	AM	Loop	On	1	Meter-On	900	470	0.522	A	517	0.574	A	521	0.579	A
	PM				Meter-Off	1,600	410	0.256	A	463	0.289	A	487	0.304	A

Notes:
1. The constraint point of a ramp is the location on the ramp that dictates how much traffic enters/exits the freeway. The constraint point determines the ramp's capacity.
   For freeway off-ramps, the constraint point is at the ramp's diverging point from the freeway mainline.
   For non-metered on-ramps, the constraint point is at the ramp's merging point with the freeway.
   For metered on-ramps, the constraint point is at the meter.
2. Typical capacities for diagonal and loop ramps are 1,800 and 1,600 vehicles per hour per lane (vphpl), respectively.
   The capacity for non-metered ramps is determined based on the number of lanes at the ramp's constraint point.
   The capacity for metered on-ramps was assumed to be 900 vph (Caltrans District 4 maximum meter rate).
3. Existing ramp volumes were interpolated from existing peak-hour turn-movement counts at the ramp intersections.
4. The ramp level of service corresponds to the calculated ramp V/C ratios.
Bold indicates a projected change in level of service from background to background plus project conditions.

1. Introduction

This report presents the results of a Transportation Analysis (TA) completed for the proposed Heatwave Industrial Development in the City of Gilroy, California.

Project Description

The project proposes to develop three light industrial buildings on a vacant 7.29-acre site (APN 835-01-059) located at 8875 Murray Avenue in the northeast part of Gilroy. The project site is generally bound by Forest Street to the west, Murray Avenue to the east, existing industrial/commercial uses to the north, and undeveloped land to the south. The project would become Heatwave Visual's new main headquarters consisting of offices, product storage, and warehouse operations including assembly and distribution. Heatwave Visual, the project applicant, is an existing eyewear manufacturer and distributor, with current operations conducted out of two existing facilities located in the same general area as the project site. With the proposed project, Heatwave Visual would consolidate its operations to a single site.

The project, as proposed, would be constructed in three phases, with the construction of one building and its associated driveways, parking supply, and infrastructure improvements, per phase. Each phase would include the following land uses and site improvements:

- Phase I would construct Building 1, two site driveways along Forest Street and associated parking areas and infrastructure improvements. Building 1 would include 8,330 square feet (s.f.) of office, 23,086 s.f. of warehouse, and 10,850 s.f. of light industrial land uses, for a total building size of 42,266 s.f.
- Phase II would construct Building 2, one driveway along Murray Avenue and associated parking areas and infrastructure improvements. Building 2 would include 7,000 s.f. of office and 41,600 s.f. of light industrial land uses, for a total building size of 48,600 s.f.
- Phase III would construct Building 3 and associated parking areas and infrastructure improvements. Building 3 would include 5,000 s.f. of office, 2,180 s.f. of warehouse, and 22,740 s.f. of light industrial land uses, for a total building size of 29,920 s.f.

Upon buildout of the project site, the project site would include 20,330 s.f. of office space, 25,266 s.f. of warehouse land use, and 75,190 s.f. of light industrial land use. Parking for both trucks and passenger vehicles would be provided on site. Access to the project site would be provided via two proposed driveways along Forest Street and one proposed driveway along Murray Avenue.

It should be noted that access to the project site would be provided via both Forest Street and Murray Avenue. Forest Street is classified in the City's General Plan as a local street while Murray Avenue is

classified as an arterial roadway. Additionally, Murray Avenue is designated as a truck route in the project area. For this reason, while passenger vehicles can utilize both streets to access the project site, all truck traffic accessing the project site must utilize Murray Avenue.

The project site location and surrounding study area are shown on Figure 1. The site plan is shown on Figure 2.

Land Use and Zoning Conformance

The City of Gilroy 2040 General Plan land use designation for the project site is Industrial Park. According to the City's General Plan, the Industrial Park land use designation's purpose is to allow for low-intensity industrial developments that can be located in proximity to residential and commercial areas. Typical uses under the Industrial Park designation include office, light manufacturing operations, electronic assembly plants, and large warehouses.

The Zoning Map designation for the site is Limited Industrial (M1) and is located within the Murray-Las Animas Avenue Overlay Combining District. The purpose of the M1 Limited Industrial zoning district is to designate industrial areas in the City that are appropriate to locate in close proximity to residential and commercial zones. Allowable uses under the M1 zoning include small-scale light manufacturing and industrial park uses with low noise and traffic levels.

The project components of office, light industrial, and warehouse land uses are permitted under the existing zoning and General Plan land use designation for the site. Therefore, the proposed project would be in conformance with the City of Gilroy General Plan and zoning designation.

Transportation Analysis Scope

The purpose of this transportation analysis is to evaluate the potential transportation impacts associated with the increase in traffic due to the proposed project in conformance with the requirements of the California Environmental Quality Act (CEQA) and the City of Gilroy.

The TA consists of a California Environmental Quality Act (CEQA) required vehicle-miles-traveled (VMT) analysis and a supplemental traffic operations analysis that demonstrates the project's consistency with the *City of Gilroy 2040 General Plan* goals and policies.

CEQA Transportation Analysis Scope

Like most other jurisdictions in Santa Clara County and the State, the City of Gilroy has historically utilized vehicular delay as the primary analysis metric to evaluate traffic impacts and potential roadway improvements to relieve traffic congestion that may result due to proposed/planned growth. However, with the adoption of Senate Bill (SB) 743 legislation, public agencies are required (effective July 2020) to base transportation impacts on Vehicle-Miles-Traveled (VMT) rather than level of service that typically uses delay as its metric. The change in measurement is intended to better evaluate the effects of development growth on the State's goal for climate change and multi-modal transportation. Therefore, to adhere to the state's legislation, all new development projects are required to analyze transportation impacts using the VMT metric.

In accordance with CEQA, all proposed projects are required to analyze transportation as a component of environmental review using average trip length per resident and/or per employee as metrics (total VMT for retail/commercial projects).

Figure 1
Site Location

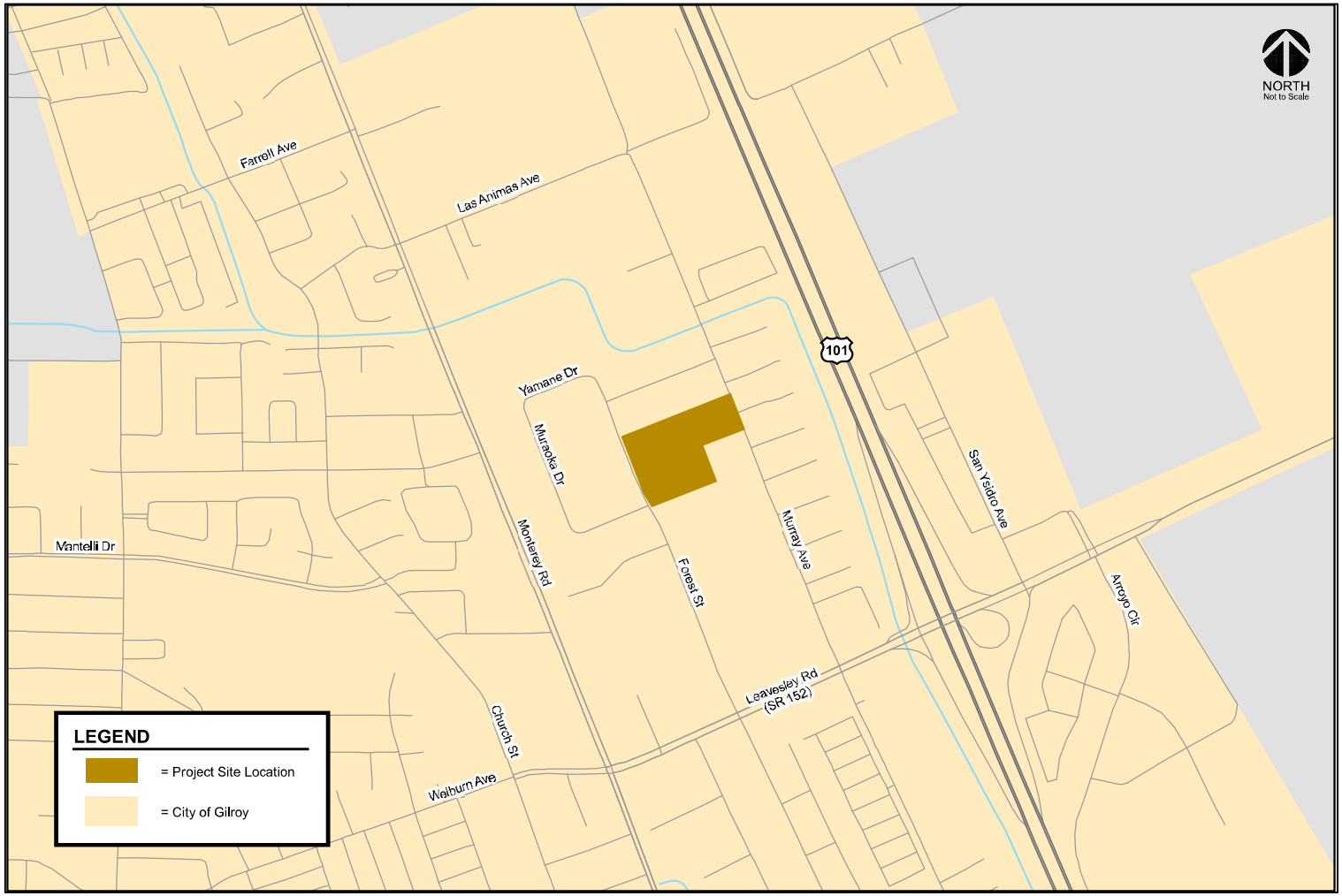
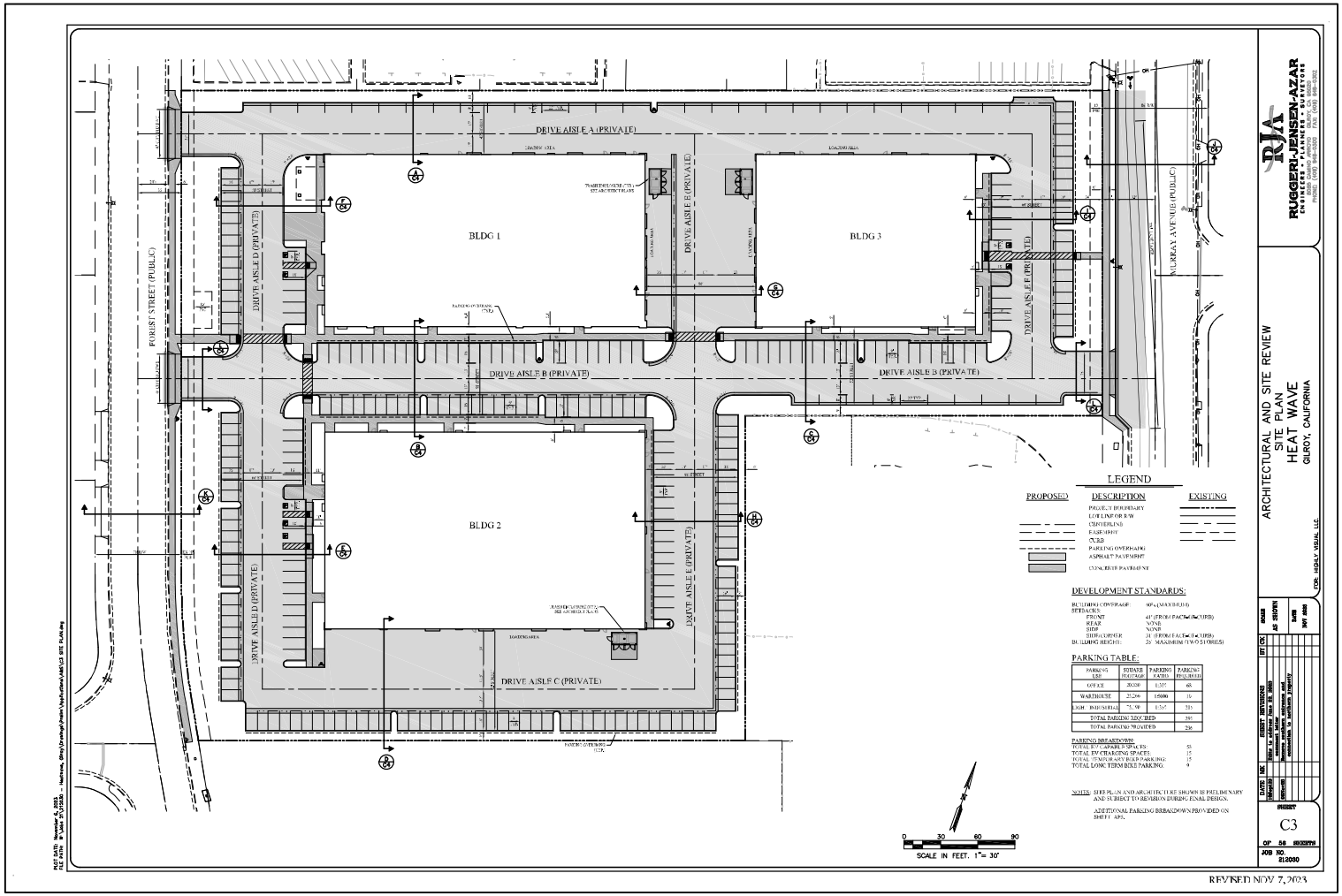


Figure 2
Proposed Site Plan



The CEQA VMT impact analysis was completed using the *Valley Transportation Authority's* (*VTA) VMT Evaluation Tool.*

The City of Gilroy is currently developing the framework for new transportation policies based on VMT as the primary measure of transportation impacts. However, since the City has not formally adopted its own City-specific VMT policies, the City relies on 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, for the evaluation of projects.

Traffic Operations Analysis Scope

The current *City of Gilroy 2040 General Plan*, adopted in November 2020, uses Level of Service (LOS) as its primary metric for the evaluation of the effects of new development and land use changes on the City's transportation network. Therefore, a traffic operations analysis based upon peak hour intersection level of service analysis is included to determine the project's conformance with General Plan transportation goals and policies. The traffic operations analysis supplements the CEQA-required VMT analysis. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis.

The traffic operations analysis includes the evaluation of weekday AM and PM peak-hour operations at selected intersections for the purpose of identifying operational issues (queuing, signal operations, and potential multi-modal issues) in the general vicinity of the project site. The traffic operations analysis also includes an evaluation of the effects of the project on other transportation issues relating to on-site access, on-site circulation, sight distance, parking, freeway segments and ramps, pedestrian, bicycle, and transit facilities, and related safety elements in the immediate area of the project.

The effects of the proposed development on traffic operations on the surrounding roadway system were evaluated following the standards and methodologies set forth by the City of Gilroy, the Gilroy 2040 General Plan, and the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program's *Transportation Impact Guidelines* (October 2014). The VTA administers the Congestion Management Program (CMP) for Santa Clara County.

Report Organization

The remainder of this report is divided into five chapters. Chapter 2 describes the existing transportation system including the existing roadway network, transit service, bicycle and pedestrian facilities. Chapter 3 presents the CEQA transportation analysis. Chapter 4 describes the traffic operations analysis and the project's effects on the transportation system and describes recommended roadway improvements. An evaluation of other transportation issues, including site access and on-site circulation review, parking, freeway ramp analysis, and effects on bicycle, pedestrian, and transit facilities, are presented in Chapter 5. Chapter 6 presents the conclusions of the transportation analysis.

2. Existing Transportation Setting

This chapter describes the existing transportation system within the project area. It describes existing conditions for all of the major transportation facilities in the vicinity of the project site, including the roadway network, transit service, and bicycle and pedestrian facilities.

Existing Roadway Network

Regional access to the project sites is provided via US 101 and State Route (SR) 152. Local access to the project site is provided by Monterey Road, Leavesley Road (SR 152), Forest Street, and Murray Avenue. These facilities are shown on Figure 1 and described below.

US 101 is a six-lane freeway north of the Monterey Road interchange (in south Gilroy) and transitions to a four-lane freeway south of that point. US 101 extends northward through San Jose and southward into Salinas. This freeway serves as the primary roadway connection between Gilroy and Morgan Hill and other Santa Clara County communities to the north and between Gilroy and Salinas to the south. US 101 includes full-access interchanges at Leavesley Road, Tenth Street/SR 152, and Monterey Road in Gilroy. A fourth interchange at Masten Avenue, north of Gilroy in unincorporated Santa Clara County, serves the north and northwestern areas of Gilroy. Regional access to the project site is provided via the US 101 interchange at Leavesley Road.

SR 152 is a two- to four-lane east-west highway that extends to the east, where it is known as Pacheco Pass Highway, starting at the US 101/Leavesley Road interchange south to the US 101/Tenth Street interchange along US 101, over the Pacheco Pass to Interstate 5 and through Los Banos. West of Gilroy, SR 152 is known as Hecker Pass Highway and extends westward from the US 101/Leavesley Road interchange, with its alignment through Gilroy following Leavesley Road to Monterey Road to First Street where it changes designation to Hecker Pass Highway west of Santa Teresa Boulevard, over the Santa Cruz Mountains to Watsonville and Highway 1. SR 152 connects the communities of Watsonville and Gilroy to the Central Valley via Interstate 5. Access to the project site from SR 152 is provided via Leavesley Road, Forest Street, and Murray Avenue.

Monterey Road is a north-south arterial roadway that begins at its interchange with US 101 in the southern part of Gilroy and extends northward to San Jose. Monterey Road is a two-lane street between Eighth Street and Fourth Street (in the historic downtown district) and a four-lane street south of Eighth Street and north of Fourth Street. Monterey Road provides access to the project site via Leavesley Road and Las Animas Avenue.

Leavesley Road is an east-west arterial roadway that consists of six lanes between Monterey Road and Arroyo Circle and narrows down to two lanes east of Arroyo Circle. West of Monterey Road and east of New Avenue, Leavesley Road changes designation to Welburn Avenue and Ferguson Road, respectively. Leavesley Road has an interchange with US 101 which serves as the primary access point for regional traffic associated with the Gilroy Premium Outlets and surrounding commercial areas. The segment of Leavesley Road between the US 101 interchange and Monterey Road is also designated as SR 152.

Forest Street is a two-lane north-south roadway that begins at Swanston Lane, south of Leavesley Road, and extends northward to Yamane Drive where it terminates. North of Leavesley Road, Forest Street provides direct access to the various industrial and commercial sites lining the street. Forest Street would provide direct access to the project site via two proposed full-access driveways.

Murray Avenue is a two-lane north-south arterial roadway that begins at Chestnut Street, south of Leavesley Road, and extends northward to Las Animas Avenue where it currently terminates. North of Leavesley Road, Murray Avenue provides direct access to the various industrial and commercial sites lining the street, as well as local residential streets. Murray Avenue would provide direct access to the project site via one proposed full-access driveway.

Existing Bicycle Facilities

Bicycle facilities are divided into three classes of relative significance:

- **Class I Bikeways (Bike Path)**. Class I bikeways are bike paths that are physically separated from motor vehicles and offer two-way bicycle travel on a separate path.
- **Class II Bikeways (Bike Lane)**. Class II bikeways are striped bike lanes on roadways that are marked by signage and pavement markings.
- **Class III Bikeways (Bike Route)**. Class III bikeways are bike routes and only have signs to help guide bicyclists on recommended routes to certain locations.

There are several bicycle facilities in the vicinity of the project site. These are listed below and shown on Figure 3:

Class I Bikeways (Bike Paths)

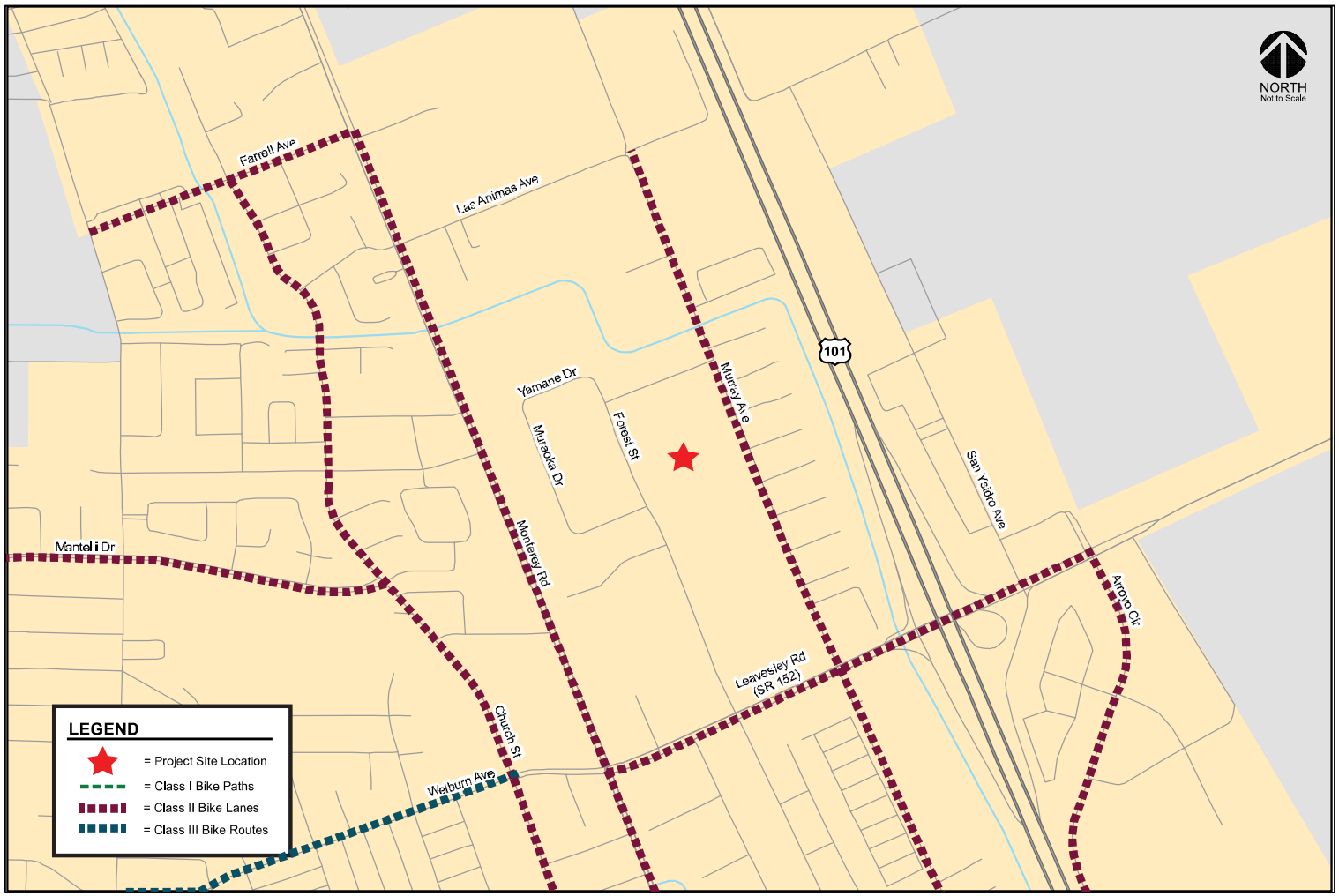
The nearest bike path to the project sites is the *Western Ronan Channel Trail*. This trail is located on the western side of the Ronan Channel between Leavesley Road and Sixth Street. The nearest trailhead is located approximately 1/2-mile from the project site at the southwest corner of the US 101/Leavesley Road interchange.

Class II Bikeways (Bike Lanes)

Class II Bikeways in the vicinity of the project site are provided along the following roadways:

- Murray Avenue, between Las Animas Avenue and IOOF Avenue (*including along the project site frontage*)
- Leavesley Road, between Monterey Road and Arroyo Circle
- Monterey Road, between Farrell Avenue and First Street
- Church Street, between Farrell Avenue and Tenth Street
- Farrell Avenue, between Wren Avenue and Monterey Road
- Mantelli Drive, west of Church Street

Figure 3
Existing Bicycle Facilities



Class III Bikeways (Bike Routes)

Class II Bikeways in the vicinity of the project site are provided along the following roadways:

- Welburn Avenue, between Church Street and Wren Avenue

Existing Pedestrian Facilities

The project area consists of a mixture of commercial and industrial land uses, and undeveloped land. Pedestrian facilities in the project area consist primarily of sidewalks along developed residential areas. Crosswalks and pedestrian push buttons are available along three or more legs of all signalized intersections in the vicinity of the project site. However, most undeveloped and industrial use parcels in northern Gilroy have missing sidewalks, including in the immediate project site vicinity and along the project site frontage. The missing sidewalks create an incomplete pedestrian network. Sidewalks are mostly missing along the following roadway segments in the vicinity of the project site:

- Murray Avenue, west side of the roadway north of Leavesley Road (*including along the project site frontage*) and east side of roadway north of Ronan Channel
- Forest Street, along both sides of the roadway north of Leavesley Road (*including along the project site frontage*)
- Yamane Drive, along both sides of the roadway
- Muraoka Drive, along both sides of the roadway
- Nagareda Drive, along the north side of the roadway
- Kishimura Drive, along both sides of the roadway
- Las Animas Avenue, along both sides of the roadway

Roadway segments with continuous sidewalks include the east side of Murray Avenue, the west side of Monterey Road, both sides of Leavesley Road, and most roadways south of Leavesley Road and west of Monterey Road.

The existing pedestrian facilities in the study area are shown on Figure 4.

Existing Transit Services

Transit services in Gilroy consist of local, regional, and intercity bus services, rail service, and paratransit services. Existing transit service in Gilroy is provided primarily by Santa Clara County VTA buses. Caltrain commuter rail service, San Benito County express bus service, and Greyhound bus service also serve Gilroy. The existing transit services in the project area are shown on Figure 5.

The project site is served by ***Local Bus Route 85***, which provides weekday and weekend service between the Gilroy Transit Center and Saint Louise Regional Hospital via Sixth Street, Wren Avenue, Mantelli Drive, Leavesley Road, and San Ysidro Avenue with approximately 60-minute headways during commute hours. Existing VTA bus stops serving Route 85 are located along Leavesley Road, between Forest Street and Murray Avenue, approximately 1/3-mile walking distance from the project site.

Additionally, the site is served by ***Frequent Route 68***, which provides weekday and weekend service between the Gilroy Transit Center and the San Jose Diridon Transit Center via Monterey Road between 4:15 AM and 1:01 AM with approximately 15- to 30-minute headways during commute hours. Existing VTA bus stops serving Route 68 are located along Monterey Road, north and south of Leavesley Road/Welburn Avenue, approximately 1/2-mile walking distance from the project site.

Figure 4
Existing Pedestrian Facilities

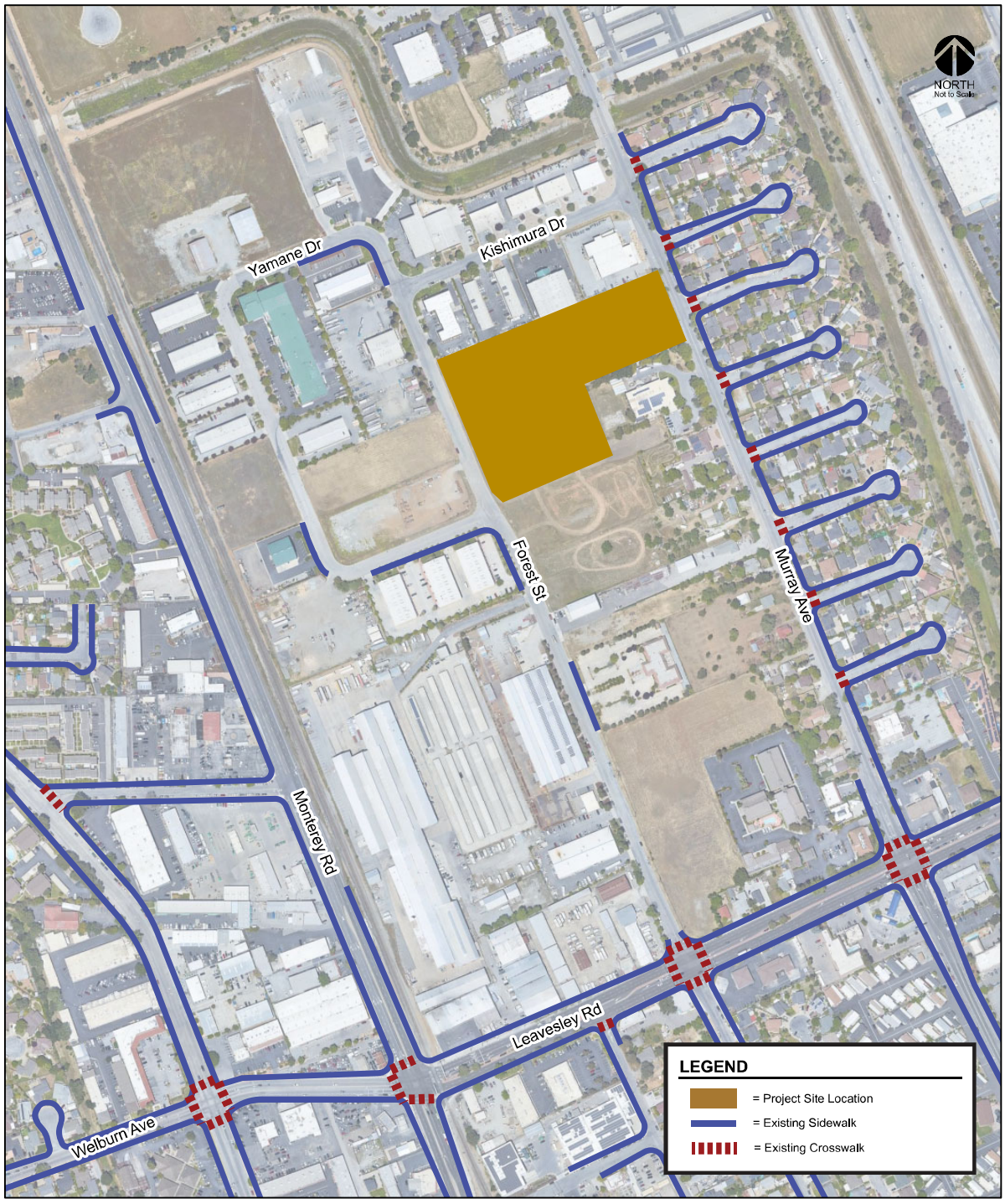
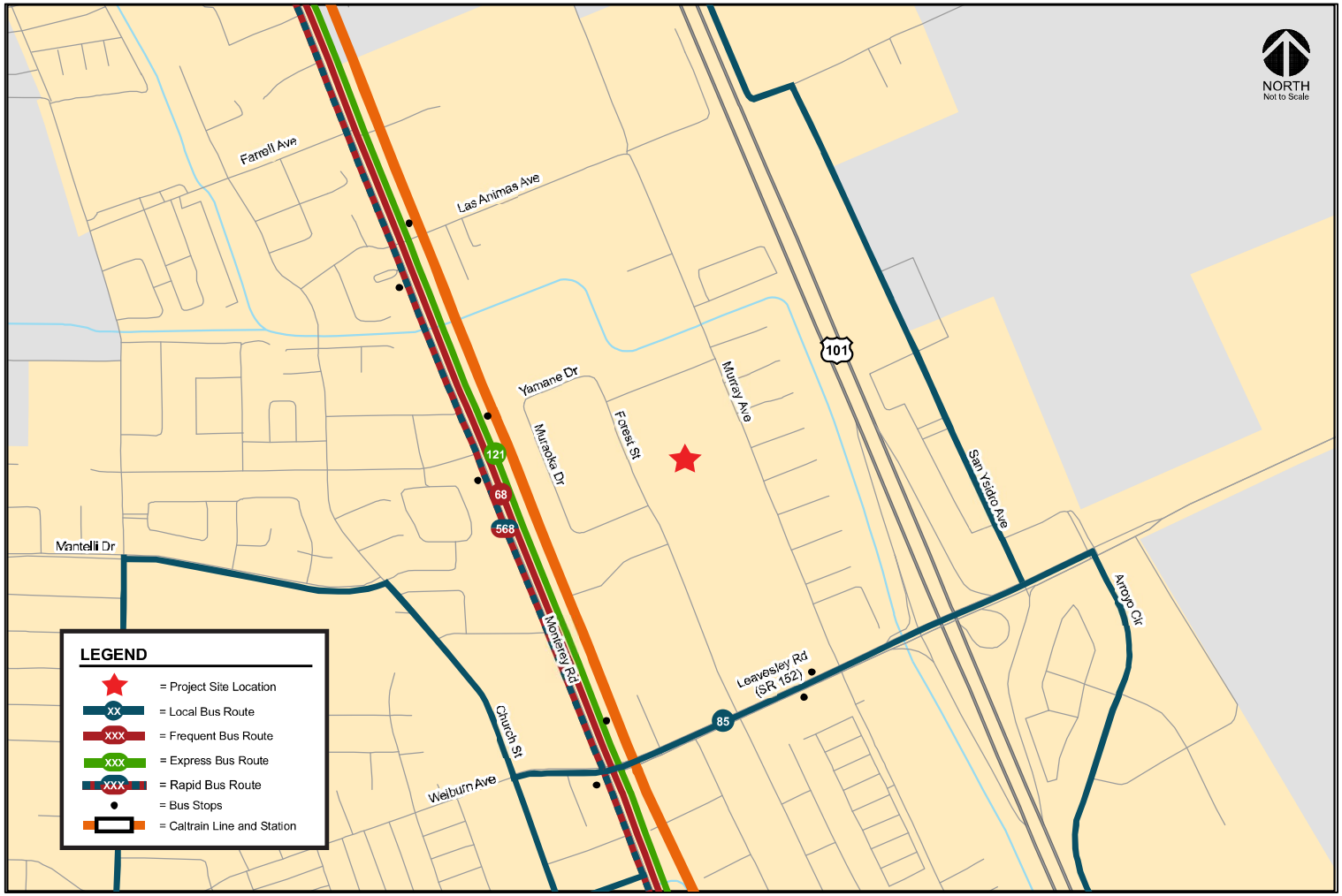


Figure 5
Existing Transit Services



Other bus transit services currently serving Gilroy, as of January 2024, include:

- ***Local Route 84*** provides weekday and weekend service between the Gilroy Transit Center and Saint Louise Regional Hospital via Tenth Street, Camino Arroyo, and San Ysidro Avenue between 7:50 AM and 7:09 PM with approximately 60-minute headways during commute hours.

- ***Local Bus Route 86*** provides weekday only service between the Gilroy Transit Center and Gavilan College via Tenth Street, Princevalle Street, Luchessa Avenue, Thomas Road, and Santa Teresa Boulevard between the hours of 7:42 AM and 10:11 PM with approximately 30-minute headways during commute hours.

- ***Express Route 121*** provides weekday service between the Gilroy Transit Center and the Lockheed Martin Transit Center in Sunnyvale with northbound service (two trips) during the morning commute period and southbound service (three trips) during the afternoon commute period with approximately 60-minute headways. This express route has scheduled stops at the Gilroy Transit Center, the Morgan Hill Caltrain Station, Old Ironsides Light Rail Station, and the Lockheed Martin Transit Center.

- ***Rapid Route 568*** provides weekday between the Gilroy Transit Center and the San Jose Diridon Transit Center via Monterey Road between 4:45 AM and 8:42 PM with approximately 30-minute headways during commute hours.

- ***San Benito County Express Bus Service (Caltrain and Gavilan College Shuttle)*** provides express bus service between Hollister and the Gilroy Transit Center Monday through Friday. Currently, seven northbound (to Gilroy) shuttles run during the morning and evening commute periods, between 4:45 and 12:00 PM and between 1:00 and 7:35 PM, respectively. In addition, there are five southbound (to Hollister) runs in the morning between 6:45 AM and 12:55 PM and seven runs in the evening between 1:45 and 8:30 PM. The schedule is coordinated with the Caltrain schedule to facilitate connections with Caltrain arrivals and departures.

- ***San Benito County Express Bus Service (Greyhound Shuttle)*** provides service between Hollister and the Gilroy Transit Center, (which serves as the Greyhound Bus Depot) on Saturdays and Sundays. There are currently two northbound (to Gilroy) and two southbound (to Hollister) runs in the morning between 7:30 and 11:20 AM and two northbound and two southbound runs in the evening between 11:55 AM and 6:45 PM. The schedule is designed to allow for connections to Greyhound service.

Additionally, ***Caltrain*** provides train service from Gilroy to San Francisco, with limited-stop service at other stations along the peninsula corridor. Caltrain service to Gilroy is only provided on weekdays; weekend service south of San Jose is not available. Currently, as of December 2023, the Gilroy Caltrain station is served by four northbound trains in the morning and four southbound trains in the evening. The northbound trains have scheduled departures from the Gilroy Transit Center at 5:52, 6:29, 6:50, and 7:29 AM and the southbound trains have scheduled arrivals at the Gilroy Transit Center at 5:19, 5:40, 6:17, and 6:40 PM.

Greyhound Lines, Inc. is an intercity, long distance bus service offering services to over 3,700 destinations in the United States, Canada, and Mexico. The Gilroy Transit Center also serves as the Greyhound Bus Depot in Gilroy. Greyhound buses operate from the Transit Center every day of the week.

All of the above transit routes serve the Gilroy Transit Center, located in Downtown Gilroy, along Monterey Road approximately 2 miles south of the project site.

3. CEQA Vehicle Miles Traveled (VMT) Evaluation

This chapter provides an evaluation of the proposed project's effect on Vehicle Miles Traveled (VMT). 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.

CEQA VMT Evaluation Methodology

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. 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, developments 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. Local-serving retail projects also would result in shorter vehicle trips as new local-serving retail development typically diverts/shortens existing shopping trips, rather than generating new retail trips.

In accordance with CEQA, all proposed projects are required to analyze transportation as a component of environmental review using average trip length per resident and/or per employee as metrics. The daily VMT per resident accounts for trips that start or end at the home. Daily VMT per employee is calculated based on trips made by people driving to and from work. However, non-residential and non-employment projects, such as retail projects, include both trips made by employees and patrons. Thus, for non-residential and non-employment projects, total VMT is evaluated.

To determine whether a project would result in CEQA transportation impacts related to VMT, the *Valley Transportation Authority* (VTA) has developed a VMT Evaluation Tool to streamline the analysis for development projects in Santa Clara County. However, the VMT tool is limited to the evaluation of VMT for the general land use categories of residential, office, and industrial. For non-residential or non-office/industrial projects, large projects, or projects that can potentially shift travel patterns, a Travel Demand Forecasting (TDF) model, or other City-approved methods, must be used to determine project VMT.

VTA VMT Evaluation Tool

The evaluation of the effects of the project on VMT was completed using the *VTA's VMT Evaluation Tool.* The VMT tool identifies the existing average VMT per capita and VMT per employee for the project area based on the assessor's parcel number (APN) of a project. Based on the project location, type of development, project description, and proposed trip reduction measures, the VMT tool calculates the project VMT. Projects located in areas where the existing VMT is above the established threshold are referred to as being in "high-VMT areas". Projects in high-VMT areas are required to include a set of VMT reduction measures that would reduce the project VMT to the greatest extent possible.

VMT Policies and Impact Criteria

A project's VMT is compared to established thresholds of significance based on the project location and type of development. When assessing a residential project, the project's VMT is divided by the number of residents expected to occupy the project to determine the VMT per capita. When assessing an office or industrial project, the project's VMT is divided by the number of employees to determine the VMT per employee/job. Retail uses are assessed based on their effects on total VMT.

To adhere to the state's legislation, the City of Gilroy 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, the City relies on 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. While OPR emphasizes that a lead agency has the discretionary authority to establish thresholds of significance, the *Technical Advisory* suggests criteria that indicate when a project may have a significant, or less than significant, transportation impact on the environment.

Employment Uses Impact Thresholds

As stated in the technical advisory, for office projects, OPR recommends an impact threshold of 15% below the existing regional VMT per employee. OPR also states that in cases where the region is substantially larger than the geography over which most workers would be expected to live, it might be appropriate to refer to a smaller geography that includes the area over which most workers would be expected to live. No specific impact threshold for industrial land use is identified by OPR.

Currently, the City of Gilroy has limited employment land uses, which results in longer commute trips as a large number of Gilroy residents are required to travel outside of Gilroy for employment. This is reflected in the average VMT per employee for the City of Gilroy (18.79 VMT per employee) compared to the regional VMT (15.33) and the Countywide VMT (16.64) per employee, as reported by the VTA VMT Evaluation Tool. Providing employment opportunities in Gilroy will likely attract a large number of employees from within the City. Therefore, for the purpose of this analysis, the impact threshold for the evaluation of the project was assumed to be 15% below the citywide employment VMT per employee/job. The citywide employment VMT threshold is also consistent with the Gilroy 2040 General Plan EIR, which utilized 15% below the citywide VMT as the impact threshold for both residential (per-capita) and employment (per-job) VMT.

The VTA's VMT Evaluation Tool indicates that the existing citywide average VMT per employee/job is currently 18.79. Therefore, the OPR recommended impact threshold of 15% below the existing average VMT per job equates to 15.97 VMT per job.

Employment Impact Threshold: ***15.97 VMT per Job***

It should be noted that 15% below the existing citywide average VMT per job impact threshold for industrial land use may be considered a conservative threshold. OPR's recommended impact threshold of 15% below the existing average VMT corresponds to the threshold for office uses. Office space and jobs are more commonly available than industrial land use and jobs. While office employees may have the option to choose a convenient job location, industrial employees may have limited options, resulting in longer trips and consequently greater VMT. For this reason, jurisdictions that have adopted their own VMT guidelines and impact thresholds, such as the City of San Jose, have defined impact thresholds for industrial land uses as the existing VMT per job. However, until the City of Gilroy adopts its own VMT guidelines and impact criteria, utilizing 15% below the existing VMT as the impact threshold for employment land uses is a conservative approach and is consistent with the Gilroy 2040 General Plan EIR.

VMT Evaluation

The VMT for the proposed project was evaluated with the VTA VMT Evaluation Tool. The use of the VMT tool for the evaluation of land uses that are not reflective of one of the general land uses requires the conversion of the proposed land use to an equivalent amount of residential units, office space, or industrial space.

The project as proposed would include a combination of warehouse, light industrial, and office space. Therefore, the proposed warehouse land use component of the project was converted into an equivalent amount of industrial space using daily trip generation estimates based on ITE trip generation rates. Converting the trips estimated to be generated by the proposed warehouse land use to an equivalent amount of industrial space is a reasonable approach since the project would have similar trip-making characteristics (origin/destination and length of trips) as industrial uses within the City.

Based on the ITE daily trip rate for warehousing (ITE land use code 150), the proposed warehouse portion of the project is estimated to generate a total of 43 daily trips which are equivalent to the trips estimated to be generated by approximately 10,000 s.f. of industrial land use. Table 1 presents the land use equivalency calculation.

The results of the VMT evaluation using the VTA's VMT Evaluation Tool indicate that the existing average daily VMT for employment uses in the vicinity of the project site is 16.97 VMT per job, which is less than the existing citywide average VMT per job (18.79). The results also indicate that the proposed development is projected to generate average daily per-job VMT equal to 16.92, which although is lower than the citywide average VMT per job, would exceed the identified impact threshold of 15.97 VMT per job. Therefore, the proposed project would result in an impact on the transportation system based on OPR's 15% below existing average VMT impact threshold.

The VMT results are presented in Table 2. The VTA VMT Evaluation Tool output sheets are shown on Figures 6 and 7 and also included in Appendix A.

Possible Measures to Reduce VMT Projections

VMT for a project can be reduced by implementing measures that would reduce the total number of trips or trip length produced by the project. There are various strategies/measures that can be implemented in an effort to reduce total traveled miles within the City, ranging from policy changes (trip reduction policies) and infrastructure changes (mixed-use development, housing near major transit facilities/employment, easy access to public transportation, enhanced bicycle and pedestrian network) to employer incentives (workplace amenities and incentives, telecommuting).

Table 1
Equivalent Industrial Land Use Calculations

Site/Land Use	Size	Daily Rate	Daily Trip
Building 1			
#150 - Warehousing	23,086 s.f.	1.71	39
#110 - General Light Industrial	9,000 s.f.	4.87	39
Building 3			
#150 - Warehousing	2,180 s.f.	1.71	4
#110 - General Light Industrial	1,000 s.f.	4.87	4

Source: ITE Trip Generation Manual, 11th Edition 2021.

Table 2
VMT Analysis Summary

Project	Citywide Average Daily VMT per Job	15% Below Base Threshold	No Project Average Daily VMT per Job	With Project Average Daily VMT per Job	Impact?	Max Reduction Possible[1]	With Proposed TDM Program[2]
Heatwave Industrial Development							
Base Year 2023	18.79	15.97	16.97	16.92	Yes	13.58	15.75

Source: VTA's VMT Evaluation Tool, January 2024.
[1]Assumes all applicable TDM measures.
[2]Assumes the proposed TDM program, which includes telecommuting and alternative work schedule and ride-sharing program.

One of the goals of the 2040 General Plan is to reduce VMT and greenhouse gas emissions by developing a transportation network that makes it convenient to use transit, ride a bicycle, walk, or use other non-automobile modes of transportation (M 1.7). The General Plan also encourages existing and proposed development to incorporate Transportation Demand Management (TDM) measures such as car-sharing, transit passes, and unbundling of parking to reduce VMT (M 1.12). Prioritizing designs that favor pedestrian and bicycle circulation improvements over those for vehicular circulation on existing or proposed streets that provide opportunities to expand walking and bicycling as viable alternative modes of transportation is another goal of the 2040 General Plan (M 3.6).

The Santa Clara County VTA, in their 2017 Congestion Management Program document, also lists various TDM strategies that employers, developers, and local agencies can adopt to manage congestion on the transportation network. Some of the trip-reducing measures include the following:

- Ridesharing matching
- Preferential parking for ridesharing vehicles/carpoolers
- Carpool/vanpool subsidies or rewards
- Car-sharing program
- Bike-sharing program

Figure 6
Project VMT Analysis – Industrial (Warehouse) Land Use

Santa Clara Countywide VMT Evaluation Tool - Version 2 - Report

Valley Transportation Authority

Industrial Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Industrial
VMT Metric 1:	Home-based Work VMT per Worker
VMT Baseline Description 1:	City Average
VMT Baseline Value 1:	18.79
VMT Threshold Description 1 / Threshold Value 1:	-15% / 15.97
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	16.97	16.92	16.92
Low VMT Screening Analysis	No (Fail)	No (Fail)	No (Fail)

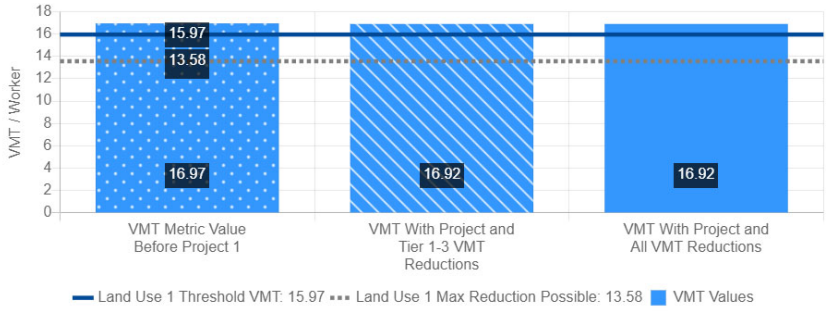


Figure 7
Project VMT Analysis – Office Land Use

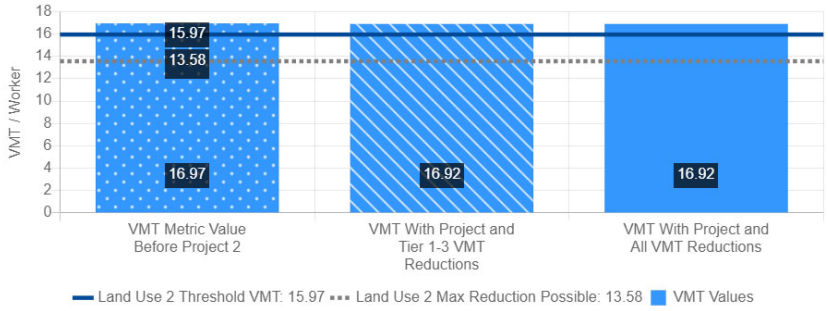
Santa Clara Countywide VMT Evaluation Tool - Version 2 - Report

Valley Transportation Authority

Office Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 2:	Office
VMT Metric 2:	Home-based Work VMT per Worker
VMT Baseline Description 2:	City Average
VMT Baseline Value 2:	18.79
VMT Threshold Description 2 / Threshold Value 2:	-15% / 15.97
Land Use 2 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	16.97	16.92	16.92
Low VMT Screening Analysis	No (Fail)	No (Fail)	No (Fail)



- Transit tickets sales/subsidies
- Childcare services at workplaces
- Guaranteed ride home
- Shuttle to transit line
- Flexible work hours for people who do not drive alone
- Flexible/alternative hours workweek program
- Compressed work weeks
- Work-at-home programs
- Telecommuting
- Establishing fees for employees' parking or parking cash-out program
- Membership in a transportation management association that provides TDM services and incentives
- Contribution to a transportation system management program administered by a member agency
- Cycling and walking subsidies and rewards
- Secure bicycle storage
- Site design amenities that would encourage transit use, ridesharing, cycling, and walking (such as showers and changing rooms)
- Other programs approved by the City's designee to reduce the number of employees who drive alone to the workplace
- Unbundled parking in residential developments
- Employee pre-tax commuter benefits
- Alternative cash incentive programs
- Road pricing/congestion pricing
- Housing closer to employment areas/transit centers
- Bicycle and pedestrian improvements
- Park and ride lots

Project Impact and Mitigation Measures

Applying OPR's 15% below existing average VMT impact threshold, the project would need to implement VMT reduction measures to achieve a minimum of 6% reduction (or approximately 0.95 miles per employee/job, from 16.92 to 15.97) in its VMT per job for the proposed project to reduce its impact to less than significant levels. The project's VMT per job could be reduced with the implementation of Travel Demand Management (TDM) strategies.

Estimated VTA VMT Evaluation Tool VMT Reduction

Per the VMT tool, the project's VMT per worker could be reduced to a maximum of 13.58 with the implementation of TDM strategies, including the following:

- TP04 – CTR Marketing and Education: Implement a marketing campaign targeting all project employees and visitors that encourages the use of transit, shared rides, and active modes. Marketing strategies may include new employee orientation on alternative commute options, event promotions, and publications. Providing information and encouragement to use transit, share ride modes, and active modes, reducing drive-alone trips and thereby reducing VMT; **and**
- TP06 – Employee Parking Cash-Out: Require project employers to offer employee parking "cash-out." Providing "cash-out" options give employees the choice to forgo subsidized/free parking for cash payment equivalent to the cost that the employer would otherwise pay for the parking space.

Providing an alternative to subsidized/free parking encourages commuters to travel via walking, biking, carpooling, and transit, thereby reducing VMT; **and**

- TP07 – Subsidized Transit Program: Provide fully (100%) subsidized transit passes for all project employees. Providing subsidies for transit use encourages people to use transit rather than driving, thereby reducing VMT; **and**
- TP08 – Telecommuting and Alternative Work Schedule: Allow and encourage employees to shift work schedules such that employees work slightly longer days resulting in fewer days in the office in a one-week or two-week period. This strategy reduces commute trips, thereby reducing VMT; **and**
- TP13 – Ride-Sharing Programs: Organize a program to match individuals interested in carpooling who have similar commute patterns. This strategy encourages the use of carpooling, reducing the number of vehicle trips and thereby reducing VMT.

The project applicant is proposing to implement a TDM program that will include telecommuting and alternative work schedule (TP08 above) and a ride-sharing program (TP13 above). Implementing these two TDM measures with a minimum 10% participation rate each, the VMT tool calculates that the proposed project's VMT could be reduced to 15.75 miles per worker, reducing the project VMT below the identified impact threshold and thus reducing the project impact to less than significant.

The VMT calculations are included in Appendix A.

4. Traffic Operations Analysis

This chapter describes the traffic operations analysis. The traffic operations analysis provides supplemental analysis for use by the City of Gilroy in identifying potential improvement of the transportation system that may be included as part of the project's Conditions of Approval. However, the identified roadway operations and improvements are not required or considered project impacts per CEQA guidelines.

The chapter presents the method by which project traffic is estimated, intersection operations analysis for existing and future conditions, the identification of any adverse effects on study intersections caused by project-generated trips, and recommended improvements to alleviate the identified operational issues. In addition, the chapter includes an intersection vehicle queuing analysis and freeway segment capacity evaluation.

Project Description

The project proposes to develop three light industrial buildings on a vacant 7.29-acre site (APN 835-01-059) located at 8875 Murray Avenue in the northeast part of Gilroy. The project would become Heatwave Visual's new main headquarters consisting of offices, product storage, and warehouse operations including assembly and distribution. Heatwave Visual, the project applicant, is an existing eyewear manufacturer and distributor, with current operations conducted out of two existing facilities located in the same general area as the project site. With the proposed project, Heatwave Visual would consolidate its operations to a single site.

Existing Operations

Currently, Heatwave Visual operates out of their 9,450-s.f. office and showroom building located at 8840 Forest Street (directly northwest of the project site) while an 8,000-s.f. building located at 8884 Forest Street (across the street from the existing office and showroom) houses their warehouse operations.

Existing hours of operations are Monday through Friday from 9:00 AM to 5:00 PM. A total of 29 employees run the existing operations, with a number of these employees working remotely. Approximately three delivery vehicles (one each from UPS, FedEx, and USPS) access the site daily for the shipping and receiving of products in addition to approximately two large truck shipments per week under the existing operations.

Proposed Operations

With the project, Heatwave Visual would consolidate its operations to a single site. The project, as proposed, would be constructed in three phases, with the construction of one building and its associated driveways, parking supply, and infrastructure improvements, per phase.

Each development phase would include the following land uses:

Land Use	Phase I Building 1 size (s.f.):	Phase II Building 2	Phase III Building 3	Total
Office	8,330	7,000	5,000	20,330 s.f.
Warehouse	23,086	0	2,180	25,266 s.f.
Light Industrial	10,850	41,600	22,740	75,190 s.f.
Total:	42,266	48,600	29,920	

Grand Total: 120,786 s.f.

Upon buildout of the project site, the project site would include 20,330 s.f. of office space, 25,266 s.f. of warehouse land use, and 75,190 s.f. of light industrial land use.

Parking for both trucks and passenger vehicles would be provided on site. Access to the project site would be provided via Forest Street (two site driveways) and Murray Avenue (one site driveway). The two proposed driveways along Forest Street would be constructed under Phase I and the proposed driveway along Murray Avenue would be constructed under Phase II. Forest Street is classified in the City's General Plan as a local street while Murray Avenue is classified as an arterial roadway. Additionally, Murray Avenue is designated as a truck route in the project area. For this reason, while passenger vehicles can utilize both streets to access the project site, all truck traffic accessing the project site must utilize Murray Avenue. Under Phase I, when access to the project site would be provided via Forest Street only, it can be presumed that all passenger vehicles would utilize Forest Street to access the project site. All truck traffic under Phase I would utilize Murray Avenue and Kishimura Drive to and from the project site driveways on Forest Street.

Heatwave Visual proposes to expand its existing operations size from the existing 9,450 s.f. office/showroom space (plus 8,000 s.f. warehouse space) to the proposed 42,266-s.f. Building 1, where all existing office, showroom, and warehouse operations would be moved to. Building 1 would become Heatwave Visual's new official headquarters. Construction of the remaining two buildings would depend upon other factors, including Heatwave Visual's rate of expansion and local, regional, and national economic conditions.

The proposed hours of operations would remain Monday through Friday 9:00 AM to 5:00 PM. The project anticipates having approximately 30 employees per building, for a total of approximately 90 employees after completion of all three development phases. The project also anticipates approximately three delivery vehicles (one each from UPS, FedEx, and USPS) accessing each of the buildings daily for the shipping and receiving of products, in addition to one large truck shipment per week per building, for a total of 9 daily delivery vehicles and 3 weekly large truck shipments under buildout conditions.

The project site location and site plan are shown on Figures 1 and 2 in Chapter 1.

Potential Operations

It is Heatwave Visual's intent to occupy and operate all three proposed buildings at full buildout of the proposed project. However, if Heatwave Visual's future operations do not warrant expansion beyond

Building 1, the proposed Buildings 2 and 3 could be leased to any of the industrial land uses that are allowed under the Industrial Park General Plan designation and the Limited Industrial (M1)/Murray Las Animas Overlay district zoning. For this reason, a trip generation comparison was conducted to identify which of the following two scenarios would result in the most site-generated traffic:

- All three proposed buildings are occupied by Heatwave Visual (land use breakdown described above)
- All three proposed buildings are occupied by a tenant under the light industrial designation

The trip generation comparison is discussed in the following sections. The highest potential trip-generator land use was assumed for the evaluation of the proposed project presented in this report.

Scope of Analysis

A level of service analysis at key intersections was completed to satisfy local guidelines and determine conformance to General Plan transportation goals and policies. The effects of the project on the study facilities were evaluated in accordance with City of Gilroy and CMP methodologies and standards.

The study intersections are listed below and shown on Figure 8.

Study Intersections

The study includes the evaluation of traffic conditions at six signalized intersections. All of the study intersections are located within the City of Gilroy. The following key intersections were evaluated:

1. Monterey Road and Las Animas Avenue
2. Monterey Road and Welburn Avenue/Leavesley Road*
3. Forest Street and Leavesley Road
4. Murray Avenue and Leavesley Road
5. US 101 Southbound Ramps and Leavesley Road
6. US 101 Northbound Ramps and Leavesley Road/San Ysidro Avenue

* Denotes VTA County Management Program (CMP) intersection

Study Periods

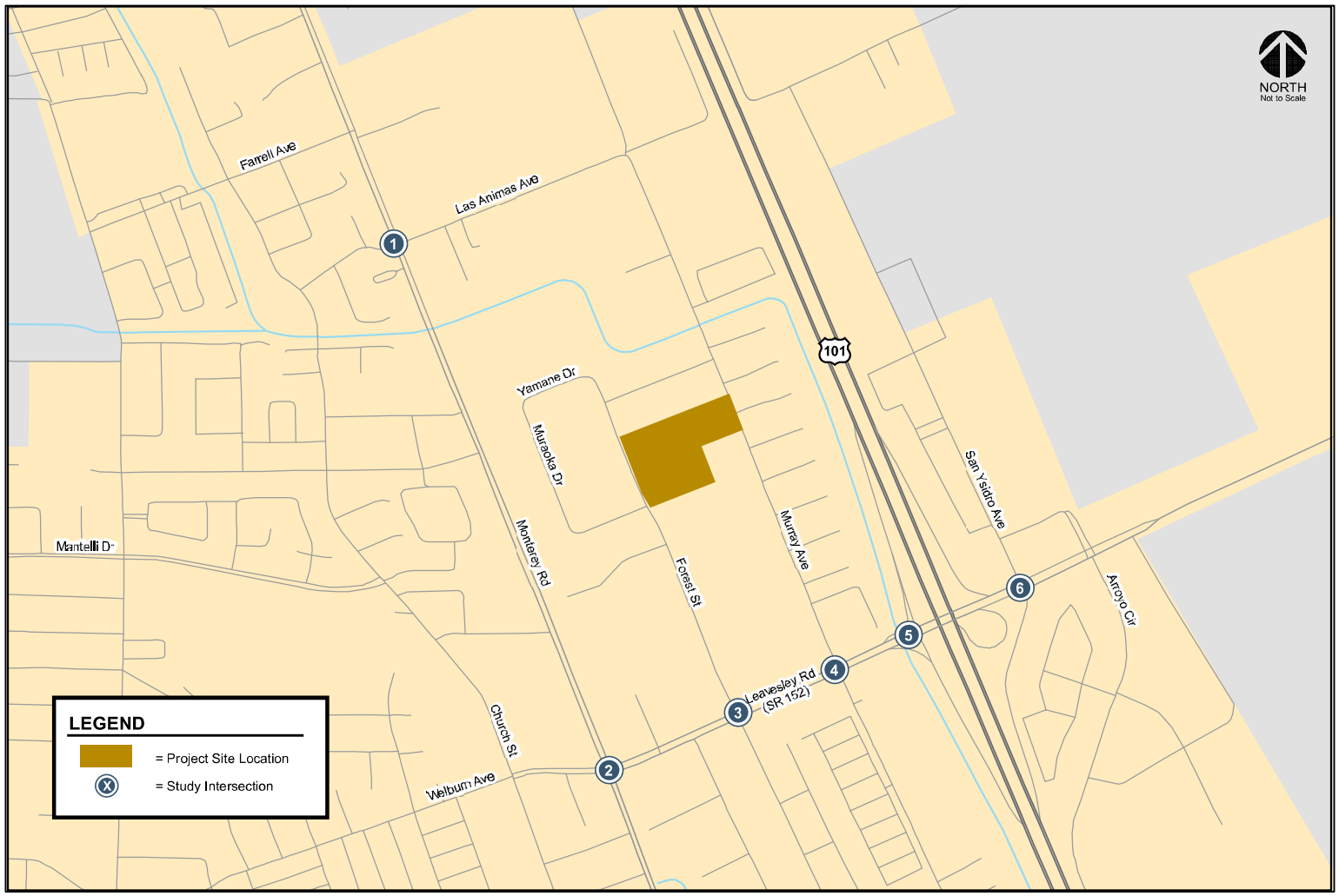
Traffic conditions at all of the study intersections were analyzed for the weekday AM and PM peak hours of adjacent street traffic. The weekday AM peak hour of traffic is generally between 7:00 AM and 9:00 AM and the weekday PM peak hour is typically between 4:00 PM and 6:00 PM. It is during these time periods that the most congested traffic conditions occur on an average weekday and weekend.

Study Scenarios

Traffic conditions were evaluated for the conditions described below:

Scenario 1: *Existing Conditions.* Existing intersection traffic volumes were obtained/derived from new intersection turning-movement traffic count data collected in March 2023 and other available traffic counts. Current 2023 traffic counts were compared to traffic counts collected prior to the Covid19 pandemic (in 2017 and 2019) and adjusted as necessary to identify traffic volumes that would represent current 2023 traffic conditions without the effect of the Covid19 pandemic. This is discussed in more detail in the following section.

Figure 8
Study Intersections



Scenario 2: *Background Conditions*. Background traffic conditions represent future traffic volumes on the future transportation network. Background traffic volumes were estimated by adding to existing peak-hour volumes the projected trips from approved but not yet constructed developments in the study area. Background conditions represent the baseline conditions to which project conditions are compared for the purpose of determining the project's adverse traffic effects on the surrounding roadway network.

Scenario 3: *Background Plus Project Conditions.* Background plus project conditions, or simply referred to as *Project Conditions*, represent future traffic volumes with the proposed project. Background plus project conditions were estimated by adding to background traffic volumes the trips associated with the proposed project (or *project traffic volumes*). Background plus project conditions were evaluated relative to background conditions in order to determine adverse traffic effects on the roadway network caused by the proposed project.

Scenario 4: *Cumulative Conditions.* Cumulative conditions represent future traffic volumes on the future transportation network that would result from traffic growth projected to occur due to proposed but not yet approved (pending) development projects. Traffic volumes from proposed but not yet approved developments were added to background conditions peak-hour volumes to obtain volumes for cumulative without project conditions. Cumulative conditions were evaluated for two scenarios: (1) without the proposed project and (2) with project-generated traffic. The change between these two scenarios illustrates the relative effect the proposed project could have on cumulative conditions.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the peak hours. As part of the project trip distribution step, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment step, the project trips are assigned to specific streets and intersections in the study area. These procedures are described further in the following sections.

Trip Generation

Through empirical research, data have been collected that correlate to common land uses their propensity for producing traffic. Thus, for the most common land uses there are standard trip generation rates that can be applied to help predict the future traffic increases that would result from a new development. Project trip estimates for the proposed project are based on trip generation rates obtained from the Institute of Transportation Engineers' (ITE's) *Trip Generation Manual*, Eleventh Edition, 2021.

Project traffic was estimated by applying ITE trip generation rates for general light industrial (ITE land use code #110), warehousing (ITE land use code #150) and general office (ITE land use code #710) land uses to the proposed project size. Based on the recommended rates and the size of the proposed project, it is estimated that at buildout conditions the proposed project would generate a total of 630 daily trips, with 92 trips (80 inbound and 12 outbound) occurring during the AM peak hour and 82 trips (13 inbound and 69 outbound) occurring during the PM peak hour.

The trip generation estimates for the proposed project are presented in Table 3.

Table 3
Project Trip Generation Estimates

		Daily		AM Peak Hour						PM Peak Hour					
					Split		Trip				Split		Trip		
Land Use	Size	Rate	Trip	Rate	In	Out	In	Out	Total	Rate	In	Out	In	Out	Total
Phase I - Building 1															
#150 - Warehousing	**23,086** Square Feet	1.710	39	0.170	77%	23%	3	1	4	0.180	28%	72%	1	3	4
#110 - General Light Industrial	**10,850** Square Feet	4.870	53	0.740	88%	12%	7	1	8	0.650	14%	86%	1	6	7
#710 - General Office Building	**8,330** Square Feet	10.840	90	1.520	88%	12%	11	2	13	1.440	17%	83%	2	10	12
Total Phase I Project Trips	**42,266** Square Feet		182				21	4	25				4	19	23
Phase II - Building 2															
#110 - General Light Industrial	**41,600** Square Feet	4.870	203	0.740	88%	12%	27	4	31	0.650	14%	86%	4	23	27
#710 - General Office Building	**7,000** Square Feet	10.840	76	1.520	88%	12%	10	1	11	1.440	17%	83%	2	8	10
Total Phase II Project Trips	**48,600** Square Feet		279				37	5	42				6	31	37
Phase III - Building 3															
#150 - Warehousing	**2,180** Square Feet	1.710	4	0.170	77%	23%	0	0	0	0.180	28%	72%	0	0	0
#110 - General Light Industrial	**22,740** Square Feet	4.870	111	0.740	88%	12%	15	2	17	0.650	14%	86%	2	13	15
#710 - General Office Building	**5,000** Square Feet	10.840	54	1.520	88%	12%	7	1	8	1.440	17%	83%	1	6	7
Total Phase III Project Trips	**29,920** Square Feet		169				22	3	25				3	19	22
Total Project Trips (Phases I, II, and III)	**120,786 Square Feet**		**630**				**80**	**12**	**92**				**13**	**69**	**82**

Source: ITE Trip Generation Manual, 11th Edition 2021.

For comparison purposes, the project also was evaluated assuming that all proposed buildings would be occupied with light industrial uses only. As discussed previously, this potential project scenario would occur if the proposed buildings were occupied with general light industrial land use (allowed under the Industrial Park General Plan designation and the Limited Industrial (M1)/Murray Las Animas Overlay district zoning) rather than the proposed project. The trip generation estimates showed that the mix of light industrial, office, and warehouse uses, as proposed by the project, would generate a slightly larger number of vehicular trips compared to the general light industrial land use only (see Table 4.) Thus, the project traffic was estimated based on the proposed project description, representing a conservative analysis of the proposed development.

Trip Distribution and Assignment

The directional distribution of project-generated traffic was estimated based on existing Heatwave Visual employee information, existing travel patterns on the surrounding roadway system, and locations of complementary land uses. The peak-hour trips associated with the proposed project were added to the roadway network in accordance with the distribution patterns discussed above and taking into account the existing roadway network, site layout, and project driveway locations.

The project trip distribution patterns are shown graphically on Figure 9. Figure 10 shows the assignment of project traffic on the local transportation network. A tabular summary of project traffic at each study intersection is contained in Appendix D.

Intersection Operations Methodology

This section presents the methods used to evaluate traffic operations at each of the study intersections for each study scenario. It includes descriptions of the data requirements, the analysis methodologies, the applicable level of service standards, and the criteria defining deficiencies at the study facilities. The intersection operations analysis is intended to quantify the operations of intersections and to identify potential negative effects due to the addition of project traffic. However, a potential adverse effect on a study intersection is not considered a CEQA impact metric.

Data Requirements

The data required for the analysis were obtained from new traffic counts, previous traffic studies, the City of Gilroy, the CMP Annual Monitoring Report, and field observations. The following data were collected from these sources:

- existing traffic volumes
- existing and planned lane configurations
- signal timing and phasing (for signalized intersections only)
- approved development information (size, use, and location)
- Freeway segment information

Roadway Network and Lane Configurations

The existing lane configurations and traffic-control devices at the study intersections were determined by observations in the field and are presented graphically on Figure 11.

It is assumed in this analysis that the transportation network under background and cumulative conditions (without the project) would be the same as under existing conditions.

Table 4
Project Trip Generation Estimates – Proposed and Potential Project Comparison

			Daily		AM Peak Hour						PM Peak Hour					
					Split			Trip			Split			Trip		
Land Use	Size		Rate	Trip	Rate	In	Out	In	Out	Total	Rate	In	Out	In	Out	Total
Proposed Project																
Heatwave Visual - Phases I, II, and III																
Total Project Trips (Phases I, II, and III) [1]	**120,786**	**Square Feet**		**630**				**80**	**12**	**92**				**13**	**69**	**82**
Potential Project																
Phase I - Building 1																
#110 - General Light Industrial	**42,266**	Square Feet	4.870	206	0.740	88%	12%	27	4	31	0.650	14%	86%	4	23	27
Phase II - Building 2																
#110 - General Light Industrial	**48,600**	Square Feet	4.870	237	0.740	88%	12%	32	4	36	0.650	14%	86%	4	28	32
Phase III - Building 3																
#110 - General Light Industrial	**29,920**	Square Feet	4.870	146	0.740	88%	12%	19	3	22	0.650	14%	86%	3	16	19
Total Project Trips (Phases I, II, and III)	**120,786**	**Square Feet**		**589**				**78**	**11**	**89**				**11**	**67**	**78**

Source: ITE Trip Generation Manual, 11th Edition 2021.
[1] See Table 3 (Project Trip Generation Estimates) for the proposed project's land use breakdown.

Figure 9
Project Trip Distribution

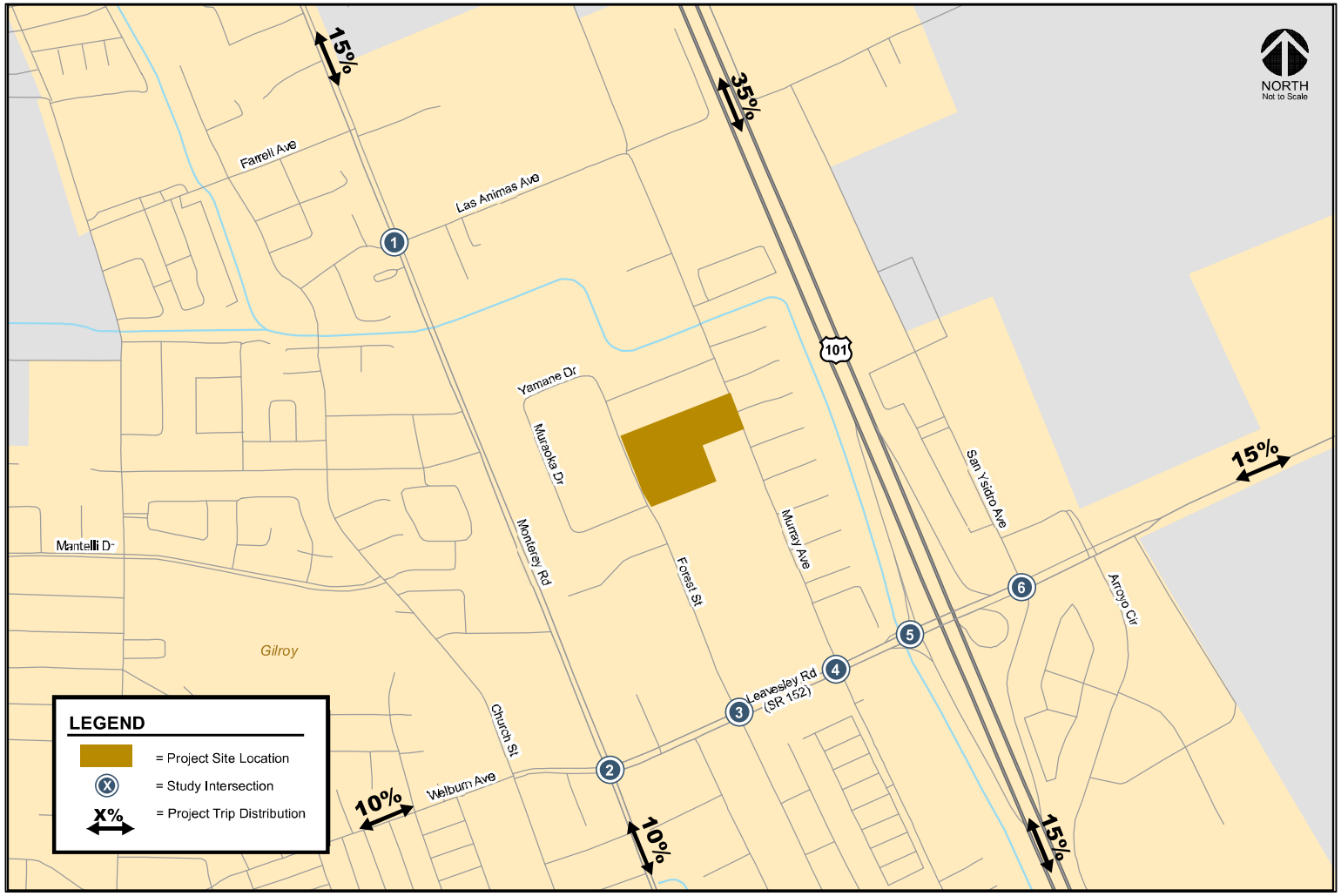


Figure 10
Project Trip Assignment

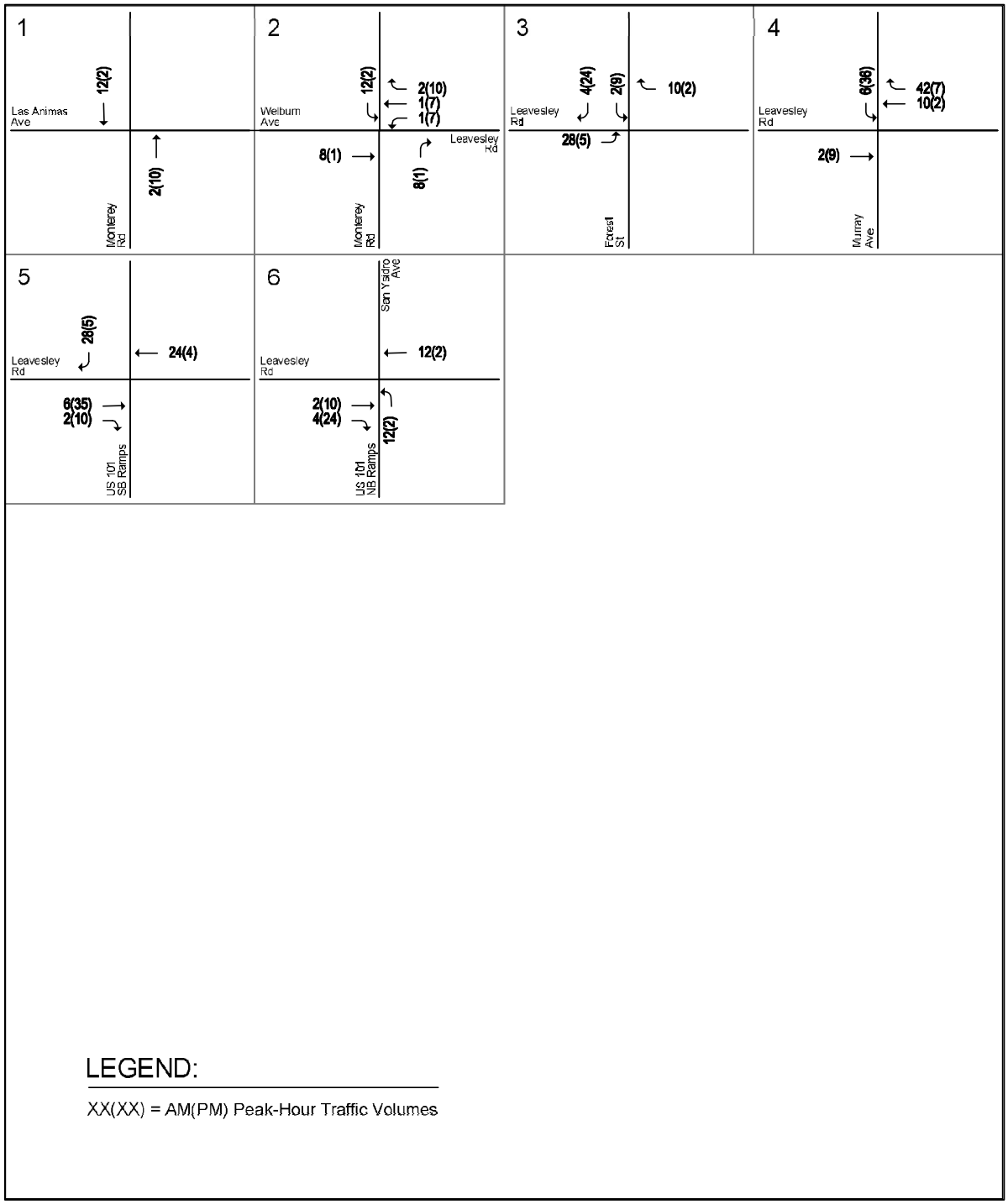
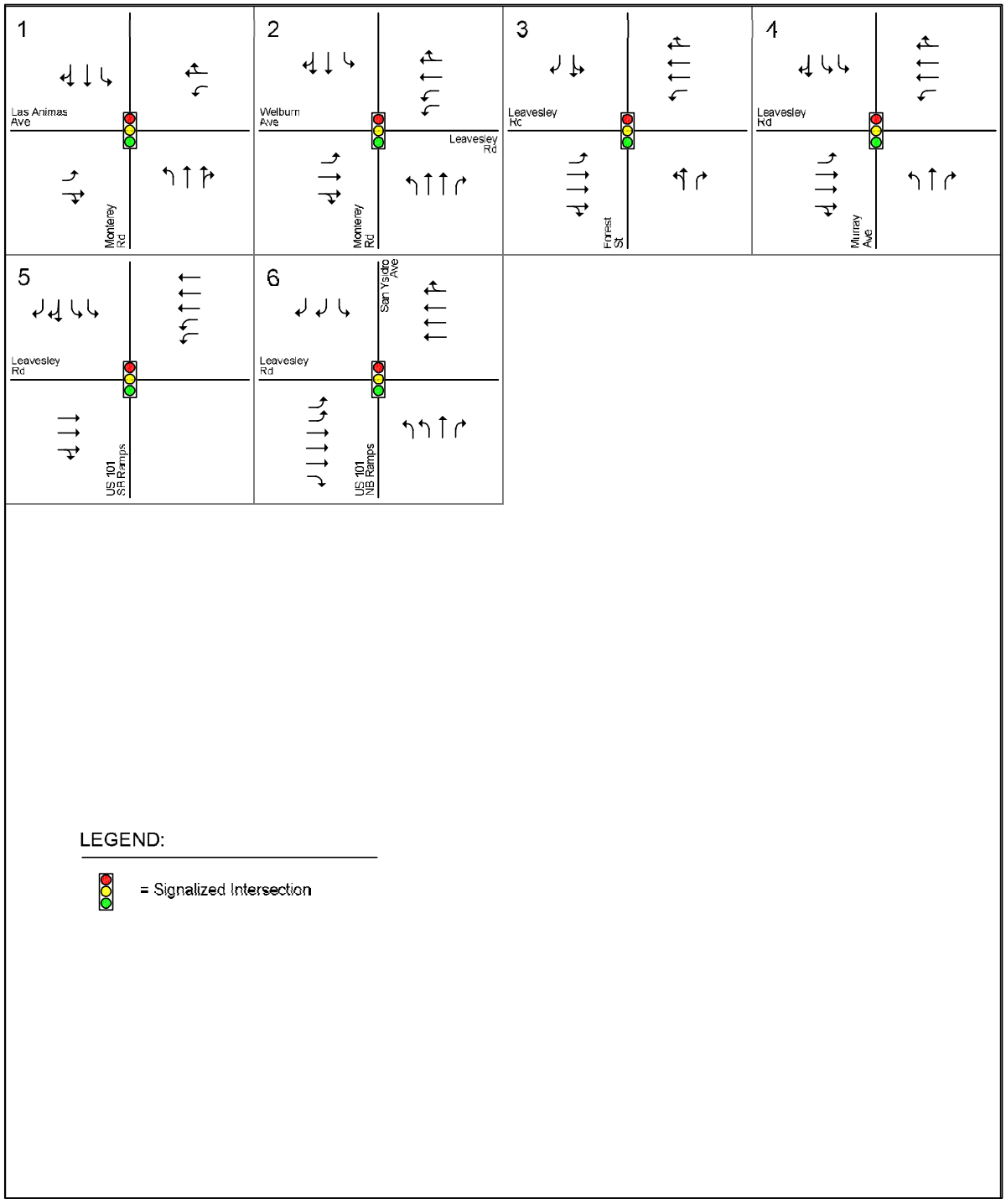


Figure 11
Existing Intersection Lane Configurations and Traffic Control Devices



Traffic Volumes

Existing Conditions

After years of unprecedented traffic conditions caused by the Covid19 pandemic and the order to shelter in place issued by Santa Clara County Department of Public Health in March 2020, traffic levels on the transportation network have slowly been restoring back to what is considered typical traffic conditions. For the purpose of this analysis, existing weekday AM and PM peak-hour intersection traffic volumes were obtained from new intersection traffic count data (collected in 2023) or derived by comparing new and available pre-pandemic intersection counts.

With ambient traffic conditions returning back to typical levels, intersection turn-movement traffic counts were collected at all of the study intersections in March 2023. Additionally, intersection traffic counts from 2017-2019 (prior to the pandemic) were available at all of the study intersections. The 2023 traffic counts were compared to the older pre-pandemic counts to determine whether the current traffic volumes are back to pre-pandemic conditions (traffic volumes are equal or greater than pre-pandemic conditions) or if the 2023 traffic counts continue to show the effects of the Covid-19 pandemic (traffic volumes continue to be less than pre-pandemic levels). The comparison of the 2023 traffic count data to pre-pandemic traffic counts showed that all 2023 traffic counts are consistent (change in total intersection volume is within a 10% increase or decrease) with pre-pandemic counts and reflect normal day-to-day traffic fluctuation. Intersections where the 2023 traffic counts were shown to be larger than pre-pandemic conditions, the collected 2023 counts were assumed to accurately represent typical current traffic conditions. However, as a conservative approach, 2023 peak-hour traffic counts that were lower than the pre-pandemic counts were increased based on the percent increase at adjacent intersections. This method resulted in all intersection traffic volumes showing a total volume increase between 1-5% from the 2017-2019 traffic counts.

The existing peak-hour intersection volumes are shown on Figure 12. The existing traffic count data are included in Appendix B.

Future Conditions

Background peak-hour traffic volumes were estimated by adding to existing volumes the estimated traffic from approved but not yet constructed developments. Approved project information was obtained from the City of Gilroy in October 2023. The traffic added to the study intersections from approved developments was estimated by distributing and assigning trips generated by these developments to the roadway network using the same procedure of trip generation, distribution, and assignment described previously. Background traffic volumes are shown on Figure 13.

The project trips, as described in the previous section, were added to background traffic volumes to obtain background plus project traffic volumes, or project conditions volumes. The background plus project traffic volumes are shown graphically on Figure 14.

Baseline cumulative peak-hour traffic volumes (without project traffic) were calculated by adding to background volumes the estimated traffic from proposed but not yet approved (pending) development projects. The added traffic from proposed developments was estimated using the same process of trip generation, distribution, and assignment utilized to estimate approved project traffic and project trips. The baseline cumulative conditions traffic volumes are presented graphically on Figure 15. Cumulative plus project traffic volumes were calculated by adding project-generated trips to baseline cumulative volumes and are shown graphically on Figure 16.

Approved and pending project information is included in Appendix C. Peak-hour intersection turning movement volumes for all intersections and study scenarios are tabulated in Appendix D.

Figure 12
Existing Conditions Traffic Volumes

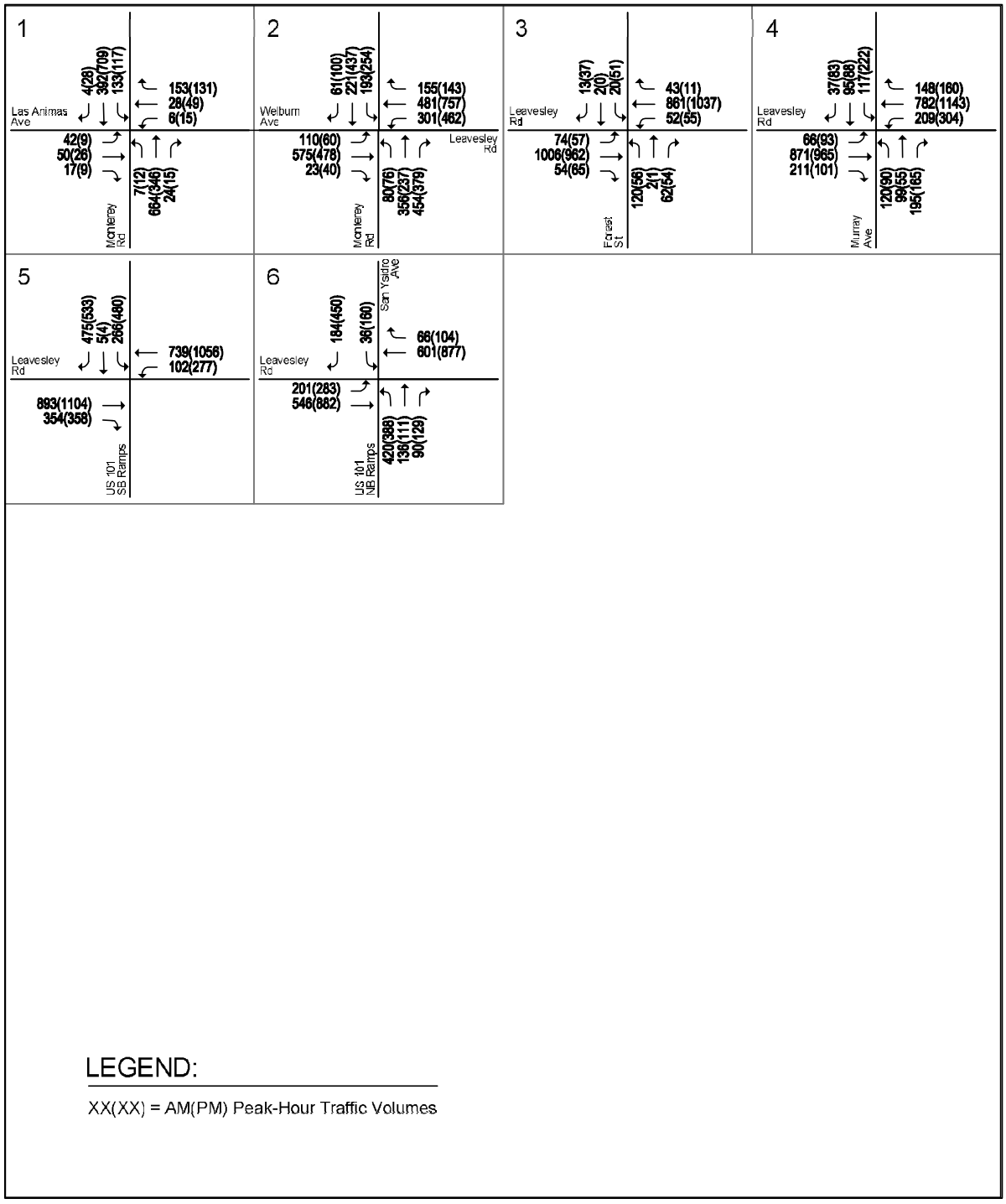


Figure 13
Background Conditions Traffic Volumes

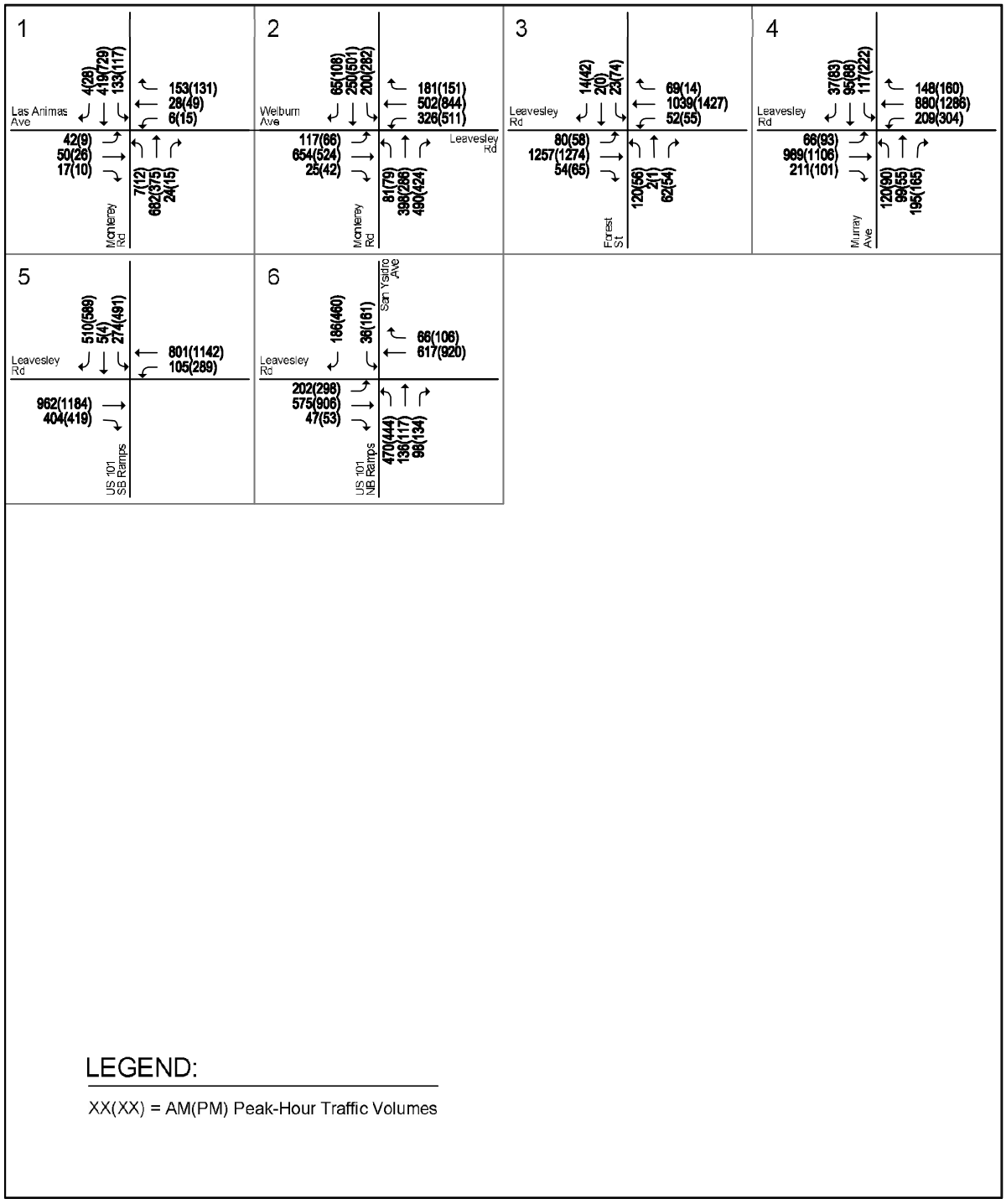


Figure 14
Background Plus Project Conditions Traffic Volumes

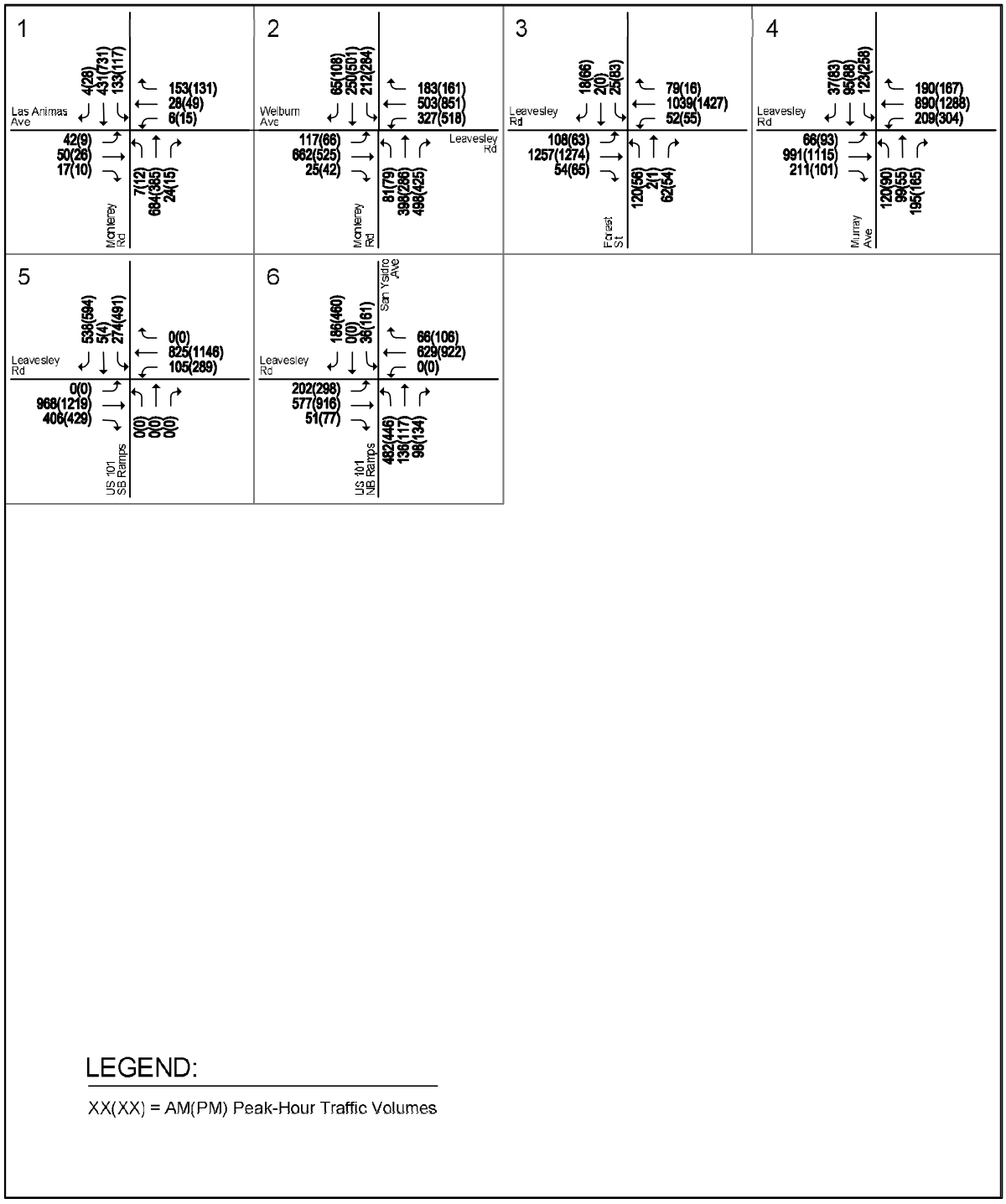


Figure 15
Cumulative Conditions Traffic Volumes

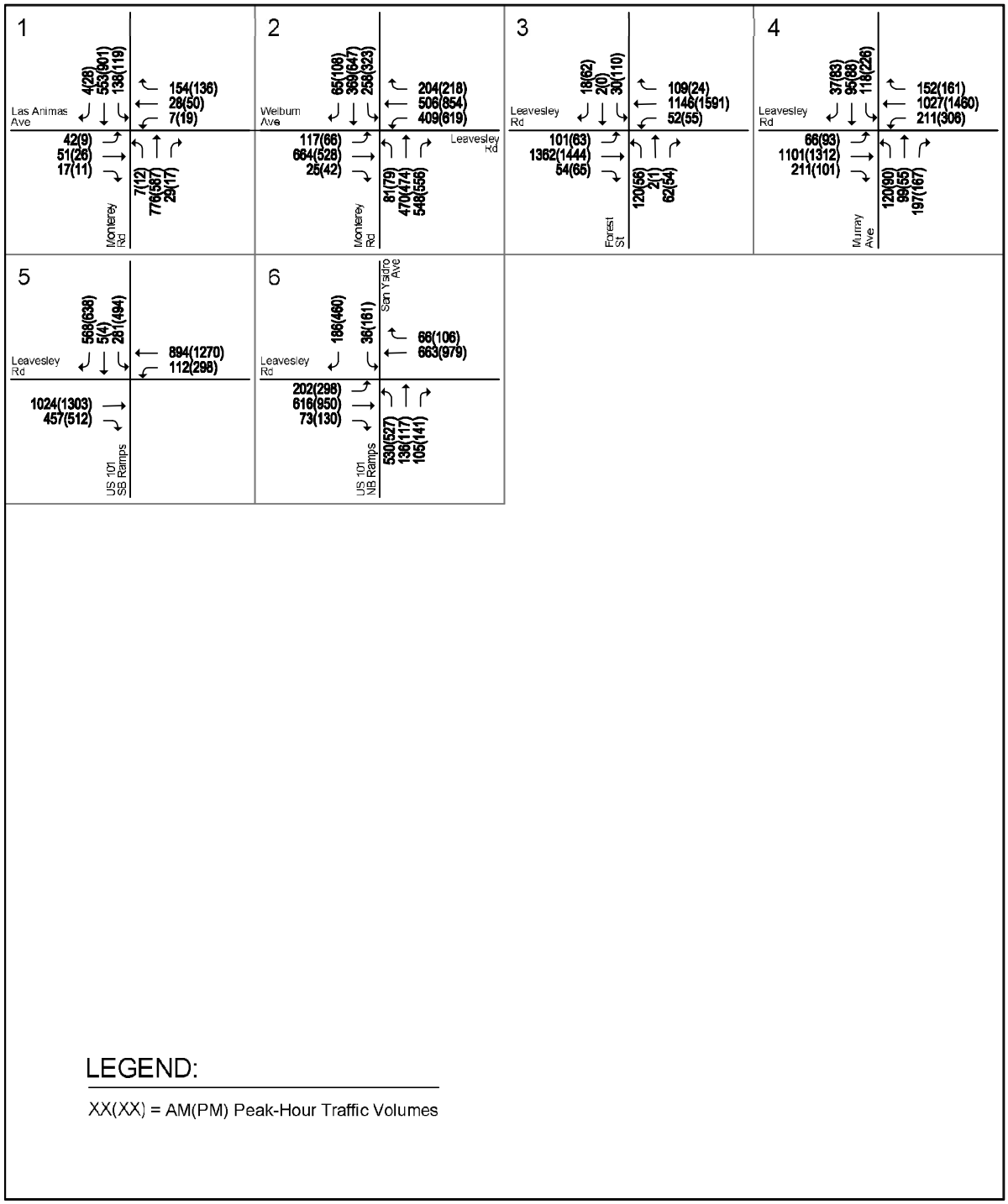
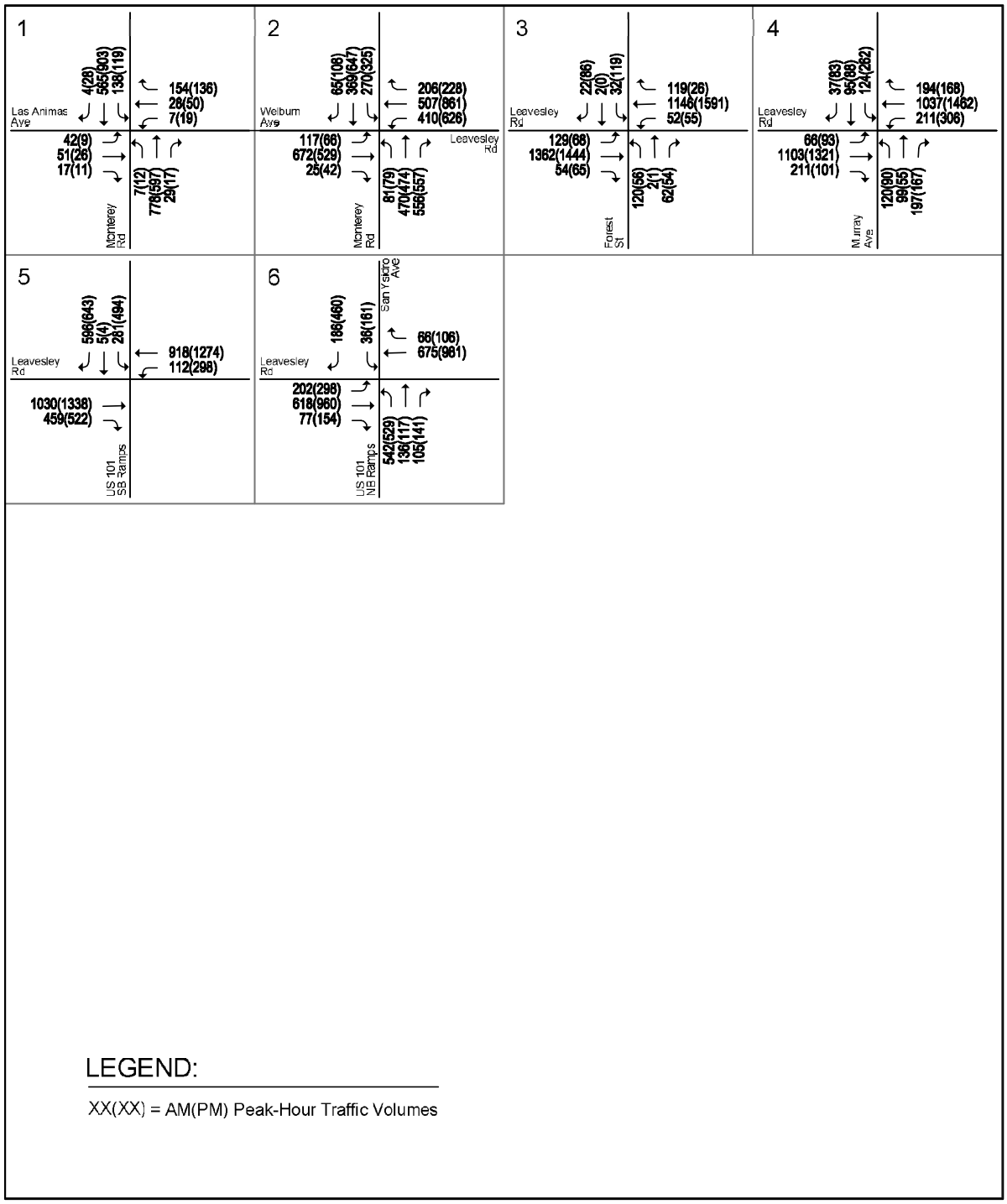


Figure 16
Cumulative Plus Project Conditions Traffic Volumes



Intersection Level of Service Methodologies, Standards, and Deficiency Thresholds

Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays.

All study intersections are currently signalized and are located within the City of Gilroy limits, therefore, were evaluated based on the City of Gilroy methodology and level of service standards. The City of Gilroy 2040 General Plan, Mobility chapter, identifies the established level of service standards and deficiency thresholds for intersections in the City of Gilroy. The analysis methods, level of service standards, and deficiency thresholds are described below.

Signalized Intersections

The City of Gilroy uses the Santa Clara County CMP level of service analysis procedure, TRAFFIX, for the evaluation of signalized intersections, based on the *2000 Highway Capacity Manual* (2000 HCM) method. TRAFFIX evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. *Control delay* is the amount of delay that is attributed to the particular traffic control device at the intersection, and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The correlation between average delay and level of service is shown in Table 5.

The City of Gilroy level of service standard for most signalized intersections located west of US 101 is LOS C or better, allowing some commercial and industrial areas (e.g., downtown Gilroy, First Street corridor) to operate at LOS D or better. For signalized intersections located east of US 101 and those in the commercial area designated in the City of Gilroy General Plan (LOS D Area), the City standard is LOS D or better. The level of service D area includes all areas east of US 101, the Tenth Street corridor from Monterey Road to US 101, the Luchessa corridor east of Monterey Road, and the Monterey Road corridor from Luchessa Avenue to the Monterey Road/US 101 interchange.

Two of the study intersections (intersections of the US 101 ramps with Leavesley Road) are located within the LOS D area, and therefore, were evaluated based on LOS D standard, while the remaining study intersections were evaluated based on LOS C standard.

City of Gilroy Definition of Operational Deficiencies at Signalized Intersections

Based on City of Gilroy intersection level of service standards, an operational deficiency at a signalized intersection would occur if any of the following criteria are satisfied:

LOS C Area

1. The level of service at the intersection degrades from an acceptable LOS C or better under background conditions to an unacceptable LOS D or worse under background plus project conditions, or
2. The intersection is already operating at an unacceptable LOS D or worse and the addition of project traffic causes the average delay to increase by four (4) seconds or more.

LOS D Area

1. The level of service at the intersection degrades from an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under background plus project conditions, or

Table 5
Signalized Intersection Level of Service Definition Based on Delay

Level of Service	Description	Average Control Delay per Vehicle (sec.)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	up to 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable	55.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	Greater than 80.0

Sources: Transportation Research Board, *2000 Highway Capacity Manual* (Santa Clara County and City of Gilroy adopted level of service methodology). *Traffic Level of Service Analysis Guidelines*, Santa Clara County Transportation Authority Congestion Management Program, June 2003.

2. If the intersection is already operating at an unacceptable LOS E or F and the addition of project traffic causes the average delay to increase by four (4) seconds or more.

Intersection Level of Service Analysis Results

The results of the intersection level of service analysis are described below and summarized in Table 6. The level of service calculation sheets are included in Appendix E.

Existing and Background Intersection Level of Service Analysis

The results of the intersection level of service analysis under existing and background conditions indicate that all of the study intersections currently operate and are projected to continue to operate at acceptable levels of service during the peak hours.

Background Plus Project Intersection Level of Service Analysis

The results of the intersection level of service analysis under background plus project conditions indicate that all of the study intersections are projected to continue to operate at acceptable levels of service during the peak hours. Therefore, the proposed project is not projected to have an adverse effect on any of the study intersections under background plus project conditions.

Table 6
Intersection Level of Service Results

Study Int. Number	Intersection	Intersection Control	LOS Standard	Peak Hour	Count Date	Existing		Background		Background Plus Project			Cumulative No Project		Cumulative Plus Project		
						Delay	LOS	Delay	LOS	Delay	LOS	Delay Change[1]	Delay	LOS	Delay	LOS	Delay Change[1]
1	Monterey Road	Signal	C	AM	03/29/23	14.9	B	14.8	B	14.8	B	+0.0	14.6	B	14.6	B	+0.0
	and Las Animas Avenue			PM	03/29/23	16.0	B	16.0	B	16.0	B	+0.0	15.2	B	15.2	B	+0.0
2	Monterey Road	Signal	C	AM	03/29/23	26.9	C	27.3	C	27.5	C	+0.2	29.5	C	29.8	C	+0.3
	and Welburn Avenue/Leavesley Road*			PM	03/29/23	29.3	C	30.5	C	30.6	C	+0.1	34.1	C	34.2	C	+0.1
3	Forest Street	Signal	C	AM	03/29/23	14.9	B	13.2	B	13.4	B	+0.2	12.8	B	13.0	B	+0.2
	and Leavesley Road			PM	03/29/23	11.6	B	10.5	B	11.2	B	+0.7	11.5	B	12.1	B	+0.6
4	Murray Avenue and Leavesley Road	Signal	C	AM	03/29/23	26.0	C	25.3	C	25.2	C	-0.1	24.7	C	24.5	C	-0.2
				PM	03/29/23	30.3	C	29.7	C	30.1	C	+0.4	29.2	C	29.7	C	+0.5
5	US 101 Southbound Ramps	Signal	D	AM	03/29/23	17.4	B	17.5	B	17.8	B	+0.3	18.0	B	18.3	B	+0.3
	and Leavesley Road			PM	03/29/23	27.0	C	27.5	C	27.6	C	+0.1	28.0	C	28.1	C	+0.1
6	US 101 Northbound Ramps	Signal	D	AM	03/29/23	26.4	C	26.7	C	26.8	C	+0.1	27.0	C	27.1	C	+0.1
	and Leavesley Road/San Ysidro Avenue			PM	03/29/23	29.0	C	29.6	C	29.6	C	+0.0	30.3	C	30.3	C	+0.0

Notes:
[1] Change in delay, expressed in seconds, for background plus project conditions is measured relative to background conditions.
Change in delay for cumulative plus project conditions is measured relative to cumulative no project conditions.
* = CMP intersection

Cumulative Conditions Intersection Level of Service Analysis

The results of the intersection level of service analysis under cumulative plus project conditions indicate that all of the study intersections are projected to continue to operate at acceptable levels of service during the peak hours. Therefore, the project would not contribute to an adverse effect at any of the study intersections under cumulative plus project conditions.

Intersection Operations (Queue) Analysis

The analysis of the intersection levels of service was supplemented with an analysis of intersection operations (queuing) for selected intersections. The intersection queuing analysis is an important component of the process to evaluate traffic conditions at an intersection. Although calculated levels of service may appear adequate at some locations, traffic operations problems caused by inadequate storage space for vehicle queues could prevent the intersection from ever realizing the calculated level of service. When inadequate storage space becomes an issue, queues in one turn movement might spill into an adjacent lane and block traffic in that lane from proceeding through the intersection.

Vehicle Queue Estimate Methodology

The operations analysis is based on vehicle queuing for high-demand movements at intersections. Vehicle queues were estimated using two methodologies: 1.) a Poisson probability distribution and 2.) Synchro Software.

Poisson probability distribution estimates the probability of "n" vehicles in the queue for a vehicle movement (based on the total number of vehicles in the queue and the average number of vehicles in the queue) 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 signal 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 (20 feet vehicle length plus 5-foot headway space); 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 identifying locations where potential problems may arise in the future and for estimating future storage requirements at intersections.

Additionally, the queueing assessment at the intersection of Forest Street and Leavesley Road was supplemented with a queueing evaluation using *Synchro* software. Synchro utilizes existing intersection parameters, including intersection configuration, signal phase timings (based on field observations), and traffic volumes to calculate delays and queue lengths for all movements of the intersection.

City of Gilroy Definition of Queue Deficiencies

Based on City of Gilroy guidelines, a queue deficiency at an intersection would occur if:

1. The 95th percentile vehicle queue in a critical turn movement at a study intersection is projected to be less than the available or planned storage length for that movement under background conditions and the addition of projected traffic to that turn movement causes the projected 95th percentile vehicle queue to exceed the available or planned storage length, or
2. The 95th percentile vehicle queue in a critical turn movement at a study intersection is projected to exceed the available or planned storage length for that movement under background conditions and the addition of projected traffic to that turn movement causes the projected 95th percentile vehicle queue to grow by at least one vehicle.

Queue deficiencies may be addressed by providing the additional queue storage capacity required to serve the projected queue length.

Study Intersection Turn-Movements

Key intersections where the project is anticipated to add more than 10 peak-hour trips per lane to the left-turn movement were selected for evaluation. Additionally, locations where the project would add a significant number of trips to the right-turn movement also were included. The adequacy of the queue storage capacity for the following intersection movements was evaluated using a Poisson probability distribution:

2. Monterey Road and Welburn Avenue/Leavesley Road – Southbound left-turn movement
3. Forest Street and Leavesley Road –southbound right-turn movement
4. Murray Avenue and Leavesley Road – Southbound left-turn and westbound through-and-right turn movements
5. US 101 SB Ramps and Leavesley Road – Southbound through-and-right-turn movement

Additionally, because of the back-to-back left-turn pockets at the intersections of Forest Street/Leavesley Road (eastbound left-turn pocket) and Swanston Lane/Leavesley Road (westbound left-turn pocket), the projected queue lengths at the eastbound left-turn pocket at Forest Street/Leavesley Road was evaluated with the use of the Synchro software.

Vehicle Queue Analysis Results – Poisson Probability Distribution

The vehicle queue analysis results are summarized in Table 7 below. The intersection queue calculation sheets are included in Appendix F.

The results of the queue analysis show that projected queue lengths for the following turn movements would exceed the available queue storage capacity during at least one of the study peak hours:

4. Murray Avenue and Leavesley Road

Southbound Left-Turn Movement

The maximum queue length for the southbound left-turn movement at the *Murray Avenue/Leavesley Road* intersection is projected to exceed the existing queue storage capacity for this movement during the PM peak-hour under background plus project conditions. The addition of project traffic to this turn-movement is projected to increase the 95th percentile vehicle queue length from 7 vehicles per lane under background conditions to 8 vehicles per lane under project conditions, exceeding the existing storage capacity by a total of 1 vehicle (25 feet) per lane. This is considered a project deficiency, according to the City of Gilroy definition of queue deficiencies.

Table 7
Intersection Vehicle Queue Analysis Results – Poisson Probability

Measurement	Monterey Road/ Leavesley Road		Forest Street/ Leavesley Road		Murray Avenue/ Leavesley Road				US 101 SB Ramps/ Leavesley Road	
	Southbound Left		Southbound Right		Southbound Left		Westbound Through/Right		Southbound Through/Right	
	SBL AM	SBL PM	SBR AM	SBR PM	SBL AM	SBL PM	WBT/R AM	WBT/R PM	SBT/R AM	SBT/R PM
Existing Conditions										
Cycle Length/Control Delay (sec)[1]	80	92	92	92	100	120	100	120	100	135
Lanes	1	1	1	1	2	2	3	3	2	2
Volume (vphpl)	193	254	13	37	59	111	310	434	240	269
95th %. Queue (veh/ln.)	8	11	1	3	4	7	14	21	11	16
95th %. Queue (ft./ln)[2]	200	275	25	75	100	175	350	525	275	400
Storage (ft./ ln.)	425	425	100	100	175	175	485	485	450	450
Adequate (Y/N)	YES	YES	YES	YES	YES	YES	YES	**NO**	YES	YES
Background Conditions										
Cycle Length/Control Delay (sec)[1]	80	92	92	92	100	120	100	120	100	135
Lanes	1	1	1	1	2	2	3	3	2	2
Volume (vphpl)	200	282	14	42	59	111	343	482	258	297
95th %. Queue (veh/ln.)	8	12	2	3	4	7	15	23	12	17
95th %. Queue (ft./ln)[2]	200	300	50	75	100	175	375	575	300	425
Storage (ft./ ln.)	425	425	100	100	175	175	485	485	450	450
Adequate (Y/N)	YES	YES	YES	YES	YES	YES	YES	**NO**	YES	YES
Background Plus Project										
Cycle Length/Control Delay (sec)[1]	80	92	92	92	100	120	100	120	100	135
Lanes	1	1	1	1	2	2	3	3	2	2
Volume (vphpl)	212	284	18	66	62	129	360	485	272	299
95th %. Queue (veh/ln.)	9	12	2	4	4	8	15	23	12	17
95th %. Queue (ft./ln)[2]	225	300	50	100	100	200	375	575	300	425
Storage (ft./ ln.)	425	425	100	100	175	175	485	485	450	450
Adequate (Y/N)	YES	YES	YES	YES	YES	**NO**	YES	**NO**	YES	YES

Notes:
Vehicle queue calculated using the Poisson probability distribution and 95-percent confidence level.
NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound, R = Right, T = Through, L = Left.
Right-turn movements with overlapping protected left-turn phasing were adjusted manually to account for the right-turns on red.
[1] Vehicle queue calculations based on cycle length for signalized intersections and control delay for unsignalized intersections.
[2] Assumes 25 feet per vehicle in the queue.

Project Deficiency: PM peak-hour
Queue Length Deficiency: 1 vehicle (25 feet) per lane

Westbound Through- and Right-Turn Movement

The maximum queue length for the westbound through- and right-turn movement at the *Murray Avenue/Leavesley Road* intersection is projected to exceed the existing queue storage capacity for this movement during the PM peak-hour under existing, background, and background plus project conditions. The westbound through- and right-turn movement at this intersection is served by three travel lanes that extend from Murray Avenue to the US 101 southbound ramps, a distance of approximately 485 feet per lane (approximately 19 vehicles per lane). Under background conditions, the 95th percentile vehicle queue length is estimated to be 23 vehicles per lane, exceeding the existing

storage capacity by a total of 4 vehicles (100 feet) per lane. However, the addition of project traffic to this turn-movement is not projected to increase the 95th percentile vehicle queue under background plus project conditions. Therefore, the proposed project would not contribute to the existing and projected queue storage deficiency for this movement.

Project Deficiency: None

Vehicle Queue Analysis Results – Synchro

Because of the back-to-back left-turn pockets at the intersections of Forest Street/Leavesley Road (eastbound left-turn pocket) and Swanston Lane/Leavesley Road (westbound left-turn pocket), a more detailed analysis of the projected queue length at the eastbound left-turn pocket at Forest Street/Leavesley Road was performed using Synchro software. As opposed to the queue assessment using Poisson probability, Synchro utilizes existing intersection parameters, including lane configurations, signal phase timings (based on field observations), and traffic volumes to calculate delays and queue lengths for all movements of the intersection. The queue length at both back-to-back left-turn pockets were estimated using Synchro.

Intersection turn-movement volumes were collected at the intersection of Swanston Lane/Leavesley Road on September 17, 2024 for this analysis. In addition, existing queue lengths were observed in the field during the peak hours to confirm whether the maximum queue length results obtained from Synchro accurately represent existing traffic conditions at the two study locations. Field observations were also conducted on September 17, 2024.

The Synchro queueing evaluation results are presented in Table 8.

3. Forest Street and Leavesley Road

Eastbound Left-Turn Movement

Using *Synchro* software, existing queue lengths are estimated to be approximately 75 feet during both AM and PM peak hours. Field observations confirm that maximum queue lengths are approximately 3 vehicles during both peak hours.

Synchro queue length estimates under background and background plus project conditions indicate a maximum length of 100 feet (4 vehicles) during the AM peak-hour and 75 feet (3 vehicles) during the PM peak-hour. The eastbound left-turn pocket has a storage capacity of 125 feet (5 vehicles). Therefore, based on these calculations, it can be concluded that the existing eastbound left-turn pocket at the intersection of Forest Street and Leavesley Road would have adequate storage capacity to serve the estimated queue length under project conditions.

Table 8
Intersection Vehicle Queue Analysis Results – Synchro

Scenario	Queue Length (ft)			
	Forest Street and Leavesley Road		Swanston Lane and Leavesley Road	
	Eastbound Left-Turn		Westbound Left-Turn	
	AM	PM	AM	PM
Existing Conditions				
Field Observation [1]	75	75	25	25
Synchro [2]	75	75	25	25
Storage (ft/lane)	125	125	100	100
Adequate (Y/N)	YES	YES	YES	YES
Background Conditions				
Synchro [2]	100	75	25	25
Storage (ft/lane)	125	125	100	100
Adequate (Y/N)	YES	YES	YES	YES
Background Plus Project Conditions				
Synchro [2]	100	75	25	25
Storage (ft/lane)	125	125	100	100
Adequate (Y/N)	YES	YES	YES	YES

Notes:
[1] Peak-hour field observations conducted on September 17, 2024.
[2] Evaluated using *Synchro (Version 12)* which uses Highway Capacity Manual (HCM) methodology. 95th-percentile queue length, rounded to the nearest car-length (25 feet).

Swanston Lane and Leavesley Road

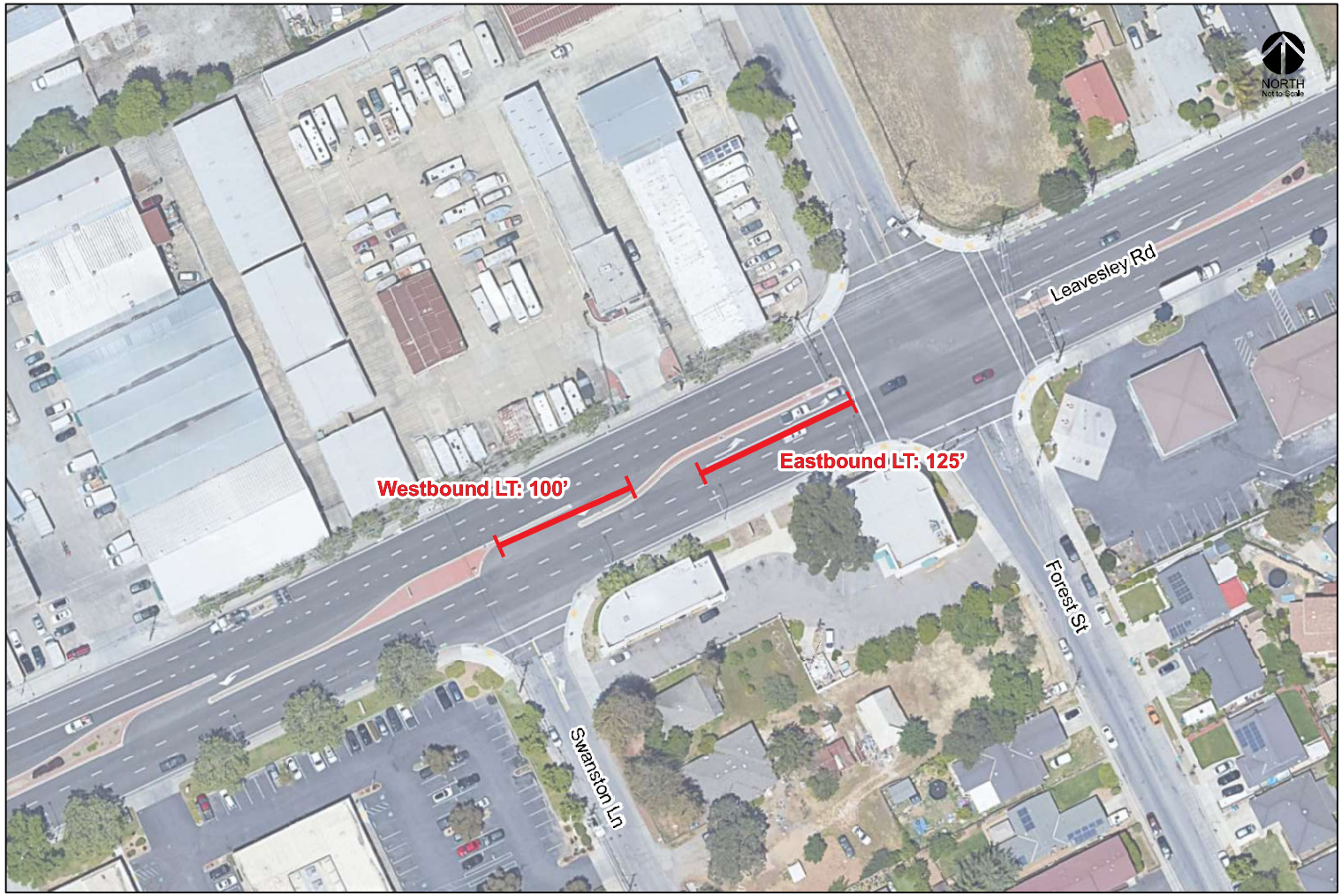
Westbound Left-Turn

The westbound left-turn movement along Leavesley Road at Swanston Lane also was evaluated. The proposed project is not anticipated to add any traffic to this turn movement. The maximum queue length for this movement was evaluated to determine if the existing pocket length could be reduced, if needed, to provide the additional queue storage capacity required for the eastbound left-turn movement at Forest Street. The westbound left-turn movement at Swanston Lane is served by a 100-foot turn pocket and is not signalized (see Figure 17).

Using *Synchro* software, existing queue lengths are estimated to be approximately 25 feet during both the AM and PM peak hours. Field observations also indicate that maximum queue lengths are approximately 25 feet during both peak-hours.

Synchro queue length estimates under background and background plus project conditions indicate a maximum queue length of 25 feet (1 vehicle) during the AM and PM peak hours. The westbound left-turn pocket has a storage capacity of 100 feet (4 vehicles). Therefore, it can be concluded that the existing westbound left-turn pocket at Swanston Lane has adequate queue storage capacity to serve the projected queue length under project conditions. It can also be concluded that, based on these results, the westbound left-turn pocket could be reduced by up to 50 feet (the existing turn pocket should provide queue storage capacity for a minimum of 2 vehicles) without causing adverse effects to traffic operations along Leavesley Road.

Figure 17
Forest Street and Swanson Lane Back-to-Back Left-Turn Pockets



Intersection Deficiencies and Possible Improvements

Described below are deficiencies that are projected to occur with implementation of the proposed project. The project's contribution to the projected deficiencies and/or possible improvements to improve operating conditions also are described below.

Level of Service Deficiencies

The proposed project is not projected to have an adverse effect on any of the study intersections.

Queue Storage Deficiencies

4. Murray Avenue and Leavesley Road

Movement: Southbound left-turn
Project deficiency: PM peak-hour
Available queue storage: 175 feet (7 vehicles) per lane
Change in queue length: from 7 vehicles per lane under background conditions to 8 vehicles per lane under project conditions
Queue length deficiency: 1 vehicle (25 feet) per lane

The projected queue storage deficiency for this turn-movement could be improved by extending the existing southbound left-turn lanes an additional 25 feet each. Extending the existing southbound left-turn pockets could be accomplished by restriping Murray Avenue, however, it could also require the removal of some on-street parking to continue to accommodate the existing lane configuration and bike lanes.

Freeway Segment Evaluation

An analysis of freeway levels of service was not conducted since the project would not add enough traffic to the freeway segments near the site to warrant a freeway analysis.

According to CMP Traffic Impact Analysis Guidelines, a freeway level of service analysis is required if the number of project trips added to any freeway segment equals or exceeds one percent of the capacity of the segment. The key freeway segments in the study area were evaluated to determine if the project traffic on each segment would exceed this threshold. US 101 consists of three mixed flow lanes in each direction between Cochrane Road in Morgan Hill and Monterey Road in Gilroy. North of Cochrane Road and south of Monterey Road, US 101 consists of 4 (3 mixed-flow and 1 HOV) and 2 (both mixed-flow) lanes in each direction, respectively. The CMP specifies that a mixed-flow lane capacity of 2,300 vehicles per hour per lane (vphpl) be used for segments six lanes or wider in both directions and a capacity of 2,200 vphpl be used for segments with less than six lanes. Thus, the three lanes on US 101 near the project site have a capacity of 6,900 vph. Using the CMP's one-percent threshold, a freeway level of service analysis for US 101 would be needed if the project adds 69 or more peak-hour trips to the freeway segments near the site.

A review of the project trip assignment indicates that the maximum number of project trips in any direction on the subject freeway segments would be no more than 28 trips during the peak-hour. Since the number of project trips on US 101 are estimated to be less than the one-percent threshold, the project would not cause a significant increase in traffic on the freeway segments in the study area, and a freeway level of service analysis is not required.

The freeway capacity analysis is summarized on Table 9.

Table 9
Freeway Segment Capacity Evaluation

Freeway Segment	Direction	Peak Hour	# of Lanes[1]	Capacity[2] (vph)	1% of Capacity	Project Trips Added	LOS Analysis Required?
US 101 from Pacheco Pass Highway to Leavesley Road	NB	AM	3	6,900	69	12	No
	NB	PM	3	6,900	69	2	No
US 101 from Leavesley Road to Masten Avenue	NB	AM	3	6,900	69	4	No
	NB	PM	3	6,900	69	24	No
US 101 from Masten Avenue to Leavesley Road	SB	AM	3	6,900	69	28	No
	SB	PM	3	6,900	69	5	No
US 101 from Leavesley Road to Pacheco Pass Highway	SB	AM	3	6,900	69	2	No
	SB	PM	3	6,900	69	10	No

[1] Information obtained from the Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2018.
[2] Based on a capacity of 2,300 vehicles per hour per lane (vphpl) for freeway sections with six or more lanes, and 2,200 vphpl for freeway sections with four lanes.

5. Other Transportation Issues

This chapter presents an analysis of other transportation issues associated with the project, including:

- Site access and on-site circulation
- A review of the required on-site parking
- Freeway ramp analysis
- Potential impacts to bicycle, pedestrian, transit facilities

Unlike the level of service impact methodology, which is adopted by the City Council, the analyses in this chapter are based on professional judgment in accordance with the standards and methods employed by the traffic engineering community. Any recommended transportation improvements identified as part of the review may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

Project Site Access and On-Site Circulation

This analysis is based on a review of the project site plan, dated November 2023, produced by Ruggeri-Jenzen-Azar (RJA). The site plan is presented on Figure 2 of this report.

Site Access

As proposed, at buildout, access to the project site would be provided via two proposed driveways along Forest Street and one proposed driveway along Murray Avenue. All driveways would provide full access to the site.

Any discussion of Forest Street and Murray Avenue in the following sections refers to the segments of these streets north of Leavesley Road, which would be the segments that would provide access to the project site.

Access Roadway/Driveway Geometrics

Forest Street

Forest Street consists of a two-lane undivided roadway with a 48-foot curb-to-curb width along its entire segment north of Leavesley Road. Time-restricted parking between 5:00 AM and 7:00 PM is allowed along both sides of the street. Speed limit on Forest Street is posted as 35 miles per hour (mph).

The City of Gilroy 2040 General Plan identifies Forest Street as a local street. According to the City of Gilroy roadway cross-section standards, local non-residential streets should have a minimum curb-to-

curb width of 48 feet to accommodate two 12-foot travel lanes, two 5-foot bike lanes, and two 7-foot parking lanes. The available 48 feet of right-of-way currently provides two 16-foot travel lanes and two 8-foot parking lanes.

Murray Avenue

Currently, Murray Avenue is a two-lane undivided roadway with bike lanes along most of the street, including along the project site frontage. On-street parking is also available along at least one side of the street (no on-street parking is available along undeveloped parcels, including along the project site frontage, or along residential units). The width of Murray Avenue varies from approximately 42 feet curb-to-curb along the east project site frontage, widening to 64 feet just north of the project site and narrowing down to 50 feet then 37 feet as it approaches its intersection with Las Animas Avenue. South of the project site, Murray Avenue is approximately 54 feet wide (including bike lanes and on-street parking along both sides of the street) and it narrows down to approximately 44 feet (with on-street parking along one side of the street only) prior to its intersection with Leavesley Road. Just north of Leavesley Road, Murray Avenue is approximately 74 feet wide curb-to-curb and includes three approach lanes, one receiving lane, and one bike lane on each side of the road. Speed limit on Murray Avenue is posted as 35 mph.

The City of Gilroy 2040 General Plan identifies Murray Avenue as an arterial roadway. According to the City of Gilroy roadway cross-section guidelines, arterial roadways have a minimum curb-to-curb width of 64 feet (undivided arterials), adequate to accommodate four 13-foot travel lanes (two in each direction) and two 6-foot bike lanes.

The project site plan shows the widening of Murray Avenue, along the eastern project site frontage, to 64 feet curb-to-curb as part of the construction of the proposed Phase III of the project. The widening of Murray Avenue along the project site frontage would conform with the planned future widening of Murray Avenue to an arterial roadway. Until the entire segment of Murray Avenue can be widening to the required 64 feet for an arterial, the segment of Murray Avenue along the project site frontage must align with the segment to the north and must adequately transition to the narrower segment to the south.

Recommendation: The roadway improvements along the project frontage, including the transitions from the improved section of Murray Avenue to the existing narrower section to the south, should be designed to meet City of Gilroy design standards.

Project Driveways

The site plan shows all three proposed project site driveways to be 35 feet wide. Additionally, all three driveways provide approximately 30 to 50 feet of throat length, adequate length to store one to two vehicles at the driveway without affecting access to drive aisles and parking spaces.

The City of Gilroy *General Guidelines* document, dated August 18, 2014, specifies that commercial driveways should have a minimum and maximum approach width of 35 and 45 feet, respectively. As proposed, the project driveways would satisfy the 35-foot minimum width requirement for commercial driveways.

Recommendation: As part of the site design process, a review of turning templates within the site shall be conducted to determine the adequacy of the site access (driveway width) and on-site circulation (drive aisle width and turn radii) for truck traffic. This analysis should be conducted using turning templates for the largest truck allowed on Murray Avenue.

Operations at the Project Driveways

Forest Street

The proposed project driveways along Forest Street would be located approximately 160 feet from each other. Both driveways would be located a minimum of 250 feet away from intersections. Both driveways, however, would be located in close proximity (less than 30 feet) to existing/planned driveways on the opposite side of the street (west side of Forest Street).

The proposed project is projected to add approximately 44 trips (both inbound and outbound) during the AM peak hour to both project driveways along Forest Street. This represents an average of 1 vehicle accessing one of the two driveways on Forest Street every 1 to 2 minutes during the peak-hour.

Although off-set driveways are not ideal, because of the relatively low traffic volumes along Forest Street, and the expected minimal traffic activity at the adjacent site driveways that is typical of industrial land uses, traffic operations at the project site driveways are anticipated to be adequate with minimal to no delays. No standing queues along Forest Street are anticipated as most project traffic is estimated to make a right-turn into the site from northbound Forest Street.

Murray Avenue

The proposed project driveway along Murray Avenue would be located approximately 40 feet south of Gavilan Court. The distance between the driveway's centerline and Gavilan Court's centerline is less than 90 feet. Gavilan Court provides direct access to 15 residential units lining the street.

The proposed project is projected to add approximately 48 trips (both inbound and outbound) during the AM peak hour to the project driveway along Murray Avenue. This represents an average of 1 vehicle accessing this driveway every 1 to 2 minutes during the peak-hour. Approximately 15 peak-hour trips can be expected to be generated by the existing residential units along Gavilan Court.

The City of Gilroy *General Guidelines* document recommends that opposing streets intersecting any giving street (i.e., opposing legs of an intersection) should have their centerline directly opposite each other (aligned) or be separated by a minimum of 100 feet. This guideline is intended to consolidate conflicting movements at an intersection or opposing driveways to a single location, and although it references two opposing streets intersecting a roadway, can also be applied to driveways. However, since both the project site driveway and Gavilan Court would serve low traffic volumes (less than 50 peak-hour trips each), the off-set position of these two facilities would be less problematic.

Because of the relatively low project traffic volumes estimated to access the Murray Avenue driveway, in addition to the relative low traffic volumes along southbound Murray Avenue, traffic operations at the project site driveway are anticipated to be adequate.

Sight Distance

Adequate sight distance should be provided at the project driveways. Outbound traffic at the driveways must be able to see opposing traffic in order to safely complete a turn out of the site.

Currently, the posted speed limit along Murray Avenue and Forest Street is 35 mph. Once improved to its final width and arterial designation, Murray Avenue will have a design speed of 45 mph. According to the Caltrans *Highway Design Manual*, the minimum required stopping sight distance for a roadway with a design speed of 35 mph is 250 feet while a roadway with a design speed of 45 mph requires a minimum stopping sight distance of 360 feet.

The northerly project driveway along Forest Street is located approximately 250 feet south of Kishimura Drive and its line of sight extends beyond the required 250 feet to both the north (to Yamane Drive) and the south (Nagareda Drive). Similarly, the available sight distance from the southerly driveway extends beyond 250 feet to the north and south, past the intersections of Forest Street with Kishimura Drive and Nagareda Drive.

At the Murray Avenue driveway, just like with the Forest Street driveways, the straight nature of Murray Avenue would allow for a clear line of sight from the proposed driveway, providing more than the required 360 feet of sight distance to both the north and the south.

The sight distance from all project site driveways is beyond the 250 feet minimum distance requirement for Forest Street (local roadway with 35 mph design speed) and 360 feet minimum distance requirement for Murray Avenue (arterial roadway with 45 mph design speed). Therefore, sight distance from all project site driveways would be adequate.

Recommendation: The design of the project site shall ensure that design features, such as the landscaping, signage, and other physical features, along the project site frontage and at the project site driveways, would not interfere with the sight distance at the proposed site driveways.

On-Site Circulation

All proposed buildings and parking areas would be accessible from any of the three proposed driveways. All driveways would be a minimum 35 feet wide, meeting the City width requirement for industrial/commercial driveways.

The northly driveway on Forest Street would provide direct access to Buildings 1 and 3 loading areas and dock doors. The southerly driveway on Forest Street and the driveway on Murray Avenue would be connected by the center drive aisle that would run east/west between Buildings 1 and 3 and Building 2.

The drive aisles would wrap around the buildings with 90-degree and/or parallel parking along one or both sides of the drive aisle. All drive aisles are shown on the site plan to be 34-35 feet wide (two 17-foot lanes), with the exception of the middle east/west drive aisle, which is shown on the site plan to be 26 feet wide (two 13-foot lanes). The layout of the parking area would allow for continuous circulation throughout the site for all vehicles while the proposed drive aisle width would be adequate to allow access to 90-degree parking spaces (the City of Gilroy requires a minimum of 25 feet of drive aisle width to serve 90-degree parking spaces.)

Emergency Vehicle Access and Circulation

Project site driveways must be designed with adequate width to allow emergency vehicle access in and out of the site. Per City design guidelines, a fire access roadway greater than or equal to 20 feet in width is applicable to all commercial, industrial, and residential buildings. The fire access roadway should be provided within 150 feet of structures.

The site plan shows all drive aisles within the project site to be 26 to 35 feet wide. All project driveways would be 35 feet wide, providing the minimum width requirement for emergency vehicle access and circulation.

A fire truck circulation plan was prepared as part of the site plan design. The fire truck circulation plan, included in Appendix G, shows the travel path of a fire truck (Gilroy Ladder Truck, approximately 38 feet long) circulating in and out of the project site. The fire truck circulation plan shows that fire trucks would be able to access the site via any of the proposed driveways, circulate the site to all areas, and exit the site.

Truck Access and Circulation

Although the proposed project anticipates to generate only approximately 3 weekly large truck shipments under buildout conditions, if occupied by another allowable land use, the site could potentially generate a larger number of truck trips. For example, based on ITE trip generation rates, a 120,000 s.f. general light industrial project is estimated to generate approximately 30 daily truck trips. These truck trips would have to be able to access and circulate the site.

The City of Gilroy General Plan identifies Murray Avenue and Las Animas Avenue as planned truck routes connecting to both Monterey Road and Leavesley Road. Any site generated truck traffic would enter the site via Murray Avenue, either from the north via Las Animas Avenue or from the south via Leavesley Road. The project driveway on Murray Avenue, as well as on-site drive aisles, would have to be wide enough to adequately serve large trucks, whether they are 3 large trucks accessing the site weekly or 15+ large trucks per day.

Under project Phase I, when access to the project site would be provided via Forest Street only, all truck traffic must utilize Murray Avenue and Kishimura Drive to access the project site driveways on Forest Street. Additionally, all truck traffic shall be able to complete all turns at intersections and project driveways leading to the project site.

A waste-collector truck circulation plan was prepared as part of the site plan design. The waste-collector truck circulation plan shows the travel path of a 31-foot frontload Recology truck accessing the site via the northerly driveway on Forest Street, accessing the trash enclosures located next to the middle north/south drive aisle, and exiting the site via the southerly driveway on Forest Street.

Recommendation: The project must ensure that all trucks utilize Murray Avenue, the designated truck route, to access the project site, including under Phase I when project site access would be provided via Forest Street only. Under Phase I, trucks would utilize Murray Avenue and Kishimura Drive to access the project site via Forest Street.

Recommendation: As part of the site design process, a review of turning templates within the site shall be conducted to determine the adequacy of the site access (driveway width) and on-site circulation (drive aisle width and turn radii) for truck traffic. Additionally, turning templates shall be checked at intersections leading to the project site, such as Murray Avenue/Leavesley Road and the Kishimura Drive intersections with Forest Street and Murray Avenue, to verify the adequacy of these intersections to serve the anticipated project truck traffic. This analysis should be conducted using turning templates for the largest truck allowed on Murray Avenue. Required improvements for adequate truck travel to and from the project site shall be identified, if any.

Pedestrian Access and Circulation

Currently, most roadways fronting undeveloped and industrial use parcels in the vicinity of the project site have missing sidewalks, including along the project site frontages on Forest Street and Murray Avenue.

The project site is required to implement full site frontage improvements, including driveways, curb ramps, and sidewalks. City guidelines require development projects to install (or upgrade existing) pedestrian crossings and Americans with Disabilities Act (ADA)-compliant curb ramps at intersections. By implementing these requirements, additional pedestrian facilities are provided to improve the pedestrian network as part of the city's normal growth process.

Even with implementing sidewalks along the project site frontages on Forest Street and Murray Avenue, the existing pedestrian network in the project area would continue to be limited.

Within the site, continuous pedestrian pathways would be provided throughout the site, including adjacent to all buildings and parking areas. Marked pedestrian crossings with curb ramps are shown across the drive aisles connecting all proposed buildings, building entrances, and parking areas to the proposed sidewalks along Forest Street and Murray Avenue.

Recommendation: The design of the proposed sidewalk along the project site frontage on Forest Street and Murray Avenue must adhere to City of Gilroy design guidelines for sidewalks in industrial areas. Additionally, curb ramps must be ADA-compliant.

Parking

The projected parking demand for the proposed project was estimated based on the City of Gilroy parking requirements contained within the City of Gilroy Zoning Ordinance (Section 30, Article 31, Off-street parking requirements) and project information.

City of Gilroy Parking Requirements

The City of Gilroy parking code has the following off-street parking requirements for the proposed land use:

- Warehouses over 10,000 square feet of gross floor area: 1 stall per five 5,000 square feet of gross floor area; minimum 10 stalls per parcel
- General Office: 1 stall per 300 square feet of gross floor area
- Light Industrial: 1 stall per 350 square feet of gross floor area

Based on the above parking rates and the project size, the project would need to provide a total of 293 parking spaces (see Table 10).

Table 10
Parking Evaluation

Land Use	Size	Parking Rate[1]	Required Parking Spaces	Provided Parking Spaces[2]
Industrial	75,190 s.f.	1 stall per 350 s.f.	215	215
Warehouse	25,266 s.f.	1 stall per 5000 s.f.	10	10
Office	20,330 s.f.	1 stall per 300 s.f.	68	68
		Total:	**293**	**293**
		ADA Spaces[3]:	**7**	**7**

[1] Source: City of Gilroy Zoning Ordinance Section 30.31.
[2] Total number of parkings spaces proposed to be provided, as shown on project site plan dated December 13, 2024.
[3] The required number of Americans with Disabilities Act (ADA) parking spaces are based on the total number of parking spaces provided.

The site plan shows a total of 293 parking stalls would be provided on site. Of the provided on-site parking, the project proposes 7 ADA accessible stalls and 29 electric vehicle (EV) charging spaces.

The proposed number of parking spaces satisfy the number of parking spaces required per the City of Gilroy parking code.

Americans with Disabilities Act Requirements

The Americans with Disabilities Act (ADA) requires developments to provide one accessible parking space for every 25 parking spaces provided for the first 100 parking spaces, one additional parking space for every 50 parking spaces provided from 100 up to 200 total parking spaces, and one additional parking space for every 100 parking spaces provided from 100 up to 500 total parking spaces. Accessible parking spaces shall be at least 96 inches (8 feet) wide and shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance. In addition, one in every 8 accessible spaces, but no less than one, shall be served by an access aisle at least 96 inches wide and shall be designated as “van accessible”. It should be noted that the accessible parking spaces are not additional parking spaces but are part of the minimum parking spaces required.

The proposed project would provide a total of 293 on-site parking stalls, which would require 7 of those stalls to be accessible. The site plan shows a total of 7 accessible parking spaces are proposed. Therefore, the proposed project satisfies the minimum ADA parking requirements.

Freeway Ramp Analysis

A freeway ramp analysis was conducted for the US 101 interchange at Leavesley Road. The analysis is based on calculated volume-to-capacity (V/C) ratios and includes freeway ramps that provide access to/from the project site area.

Freeway Interchange Ramp Analysis Methodology

The freeway ramp analysis was performed to evaluate projected interchange operations with implementation of the proposed project and supplements the intersection level of service analysis at the freeway ramp intersections. The study freeway ramps are under the jurisdiction of Caltrans.

The analysis is based on calculated ramp capacity (volume-to-capacity (V/C) ratios) at the study freeway ramps. The correlation between V/C ratio and level of service for freeway ramps is shown in Table 11.

It should be noted that operating conditions at the study freeway ramps are presented for informational purposes only since Caltrans no longer utilizes level of service as the analysis metric to evaluate traffic impacts.

Freeway Ramp Volumes

Peak-hour ramp volumes were interpolated from turning-movement traffic volumes at the adjacent ramp intersections.

Freeway Ramp Capacities

The study freeway off-ramps consist of one lane at the point where they diverge from the freeway mainline and widen to multiple lanes at the off-ramp termini intersection. For this ramp analysis, the ramp capacity for the off-ramps is dictated by the number of lanes at the ramps’ diverging point from the freeway mainline, since this is the location that dictates how much traffic exits the freeway.

Table 11
Freeway Ramp Levels of Service Based on Volume-to-Capacity Ratio

Level of Service	V/C Ratio
A	Less than 0.600
B	0.600-0.699
C	0.700-0.799
D	0.800-0.899
E	0.900-0.999
F	1.000 and Greater

Source: Transportation Research Board, *2000 Highway Capacity Manual*. (Washington, D.C., 2000)

The study on-ramps consist of two lanes (one mixed-flow lane with a separate HOV lane or two mixed-flow lanes) and are controlled by a ramp meter during the peak hours in the peak commute direction only (northbound in the morning and southbound in the evening). All on-ramps studied narrow to a single lane after the ramp meter before the freeway merge point. For metered on-ramps, the constraint point is at the meter. For non-metered on-ramps, the constraint point is at the ramps' merging point with the freeway.

The typical capacity for a diagonal freeway ramp is 1,800 vehicles per hour per lane (vphpl). Loop ramps have a typical capacity of 1,600 vphpl. For metered on-ramps, the capacity depends on the ramp meter rate. Freeway ramp meter rates for the study on-ramps were assumed to be 900 vph (maximum allowable rate per ramp in Caltrans District 4).

Freeway Ramp Configurations

The *US 101 at Leavesley Road* interchange provides full-access to/from US 101 and includes the following ramps:

- US 101 southbound diagonal off-ramp (SB off-ramp) – this ramp is controlled by a traffic signal on Leavesley Road. Constraint point capacity = 1,800 vph.
- US 101 southbound diagonal on-ramp (SB on-ramp) – this ramp is controlled by a ramp meter during the PM peak hour only. Constraint point capacity is as follows:
  - AM peak hour (unmetered) – 1,800 vph
  - PM peak hour (metered) – 900 vph
- US 101 northbound diagonal off-ramp (NB off-ramp) – this ramp is controlled by a traffic signal on Leavesley Road. Constraint point capacity = 1,800 vph.
- US 101 northbound loop on-ramp (NB on-ramp) – this ramp is controlled by a ramp meter during the AM peak hour only. Constraint point capacity is as follows:
  - AM peak hour (metered) – 900 vph

- PM peak hour (unmetered) – 1,600 vph

Freeway Ramp Analysis Results

The results of the freeway ramp analysis are summarized in Table 12.

Based on the calculated V/C ratios, all of the study freeway ramps currently have adequate capacity and would continue to have adequate capacity to continue to serve the projected demand with the project. All study freeway ramps are projected to operate at LOS C or better under existing and background conditions, and at LOS D or better under background plus project conditions.

Bicycle Circulation

Various bicycle facilities exist in the vicinity of the project sites, including bike lanes (Class II bikeways) along Murray Avenue, Leavesley Road, and Monterey Road.

The Bicycle Transportation Plan contained in the City of Gilroy General Plan, the City of Gilroy Bicycle/Pedestrian Transportation Plan, and the City of Gilroy Trails Master Plan indicate that a variety of bicycle facilities are planned in the City of Gilroy, some of which would serve the study area.

Of the planned facilities, those relevant to the project include:

Planned Class I multi-use trails:

- Monterey Road Trail – this trail is a countywide route proposed to extend south from Morgan Hill to Buena Vista Avenue in Gilroy;
- Lions Creek Trail – along the Santa Clara Valley Water District channel, Lions Creek Trail would extend from west of Christopher High School to Day Road (East), parallel to (east of) Santa Teresa Boulevard and (north of) Tatum Avenue, to Church Street;
- Ronan Channel Trail – located along the Ronan Channel, this trail will link residential areas in the northwest area of the City with commercial and industrial areas to the east and southeast;
- Las Animas Trail – along Las Animas Avenue, this trail would extend east from Monterey Road to Murray Avenue.
- Miller Slough (Llagas Creek) – between the Sixth Street trailhead west of US 101 to Pacheco Pass Highway/SR 152.

Project's Effect on Bicycle Facilities

The proposed projects could increase the demand for bicycle facilities in the vicinity of the project site. The potential demand could be served by the various bicycle facilities available in the project site area, including the bike lanes along Murray Avenue (which would provide direct access to the project site), Leavesley Road, and Monterey Road. With implementation of the planned bicycle facilities, the exiting bicycle network would be enhanced providing additional connections and opportunities for project trips to be made by bicycle. Therefore, potential project-generated bicycle traffic could be accommodated by the existing/proposed bicycle facilities in the project area.

Although the City of Gilroy currently does not have requirements for bicycle parking, VTA recommends bicycle-parking rates for new developments in their *Bicycle Technical Guidelines*, revised in February 2022. The recommended bicycle parking rates are shown in Table 13 below. The standards distinguish between Class I (long-term) bicycle parking and Class II (short-term) bicycle parking.

Table 12
Freeway Ramps Analysis Results

Interchange/Ramp	Peak Hour	Ramp Type		Constraint Point[1]	Control	Capacity[2] (vph)	Existing Conditions Volume[3] (vph)	Existing Conditions V/C	Existing Conditions LOS[4]	Background Conditions Volume (vph)	Background Conditions V/C	Background Conditions LOS[4]	Background Plus Project Conditions Volume (vph)	Background Plus Project Conditions V/C	Background Plus Project Conditions LOS[4]
US 101 at Leavesley Road															
Southbound Off-Ramp	AM	Diagonal	Off	1	Signal	1,800	746	0.414	A	789	0.438	A	817	0.454	A
	PM				Signal	1,800	1,017	0.565	A	1,084	0.602	B	1,089	0.605	B
Southbound On-Ramp	AM	Diagonal	On	1	Meter-Off	1,800	461	0.256	A	514	0.286	A	516	0.287	A
	PM				Meter-On	900	639	0.710	C	712	0.791	C	722	0.802	**D**
Northbound Off-Ramp	AM	Diagonal	Off	1	Signal	1,800	646	0.359	A	704	0.391	A	716	0.398	A
	PM				Signal	1,800	628	0.349	A	695	0.386	A	697	0.387	A
Northbound On-Ramp	AM	Loop	On	1	Meter-On	900	470	0.522	A	517	0.574	A	521	0.579	A
	PM				Meter-Off	1,600	410	0.256	A	463	0.289	A	487	0.304	A

Notes:
1. The constraint point of a ramp is the location on the ramp that dictates how much traffic enters/exits the freeway. The constraint point determines the ramp's capacity.
   For freeway off-ramps, the constraint point is at the ramp's diverging point from the freeway mainline.
   For non-metered on-ramps, the constraint point is at the ramp's merging point with the freeway.
   For metered on-ramps, the constraint point is at the meter.
2. Typical capacities for diagonal and loop ramps are 1,800 and 1,600 vehicles per hour per lane (vphpl), respectively.
   The capacity for non-metered ramps is determined based on the number of lanes at the ramp's constraint point.
   The capacity for metered on-ramps was assumed to be 900 vph (Caltrans District 4 maximum meter rate).
3. Existing ramp volumes were interpolated from existing peak-hour turn-movement counts at the ramp intersections.
4. The ramp level of service corresponds to the calculated ramp V/C ratios.
Bold indicates a projected change in level of service from background to background plus project conditions.

Table 13
Recommended Bicycle Parking

Land Use	Size	Minimum Bicycle Parking Rate [1]		Recommended Bicycle Parking	
		Class I	Class II	Class I	Class II
Industrial	75,190 s.f.	1 per 10ksf[3]	1 per 5 ksf	8	16
Warehouse[2]	25,266 s.f.	1 per 10ksf[3]	1 per 5 ksf	3	6
Office	20,330 s.f.	1 per 4ksf	4 per building entrance[4]	6	12
			Total:	**17**	**34**

[1] Source: VTA's Bicycle Parking Supply Recommendations (*Bicycle Technical Guidelines*, February 2022), Industrial and Office building land uses.
[2] Listed as *Industrial* use in the Bicycle Technical Guidelines.
[3] Or 1 Class I bicycle parking per 20 employees.
[4] Assuming 1 main entrance for each of Buildings 1, 2, and 3.
Class I = long-term parking; Class II = short-term parking.

Based on the recommended VTA bicycle rates for the proposed land uses and the sizes of the projects, a minimum of 17 long-term and 34 short-term bicycle parking spaces are recommended for the project. However, it should be noted that the VTA guidelines do not specify parking rates for warehouse land use and only provide a rate for industrial sites/campus employment centers, which might not be a good representation of the proposed project. Additionally, the VTA also recommends that Cities with less than 2% bicycle commuter rate pro-rate the recommended bicycle parking rates.

Following recommendations from the California Green Building Standards Code (CALGreen) on bicycle parking requirements for non-residential structures, a new project anticipated to generate visitor traffic shall provide permanently anchored bicycle racks within 200 feet of the visitor's entrance for 5 percent of new visitor vehicular parking spaces being provided by the project, with a minimum of one two-bike capacity rack. Long-term secured bicycle parking shall be provided for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one long-term bicycle parking facility.

The project proposes to provide a total of 293 parking spaces. Additionally, the project anticipates a total of approximately 90 employees under the project buildout conditions. Based on the CALGreen bicycle parking requirements, the project must provide at least 5 long-term (90*5%) and 11 short-term ((296-90)*5%) bicycle parking spaces.

The project proposes to provide a total of 15 short-term bicycle parking spaces and 9 long-term bicycle parking spaces, adequately satisfying the CALGreen bicycle parking requirements.

Pedestrian Circulation

As noted within the existing pedestrian network discussion, most undeveloped and industrial use parcels in northern Gilroy have missing sidewalks, including in the immediate project site vicinity and along the project site frontage. Pedestrians traveling between the project site and other pedestrian destinations in the project area, including the bus stops along Leavesley and Monterey Roads, would have to walk along the edge of the road on Forest Street and Murray Avenue. The lack of a continuous pedestrian network in the project area could discourage walking to/from the project site.

Project's Effect on Pedestrian Facilities

It can be expected that new pedestrian traffic would be generated by the proposed project. The project is proposing to provide sidewalks along its frontages on Forest Street and Murray Avenue. However, the lack of sidewalks would continue to exist in the project area.

City standards require a minimum sidewalk width of 6 feet in industrial areas. They also require development projects to install (or upgrade existing) pedestrian crossings and ADA-compliant curb ramps at intersections.

Transit Service

The project site is served by Local Bus Route 85, which provides weekday and weekend service between the Gilroy Transit Center and Saint Louise Regional Hospital, with bus stops along Leavesley Road, east of Forest Street.

Additional transit services are provided at the Gilroy Transit Center, located in Downtown Gilroy, approximately 2 miles south of the project site.

Project's Effect on Transit Services

Although no reduction to the project trip generation estimates was applied due to transit services, it can be assumed that some of the project trips could be made by public transportation. Applying an estimated two percent transit mode share, which is probably the highest that could be expected for the project, to the project trips equates to approximately 2 new transit riders generated by the project added to the local transit service during the busiest peak-hour. The estimated number of new transit riders to the proposed project could be served by the existing bus line currently serving the project site area. However, the limited-service area covered by the existing transit route and the hour-long headways could discourage potential transit users from using public transportation to access the sites.

6. Conclusions

This transportation analysis has been prepared in accordance with the standards and methodologies set forth by the City of Gilroy, the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program's *Transportation Impact Guidelines* (October 2014), and by the California Environmental Quality Act (CEQA).

In adherence to SB 743, the effects and impacts to the transportation network as the result of the proposed project were evaluated based on VMT. In addition to the evaluation of VMT, this transportation study also includes level of service analysis to evaluate the effects of the project on the citywide transportation system, including intersections, freeway segments, and freeway ramps. The level of service analysis is presented to determine conformance to General Plan transportation goals and policies. The determination of project impacts per CEQA requirements is based solely on the VMT analysis.

CEQA VMT Evaluation Results

The results of the VMT evaluation using the VTA's VMT Evaluation Tool indicate that the existing average daily VMT for employment uses in the vicinity of the project site is 16.97 VMT per job, which is less than the existing citywide average VMT per job (18.79). The results also indicate that the proposed development is projected to generate average daily per-job VMT equal to 16.92, which although is lower than the citywide average VMT per job, would exceed the identified impact threshold of 15.97 VMT per job. Therefore, the proposed project would result in an impact on the transportation system based on OPR's 15% below existing average VMT impact threshold.

Per the VMT tool, the project's VMT per worker could be reduced to a maximum of 13.58 with the implementation of TDM strategies, including the following:

- TP04 – CTR Marketing and Education; **and**
- TP06 – Employee Parking Cash-Out; **and**
- TP07 – Subsidized Transit Program; **and**
- TP08 – Telecommunicating and Alternative Work Schedule; **and**
- TP13 – Ride-Sharing Programs.

The project applicant is proposing to implement a TDM program that will include telecommuting and alternative work schedule (TP08 above) and a ride-sharing program (TP13 above). Implementing these two TDM measures with a 10% or more participation rate each, the VMT tool calculates that the proposed project's VMT could be reduced to 15.75 miles per worker, reducing the project VMT below the identified impact threshold and thus reducing the project impact to less than significant.

Roadway Capacity Analysis Results

Intersection Level of Service Analysis Results

The results of the intersection level of service analysis indicate that all of the study intersections are projected to continue to operate at acceptable levels of service during the peak hours under both background plus project and cumulative plus project conditions. Therefore, the proposed project is not projected to have or contribute to an adverse effect on any of the study intersections.

Intersection Operations Analysis Results

The results of the queue analysis show that the proposed project would contribute to the projected queue length storage capacity deficiency for the following turn-movement:

4. Murray Avenue and Leavesley Road

Southbound Left-Turn Movement

Project Deficiency: PM peak-hour
Queue Length Deficiency: 1 vehicle (25 feet) per lane

Intersection Deficiencies and Possible Improvements

Level of Service Deficiencies

The proposed project is not projected to have an adverse effect on any of the study intersections.

Queue Storage Deficiencies

4. Murray Avenue and Leavesley Road

The projected queue storage deficiency for this turn-movement could be improved by extending the existing southbound left-turn lanes an additional 25 feet each. Extending the existing southbound left-turn pockets could be accomplished by restriping Murray Avenue, however, it could also require the removal of some on-street parking to continue to accommodate the existing lane configuration and bike lanes.

Freeway Segment Evaluation

A review of the project trip assignment indicates that the maximum number of project trips in any direction on the subject freeway segments would be no more than 28 trips during the peak-hour. Since the number of project trips on US 101 are estimated to be less than the one-percent threshold, the project would not cause a significant increase in traffic on the freeway segments in the study area, and a freeway level of service analysis is not required.

Appendix G Queueing Evaluation Report

Hexagon Transportation Consultants, Inc.

Memorandum

Date: October 3, 2024

To: Erin Freitas, City of Gilroy

From: Gicela Del Rio, T.E., Luis Descanzo

Subject: Queueing Evaluation for the Forest Street/Leavesley Road and Swanston Lane/Leavesley Road Intersections in Gilroy, California

Hexagon Transportation Consultants, Inc. has completed an intersection queueing evaluation for the intersections of Leavesley Road with Forest Street and Swanston Lane in Gilroy, California (see Figure 1). This analysis is in connection with recommended improvements for the proposed Heatwave Industrial Development located at 8875 Murray Avenue, identified in the project's June 2024 Transportation Analysis (TA) report. The June 2024 TA report identifies that with the addition of the project traffic, the existing queue storage capacity for the eastbound left-turn movement at the intersection of Forest Street/Leavesley Road would be deficient by approximately 25 feet (1 vehicle). Due to the back-to-back left-turn pockets with the upstream intersection at Swanston Lane, the eastbound left-turn pocket at Forest Street cannot be extended an additional 25 feet without affecting the length of the westbound left-turn pocket at Swanston Lane. The TA report identifies possible improvements that would provide the additional queue storage capacity, one of which is further investigated in this analysis. It should also be noted that the queue analysis results and recommendations presented in the TA report are based on planning-level calculations that should be further investigated prior to their implementation.

The analysis presented in this report investigates the feasibility of the following recommended improvement:

Potential Improvement 1: Reduce the length of the existing westbound left-turn pocket at Swanston Lane (approximately 100 feet long) by 25 feet. This will allow the extension of the eastbound left-turn pocket at Forest Street the required 25 feet. This improvement would not affect other turn-pockets or result in traffic displacement. However, the length of the westbound left-turn pocket at Swanston Lane would have to be evaluated to ensure adequate queue storage capacity would continue to be provided with the reduced length.

This queuing evaluation was conducted for the following turn-movements:

- Eastbound left-turn at Forest Street and Leavesley Road
- Westbound left-turn at Swanston Lane and Leavesley Road

Queueing Evaluation Methodology

The queuing evaluation presented in the 2024 TA report was completed using a Poisson probability distribution, which estimates the probability of "n" vehicles in the queue based on the total number of vehicles in the queue and the average number of vehicles in the queue (vehicles per hour/signal cycles

Figure 1
Location of Study Intersections



per hour). This queue estimate provides a planning-level assessment (based on volume and delay) for identifying locations where potential queue deficiencies may arise in the future.

For this analysis, the queueing assessment was completed using *Synchro* software. As opposed to the queue analysis presented in the TA report, Synchro utilizes existing intersection parameters, including signal phase timings (based on field observations) and traffic volumes to calculate delays and queue lengths for all movements of the intersection, providing a more accurate estimate of the intersection's 95th-percentile queue lengths. In addition, existing queue lengths were observed during the peak hours at both study locations to confirm whether the maximum queue length results obtained from Synchro accurately represent existing traffic conditions at the study locations. Field observations were conducted on September 17, 2024.

Intersection volumes at Forest Street/Leavesley Road under existing, background, and background plus project conditions were obtained from the project's 2024 TA report. At the intersection of Swanston Lane/Leavesley Road, new peak-hour traffic counts were collected on September 17, 2024, while volumes under background and background plus project conditions were estimated using approved and project trip information derived from the project's 2024 TA report.

Peak-hour volume sheets and *Synchro* calculation sheets are included in the Appendix.

Queueing Evaluation Results

Forest Street and Leavesley Road (Eastbound Left-Turn)

The queueing evaluation results for the eastbound left-turn movement at Forest Street and Leavesley Road are presented in Table 1. Using *Synchro* software, existing queue lengths are estimated to be approximately 75 feet during both AM and PM peak hours. Field observations confirm that maximum queue lengths are approximately 75 feet during both peak hours. The existing queue lengths presented in the 2024 TA report estimate four vehicles (100 feet) in the queue for this movement during both peak hours. These results suggest that the Poisson probability distribution method used to estimate the queue length in the TA report provides a conservative result while the queue length calculated by *Synchro* may be a more accurate representation of the existing peak-hour queue lengths.

Synchro queue length estimates under background and background plus project conditions indicate a maximum length of 100 feet (4 vehicles) during the AM peak-hour and 75 feet (3 vehicles) during the PM peak-hour. The eastbound left-turn pocket has a storage capacity of 125 feet (5 vehicles). Therefore, based on these new calculations, it can be concluded that the existing eastbound left-turn pocket at the intersection of Forest Street and Leavesley Road would have adequate storage capacity to serve the estimated queue length under project conditions.

For comparison purposes, the queue length calculations using the Poisson probability distribution were adjusted to reflect the observed queue length under existing conditions. With the adjusted baseline, the queue length for this movement under background plus project conditions is estimated to be 100 and 75 feet during the AM and PM peak hours, respectively.

Swanston Lane and Leavesley Road (Westbound Left-Turn)

The westbound left-turn movement along Leavesley Road at Swanston Lane also was evaluated. The maximum queue length for this movement was evaluated to determine if the existing pocket length could be reduced, if needed, to provide the additional queue storage capacity required for the

Table 1
Eastbound Left-Turn Queue Length Estimates (Forest/Leavesley)

Scenario	95th-Percentile Queue Length (ft)			
	Transportation Analysis[1]	Field Observation[2]	Synchro[3]	Adjusted Poisson Prob Dist [4]
Existing				
AM	100	75	75	75
PM	100	75	75	75
Background				
AM	125	--	100	100
PM	100	--	75	75
Background Plus Project				
AM	**150**	--	100	100
PM	100	--	75	75

Notes:

[1] Source: *Heatwave Industrial Development Transportation Analysis* (June 10, 2024)
Vehicle queue calculated using the Poisson probability distribution.

[2] Peak-hour field observations conducted on September 17, 2024.

[3] Evaluated using *Synchro (Version 12)* which uses Highway Capacity Manual (HCM) methodology.
Round to the nearest car-length (25 feet).

[4] Evaluated using the Poisson probability distribution and adjusted existing conditions queue length.

eastbound left-turn movement at Forest Street. The westbound left-turn movement at Swanston Lane is served by a 100-foot turn pocket and is not signalized (see Figure 1). The results of the evaluation are shown in Table 2.

Using *Synchro* software, existing queue lengths are estimated to be approximately 25 feet during both peak hours. Field observations indicate that maximum queue lengths are approximately 25 feet during both peak-hours.

Synchro queue length estimates under background and background plus project conditions indicate a maximum queue length of 25 feet (1 vehicle) during the AM and PM peak hours. The westbound left-turn pocket has a storage capacity of 100 feet (4 vehicles). Therefore, it can be concluded that the existing westbound left-turn pocket at Swanston Lane has adequate queue storage capacity to serve the projected queue length under project conditions. It can also be concluded that, based on these results, the westbound left-turn pocket could be reduced by up to 50 feet (the existing turn pocket should provide queue storage capacity for a minimum of 2 vehicles) without causing adverse effects to traffic operations along Leavesley Road.

Table 2
Westbound Left-Turn Queue Length Estimates (Swanston/Leavesley)

Scenario	95th-Percentile Queue Length (ft)	
	Field Observation[1]	Synchro[2]
Existing		
AM	25	25
PM	25	25
Background		
AM	--	25
PM	--	25
Background Plus Project		
AM	--	25
PM	--	25

Notes:

[1] Peak-hour field observations conducted on September 17, 2024.

[2] Evaluated using *Synchro (Version 12)* which uses Highway Capacity Manual (HCM) methodology. Round to the nearest car-length (25 feet).

Conclusions

Based on the results of the queueing evaluation presented in this report, it can be concluded that the existing eastbound left-turn pocket at Forest Street and Leavesley Road would have adequate storage capacity to serve the projected queue length under project conditions.

It can also be concluded that the existing westbound left-turn pocket at Swanston Lane and Leavesley Road currently provides and would continue to provide excess queue storage capacity under project conditions, allowing this turn-pocket to be reduced if necessary.

RESOLUTION NO. 2025-##

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF GILROY APPROVING ARCHITECTURAL AND SITE REVIEW FOR THREE 121,000+/- SQUARE-FOOT TOTAL LIGHT INDUSTRIAL WAREHOUSE BUILDINGS ON AN APPROXIMATE 7.29-ACRE UNDEVELOPED SITE LOCATED AT 8875 MURRAY AVENUE, APN: 835-01-059 (FILE NUMBER AS 23-06)

WHEREAS, on May 23, 2023, Justin Hertel representing Highly Visual LLC, submitted an application requesting architectural and site review of three new light warehouse buildings for a total of 121,000+/- square-feet on property located within the M1 Limited Industrial, Murray-Las Animas Avenue Overlay Combining zoning district (APN: 835-01-059); and

WHEREAS, on January 12, 2025, the application was accepted as complete for processing; and

WHEREAS, the project has been determined to be exempt from further environmental review because it is consistent with the development density established in the General Plan and is within the scope of the General Plan and General Plan EIR. No further CEQA documentation is required under section 15183; and

WHEREAS, on May 1, 2025, the Planning Commission held a duly noticed public meeting on the project, at which time the Planning Commission received and considered the staff report and all evidence received on the project, including written and oral public testimony; and

WHEREAS, the location and custodian of the documents or other materials which constitute the record of proceedings on this project is the Community Development Department, Planning Division.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of Gilroy hereby grants approval of Architectural and Site Review AS 23-06 based on the following findings made pursuant to Gilroy City Code section 30.50.43 (Scope of Review) and subject to the conditions in Exhibit A:

A. The proposed development is consistent with the intent of the goals and policies of the City of Gilroy 2040 General Plan (adopted November 2020) given the light industrial development is anticipated within the Industrial Park land use designation and is in substantial conformance with the applicable goals and policies including LU1.1, LU5.1, LU5.3, LU5.4, LU 8.12, LU 8.13, M 1.8, M.3.2, M3.9, EP 2.2 as it results in orderly and attractive in-fill industrial development that will provide additional employment opportunities within the city; proposes durable materials and a color scheme that is compatible with the architecture and surrounding buildings; provides landscaping in compliance with standards; provides lighting shielded to prevent glare; and provides public sidewalks and bicycle facilities;

B. The development as proposed and conditioned is consistent with the Zoning Ordinance given that it involves development of a legal lot in compliance with all applicable requirements of the M1 zoning district land use tables and site and building standards;

C. The proposed Architectural and Site Review request is consistent with the Industrial Design Guidelines given that the in-fill project provides vertical and horizontal articulation of the building with varied colors and materials that complement the architecture; landscaping is provided for all yard areas which include trees on the street frontage and side yard areas; adequate parking, access and fire lanes are provided; loading and unloading areas are available on-site; and screened trash enclosures for waste materials is provided;

D. The Architectural and Site Review request is consistent with the intent of the goals and policies of the Murray-Las Animas Avenue Overlay Combining District Policy given that the project provides landscaping that enhances the site appearance, and attractive architecture and building materials, consistent with the requirements of the policy;

E. Public utilities and infrastructure improvements needed to serve the proposed project are available to serve the site form the existing public streets; and

F. There will be no significant environmental impacts as a result of this project, which qualifies for an exemption from the California Environmental Quality Act (CEQA) because it is consistent with the development density established in the General Plan and is within the scope of the General Plan and General plan EIR. No further CEQA documentation is required under section 15183. The project will require payment of any required habitat fees in compliance with the Santa Clara Valley Habitat Plan prior to issuance of a building permit.

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PASSED AND ADOPTED this 1st day of May 2025 by the following roll call vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST:

APPROVED:

Sharon Goei, Secretary
Community Development Director

Manny Bhandal, Chairperson

Attachment: Exhibit A (Conditions of Approval)

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EXHIBIT A
AS 23-06
8875 Murray Avenue

PLANNING CONDITIONS

The following GENERAL conditions authorize specific terms of the project ENTITLEMENT(S).

1.	**APPROVED PROJECT:** The approval for Architectural and Site Review Permit AS 23-06 is granted to construct three light industrial warehouse buildings and site improvements located on Assessor Parcel No. 835-01-059, as shown on Project Plans stamped approved in the Planning Division project file, as follows: a. Architectural Plans prepared by E2 Architecture, dated 12/11/24, and consisting of 24 sheets. b. Civil Plans prepared by RJA, dated 12/13/24, and consisting of 14 sheets. c. Landscape Plans prepared by Aitken Associates, dated 11/12/24, and consisting of 10 sheets. d. Joint Trench and Photometric Plans prepared by Vision Utilities Partners, dated 10/28/24, and consisting of 11 sheets. Build-out of the project shall conform to the plans, except as otherwise specified in these conditions. Any future adjustment or modification to the plans, including any changes made at time of building permit submittal, shall be considered by the Community Development Director or designee, may require separate discretionary approval, and shall conform to all City, State, and Federal requirements, including subsequent City Code requirements or policies adopted by City Council.
2.	**PERMIT EXPIRATION:** The expiration date of this approval is one year from the decision date, May 1, 2025. If any development for which architectural and site approval has been granted has not obtained building permits within one (1) year from the date of notification of approval, the approval shall be deemed automatically revoked. Upon application, an extension of time may be granted by the Community Development Director or designee. Should Developer intend to request an extension to the permit expiration date, Developer must submit to the Planning Division a written application with applicable fees prior to the expiration date. Only timely requests may be considered pursuant to the City Code.
3.	**COMPLIANCE WITH CONDITIONS:** If Developer, owner or tenant fails to comply with any of the conditions of this permit, the Developer, owner or tenant shall be subject to permit revocation or enforcement actions pursuant to the City Code. All

	costs associated with any such actions shall be the responsibility of Developer, owner or tenant.
4.	**INDEMNIFICATION:** Developer agrees, as a condition of permit approval, at Developer's own expense, to defend, indemnify, and hold harmless the City of Gilroy ("the City") and its officers, contractors, consultants, attorneys, employees and agents from any and all claim(s), action(s) or proceeding(s) brought against the City or its officers, contractors, consultants, attorneys, employees, or agents to challenge, attack, set aside, void or annul the approval of this resolution or any condition attached thereto or any proceedings, acts or determinations taken, including actions taken under the California Environmental Quality Act of 1970, as amended, done or made prior to the approval of such resolution that were part of the approval process.
5.	**SIGNS:** No signs are approved as part of this application. Prior to issuance of a sign permit for this site, Developer shall propose well-designed, quality signs that comply with the allowances of the City Code and are to the satisfaction of the Community Development Director or designee.
6.	**SIGNAGE:** All signage advertising the development project or components thereof, including individual tenants or subdivisions, shall be installed or maintained onsite or offsite as allowed and in conformance with an approved sign permit.
7.	**WATER LIMITATIONS:** Developer shall be advised that the approval is subject to the drought emergencies provisions pursuant to the Gilroy City Code Chapter 27.98.
8.	**MULTI-PHASE DEVELOPMENT:** Construction of the project shall be done in multiple phases, as described below and shown in the approved plan set: a. Phase 1: Construction of Building 1, two driveways and frontage improvements on Forest Street, temporary internal driveway to the northern property with EVA access, parking and infrastructure improvements, Duration:1 year, Sheet C14 b. Phase 2: Construction of Building 2, parking and infrastructure improvements, Duration: 1 year, Sheet C14 c. Phase 3: Construction of Building 3, driveway and frontage improvements on Murray Avenue, Duration: 1 year, Sheet C14
9.	**TRANSPORTATION DEMAND MANAGEMENT (TDM) PROGRAM:** The project will comply with the Transportation Demand Management (TDM) Program to reduce vehicle miles travelled identified in the Transportation Analysis prepared by Hexagon Transportation Consultants, Inc. dated February 21, 2025, including the following:

	• TP08 - Telecommunicating and Alternative Work Schedule: Allow and encourage employees to shift work schedules such that employees work slightly longer days resulting in fewer days in the office in a one-week or two-week period. • TP13 - Ride-Sharing Programs: Organize a program to match individuals interested in carpooling who have similar commute patterns.
The following conditions shall be addressed prior to issuance of any BUILDING PERMIT, GRADING PERMIT or IMPROVEMENT PLAN, whichever is first issued, or as otherwise specified in the condition.	
10.	**CONDITIONS OF APPROVAL:** Developer shall include a plan sheet(s) that includes a reproduction of all conditions of approval of this permit, as adopted by the decision-maker.
11.	**CERTIFICATION OF BUILDING PERMIT PLANS:** The project architect shall certify in writing that the architectural design shown in the building permit plans match the plans approved by the Community Development Director or designee/Planning Commission/City Council. Any changes must be clearly noted. The project architect shall also certify that the structural plans are consistent with the architectural plans. In the event of a discrepancy between the structural plans and the architectural plans, the architectural plans shall take precedence, and revised structural drawings shall be submitted to the Building Division.
12.	**COLORS AND MATERIALS:** Plans submitted for building permit applications shall include all exterior building materials and colors, including product and finish manufacturer name, color name and number, and surface finish type (e.g. stucco with sand finish, plaster with smooth finish) to be used in construction.
13.	**SUBSEQUENT ENTITLEMENTS:** Developer shall obtain necessary permits prior to initiating any new construction or modifications authorized under this approval, including but not limited to temporary construction trailers, temporary staging areas, model home sales offices, advertising signs of any kind, exterior and interior modifications. Developer shall pay all requisite fees in effect at the time of plan submittal and/or issuance, as applicable.
14.	**LIGHTING PLAN:** Developer shall submit a lighting plan with the application for building permit. This plan should include photometric contours, manufacturer's specifications on the fixtures, and mounting heights. Parking lot and exterior light fixtures shall be full cutoff type so that lighting is directed downward only, minimizing glare and light pollution, and shall not cast light on any adjacent property or roadway. Developer shall recess or conceal any under-canopy lighting elements, so they are not directly visible from any public area. The lighting plan must be approved by the Community Development Director or designee.

15.	**LANDSCAPE AND LIGHTING PLAN:** Prior to issuance of grading permits, Developer shall submit a combined landscape and lighting plan to verify all project onsite lighting shall be of a type and in a location that does not constitute a hazard to vehicular traffic, either on private property or on public property, including streets. Such lighting shall not conflict with drainage plans, landscape plans, tree locations, parking spaces, or any other such land use concerns.
16.	**HABITAT PERMIT:** Concurrent with or prior to an application for a grading permit, Developer shall obtain a final Habitat Permit approval and submit payment of mitigation fees. The grading permit will be issued only after approval of the Habitat Plan permit and payment of assessed fees. The applicant shall be responsible for all costs associated with review and issuance of the permit, including application processing fee and consultant review deposit. Applications for Private Projects shall be submitted electronically through the agency website. See the Santa Clara Valley Habitat Agency website: https://www.scv-habitatagency.org for more information.
17.	**WINDOWS:** The manufacturer type, design, material, and installation details for all windows within the project shall be specified in the construction drawings for review and approval by the Community Development Director or designee.
18.	**FENCES AND WALLS:** All fencing and walls are to be shown on construction drawings submitted for building permit review and comply Article XXXIV. The design and location must comply with all setback and height requirements.
19.	**BICYCLE RACKS OR STORAGE:** Developer shall provide bicycle racks and lockers in compliance with Building Division and/or Engineering conditions of approval. Racks shall be an "inverted U," or equivalent as approved by the Community Development Director and must secure the frame and both wheels. Racks should be located near the building entrance (i.e., within constant visual range) unless it is demonstrated that they create a public hazard or locating them there is otherwise infeasible. If space is unavailable near building entrances, the racks must be designed so that the lock is protected from physical assault.
20.	**LOADING ZONES:** Prior to certificate of occupancy, Developer shall stripe all loading zones, whether situated outside or inside a structure, for loading and unloading activities only and shall post a sign prohibiting storage or other non-loading activity within the designated loading zone.
21.	**TRASH ENCLOSURE:** Prior to building permit issuance, details of an opaque screen trash enclosure are to be shown on construction drawings and approved by the Community Development Director or designee. The trash enclosure should match the architectural design, color, and materials of the primary structure.

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22.	**SCREENING OF APPERTUNANCES:** Developer shall show on construction drawings details of screening for all exterior equipment, including but not limited to mechanical equipment, post indicator valves, backflow prevention devices, utility meters, mailboxes and address directories, etc. 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, berms, and landscaping. In addition to the above, backflow preventers shall be painted dark green, except the fire connection which shall be painted yellow. The final placement and design of these items shall be to the satisfaction of the Community Development Director or designee.
23.	**ROOFTOP EQUIPMENT:** Developer shall ensure rooftop mechanical equipment, including but not limited to heating and cooling systems, plumbing vents, ducts, antennas and other appurtenances protruding from the roof are recessed or otherwise screened from public street view. Details of the roof equipment and roof screens shall be included in the building permit drawings and approved by the Community Development Director or designee.
24.	**ROOF AND BUILDING DRAINPIPES:** Developer shall install all roof and building drainpipes and downspouts inside building elements. These items shall not be visible on any exterior building elevations.
25.	**RAIN GUTTERS AND DOWNSPOUTS:** Developer shall install all roof and building rain gutters and downspouts, vents, and flashing to integrate as closely as possible with building design elements, including matching the color of the adjacent surface.
26.	**LANDSCAPING:** Prior to building permit issuance, proposed landscaping shall be shown on the site plan and submitted with the construction drawings for review and approval by the Community Development Director or designee.
27.	**HERITAGE TREES: IMPLEMENTATION:** Permits to remove, relocate, or otherwise alter Heritage trees cannot be implemented until a project building permit is secured and the project is pursued.
28.	**LANDSCAPE MULCH:** As part of the Landscape Plan submittal, Developer shall clarify a minimum three (3) inch layer of mulch to be applied on all exposed soil surfaces, as required by the State Model Water Efficient Landscape Ordinance (MWELO).
29.	**INVASIVE PLANT SPECIES:** Developer shall not include any invasive plant species, such as those listed by the California Invasive Plant Council.

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30.	**LANDSCAPE DOCUMENTATION PACKAGE:** Prior to issuance of building permits or initiation of the proposed use, whichever comes first, Developer shall submit a completed Landscape Documentation Package, including a soil analysis/management report along with appropriate application review fees, to the Community Development Department, including required documentation for compliance verification, and obtain approval of such plans.
31.	**IRRIGATION SENSORS:** Prior to issuance of building permits, developer shall (as part of the irrigation system) indicate on construction drawings sensors that suspend or alter irrigation operation during unfavorable weather conditions (e.g. automatic rain shut-off devices).
32.	**PRECONSTRUCTION NESTING BIRD SURVEY:** To the extent practicable, vegetation removal and construction activities shall be performed from September 1 through January 31 to avoid the general nesting period for birds. If construction or vegetation removal cannot be performed during this period, preconstruction surveys will be performed no more than two days prior to construction activities to locate any active nests as follows: "The Developer shall be responsible for the retention of a qualified biologist to conduct a survey of the project site and surrounding 500' for active nests: with particular emphasis on nests of migratory birds: if construction (including site preparation) will begin during the bird nesting season, from February 1 through August 31. If active nests are observed on either the project site or the surrounding area, the project applicant, in coordination with the appropriate City staff, shall establish no-disturbance buffer zones around the nests, with the size to be determined in consultation with the California Department of Fish and Wildlife (usually 100' for perching birds and 300' for raptors). The no-disturbance buffer will remain in place until the biologist determines the nest is no longer active or the nesting season ends. If construction ceases for two days or more and then resumes during the nesting season, an additional survey will be necessary to avoid impacts on active bird nests that may be present."
The following conditions shall be met prior to RELEASE OF UTILITIES, FINAL INSPECTION, or ISSUANCE OF A CERTIFICATE OF OCCUPANCY, whichever occurs first, or as otherwise specified in the condition.	
33.	**ON- AND OFF-SITE IMPROVEMENTS:** Prior to occupancy, Developer shall complete all required offsite and onsite improvements related to the project, including structures, paving, and landscaping, unless otherwise allowed by the Community Development Director, or stated in these conditions.
34.	**LANDSCAPE AND IRRIGATION INSTALLATION:** Prior to issuance of certificate of occupancy or building permit final sign-off, Developer shall complete installation of all landscaping and irrigation in accordance with the approved plans.

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35.	**LANDSCAPE CERTIFICATE OF COMPLETION:** Prior to occupancy or initiation of the proposed use, or completion of each build-out phase of development, Developer shall submit a signed Certificate of Completion, along with all necessary supporting documentation and payment to the Community Development Department, for compliance verification of the landscape installation. Developer is required under the Model Water Efficient Landscape Ordinance (MWELO) to provide a copy of the approved Certificate of Completion to the property owner or his or her designee.
36.	**PLANNING INSPECTION:** Inspections by the Planning Division will be required for the application of exterior materials and final completion of each structure to ensure that the construction matches the approved plans.
37.	**SITE CLEAN-UP:** Prior to issuance of a certificate of occupancy, Developer shall remove all construction materials, debris, and vehicles from the subject property.
The following conditions shall be complied with AT ALL TIMES DURING THE CONSTRUCTION PHASE OF THE PROJECT, or as otherwise specified in the condition.	
38.	**CONSTRUCTION RELATED NOISE:** To minimize potential construction-related impacts to noise, Developer shall include the following language on any grading, site work, and construction plans issued for the subject site "During earth-moving, grading, and construction activities, Developer shall implement the following measures at the construction site: a. Limit construction activity to weekdays between 7:00 a.m. and 7:00 p.m., and on Saturdays between 9:00 a.m. and 7:00 p.m. Construction noise is prohibited on Sundays and City-observed holidays; b. Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area; c. Construct sound walls or other noise reduction measures prior to developing the project site; d. Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment; e. Prohibit all unnecessary idling of internal combustion engines; f. Utilize "quiet" models of air compressors and other stationary noise sources where technology exists; and g. Designate a "disturbance coordinator' who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g. bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem."

39.	**CONSTRUCTION RELATED AIR QUALITY:** To minimize potential construction-related impacts to air quality, Developer shall require all construction contractors to implement the basic construction mitigation measures recommended by the Bay Area Air Quality Management District (BAAQMD) and shall include the following language on any grading, site work, and construction plans issued for the project site "During earth-moving, grading, and construction activities, Developer shall implement the following basic control measures at the construction site: a. All exposed surfaces (e.g. parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day; b. All haul trucks transporting soil, sand, or other loose material onsite or offsite shall be covered; c. All visible mud or dirt tracked 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; d. All vehicle speeds on unpaved roads or pathways shall be limited to 15 miles per hour; e. 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; f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points; g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator; and h. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations."
40.	**DISCOVERY OF CONTAMINATED SOILS:** If contaminated soils are discovered, the Developer will ensure the contractor employs engineering controls and Best Management Practices (BMPs) to minimize human exposure to potential contaminants. Engineering controls and construction BMPs will include, but not be limited to, the following: a. Contractor employees working on-site will be certified in OSHA's 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training; b. Contractor will stockpile soil during development activities to allow for proper characterization and evaluation of disposal options;

	c. Contractor will monitor area around construction site for fugitive vapor emissions with appropriate filed screening instrumentation; d. Contractor will water/mist soil as it is being excavated and loaded onto transportation trucks; e. Contractor will place any stockpiled soil in areas shielded from prevailing winds; and f. Contractor will cover the bottom of excavated areas with sheeting when work is not being performed.
41.	**DISCOVERY OF PALEONTOLOGICAL RESOURCES:** In the event that a fossil is discovered during construction of the project, excavations within 50' of the find shall be temporarily halted or delayed until the discovery is examined by a qualified paleontologist, in accordance with the Society of Vertebrate Paleontology standards. The City shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If the find is determined to be significant and if avoidance is not feasible, the paleontologist shall design and carry out a data recovery plan consistent with the Society of Vertebrate Paleontology standards.
42.	**DISCOVERY OF ARCHAEOLOGICAL RESOURCES:** In the event of an accidental discovery of archaeological resources during grading or construction activities, Developer shall include the following language on any grading, site work, and construction plans issued for the project site: "If archaeological or cultural resources are discovered during earth-moving, grading, or construction activities, all work shall be halted within at least 50 meters (165 feet) of the find and the area shall be staked off immediately. The monitoring professional archaeologist, if one is onsite, shall be notified and evaluate the find. If a monitoring professional archaeologist is not onsite, the City shall be notified immediately and a qualified professional archaeologist shall be retained (at Developer's expense) to evaluate the find and report to the City. If the find is determined to be significant, appropriate mitigation measures shall be formulated by the professional archaeologist and implemented by the responsible party."
43.	**DISCOVERY OF HUMAN REMAINS:** In the event of an accidental discovery or recognition of any human remains, Developer shall include the following language in all grading, site work, and construction plans: "If human remains are found during earth-moving, grading, or construction activities, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of Santa Clara County is contacted to determine that no investigation of the cause of death is required. If the coroner determines the remains to be Native American the coroner shall contact the Native American Heritage Commission within 24 hours. The Native American

	Heritage Commission shall identify the person or persons it believes to be the most likely descendent (MLD) from the deceased Native American. The MLD may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code Section 5097.98. The landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if: a) the Native American Heritage Commission is unable to identify a MLD or the MLD failed to make a recommendation within 24 hours after being notified by the commission; b) the descendent identified fails to make a recommendation; or c) the landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner."
The following conditions shall be complied with AT ALL TIMES that the use permitted by this entitlement occupies the premises.	
44.	**ADDITIONS, ACCESSORY BUILDINGS, AND PATIO COVERS:** Building additions and patio covers shall conform to the zoning district as applicable.
45.	**LANDSCAPE MAINTENANCE:** For the life of the project, Developer shall maintain landscaping and irrigation in accordance with the approved plans, except as otherwise permitted or required by law. Significant changes to the number, placement, and selection of plant species may require a modification to this approval, to be determined by the Community Development Director or designee.
PUBLIC WORKS CONDITIONS OF APPROVAL	
The following conditions authorize the specific terms and are a part of the project ENTITLEMENT(S); and which shall be addressed on the construction plans submitted for any BUILDING PERMIT, GRADING PERMIT or SUPERSTRUCTURE, and shall be satisfied prior to issuance of whichever permit is issued first, or if another deadline is specified in a condition, at that time.	
46.	**PAYMENT OF PUBLIC WORKS PLAN CHECK AND INSPECTION FEE**: At the time of first improvement plan submittal, the applicant shall submit a $10,000.00 (Ten thousand dollar) initial deposit for project plan check and construction inspection. This deposit will be credited/accounted toward final plan check and inspection fee for the project. In addition, the applicant shall submit a detailed project cost estimate prepared by the project engineer, to approval of the City Engineer, with the initial project plan submittal. The cost estimate shall be broken out into on-site and off-site improvements. Prior to plan approval, the applicant shall pay 100% of the plan check and inspection fee based on the approved project

	cost estimate. Public Works will not sign-off on the issuance of the project building permit without full payment of this plan check and inspection fee. *(PUBLIC WORKS)*.
47.	**PLAN SUBMITTAL**: The Engineering project plans shall be submitted, in full, with the building permit plans. Improvement plans are required for both on-site and off-site improvements, and the improvement plan set cover sheet shall include an index referencing on-site and off-site improvements. All improvements shall be designed and constructed in accordance with the City of Gilroy Municipal Code and Standard Specifications and Details, and are subject to all laws of the City of Gilroy by reference. The improvement plans shall include all civil project plans including, but not limited to, site plans, grading plans, utility plans, joint trench, off-site plans, lighting (photometric) plans, and landscaping plans within the public right-of-way. The plan shall clearly identify both public and private utilities. The improvement plans shall be submitted with the Public Works Engineering submittal checklist provided by the City, and available on the City website. In addition: a. A complete set of improvement plans shall consist of Civil site design, landscape site design, Electrical, Joint Trench. Any walls or structural features part of the landscape design shall also be included; b. Improvement plans are required for both on-site and off-site improvements. A separate plan set for each shall be prepared, or at the approval of the City Engineer, onsite and offsite sheets can be combined into one plan set; c. The improvement plan submittal, including utility sheets, shall show appropriate line types and labels to identify different type of utilities and pipe sizes. Utility boxes, hydrants, backflow preventers, etc. shall be relocated/installed behind the back of sidewalk; d. Improvement plans (as second sheet in plan set) shall contain Approved Conditions of Approval; e. Improvement plans shall include General Notes found in the City of Gilroy General Guidelines; f. Improvement plans shall be completed per the Public Works Engineering submittal checklist, which can be found in the City's website. At first submittal, a completed checklist shall be included in the submittal package, and shall show which items have been included. g. The improvement plan cover sheet shall include a table summarizing all facilities (Streets, Utilities, Parks, Landscaping, etc.), showing the ownership of all facilities, access rights to, and the maintenance responsibilities of all facilities; h. Improvement and grading plans shall show existing topo and features at least 50' beyond the project boundary. The plan shall clearly show existing topo, label contour elevations, drainage patterns, flow lines, slopes, and all other property encumbrances; i. If the project has excess fill or cut that will be off-hauled to a site or on-

	hauled from a site within the city limits of Gilroy, an additional Haul Permit is required. A statement indicating the need to obtain a Haul Permit must be added as a general note to the Grading and Drainage Plan; j. All grading and improvement plans shall identify the vertical elevation datum, date of survey, and surveyor; k. A Title Report shall be submitted with first submittal improvement plans. An existing site plan shall be submitted showing all existing site conditions and title report easements. The plan shall include bearing and distance information for all right-of-way and easements; l. The plan shall show any proposed easements to be dedicated for any needed purpose, or any easement expected to be abandoned through separate instrument. This includes PUE, PSE, EVAE, Cross-Property Access Easement, Landscape Easement, Drainage Easement, Pole Line Easement, etc.; m. To ensure the plans are coordinated and there are no conflicts between disciplines, the applicant shall provide a "composite exhibit" showing Civil, Landscape, Electrical, and Joint Trench design information (as a separate sheet titled "Composite Plan") to confirm that there are no conflicts; n. All Solid Waste Vehicle circulation movements shall be modeled and shown on a separate plan sheet. The circulation plan shall be prepared to the City Engineer's satisfaction, and modeled using AutoTurn swept analysis software, and shall include all turning and street circulation movements; o. All Emergency Vehicle circulation movements shall be modeled and shown on a separate plan sheet. The circulation plan shall be prepared to the City Engineer's satisfaction, and modeled using AutoTurn swept analysis software, and shall include all turning and street circulation movements; p. All utility boxes exposed to traffic or in a driveway, including sanitary sewer and/or water meter boxes, shall have traffic-rated boxes and lids; q. All on-site recycled water system improvements, including appurtenances, shall be located within a PSE. *(PUBLIC WORKS)*
48.	**DESIGN -** Engineering Design exceptions to City design standards and policies must be specifically requested in writing and approved by City Engineer/PW Director. Any design exceptions shown on the tentative map and associated engineering documents that are not specifically requested are not approved.
49.	**UTILITY PLANS**: A utility plan shall be provided for all projects as specified within these conditions of approval. To ensure coordination between the applicant and the relevant utility company: a. The applicant shall provide joint trench composite plans for the underground electrical, gas, telephone, cable television, and communication conduits and cables including the size, location and details of all trenches, locations of building utility service stubs and meters and placements or arrangements of junction structures as a part of the Improvement Plan submittals for the project. Show preferred and alternative locations for all utility vaults and boxes if project has not obtained PG&E approval. A licensed Civil or

	Electrical Engineer shall sign the composite drawings and/or utility improvement plans. (All dry utilities shall be placed underground). b. The applicant shall negotiate any necessary right-of-way or easement with PG&E, or any other utilities, subject to the review and approval by the Engineering Division and the utility companies. c. A "Will Serve Letter" shall be provided for each utility company expected to service the subdivision. Early coordination with the utility companies is necessary to obtain this letter. Coordination of City utilities shall be through the Engineering Division. d. A note shall be placed on the joint trench composite plans which states that the plan agrees with City Codes and Standards and that no underground utility conflict exists. (PUBLIC WORKS)
50.	**UTILITY RESPONSIBILITIES**: Storm and sewer utilities in private areas shall be privately owned and privately maintained. The water system in Gilroy is owned and maintained by the City. Conversely, public utilities within utility easements on private property remain the responsibility of the individual utility companies to maintain. The plans shall note the inspection, ownership and maintenance responsibility for each utility shown on the plans within a Table of Responsibilities on the project cover sheet of the improvement plans submitted with the initial plan submittal. The table shall include the list of streets, the responsible party for inspection of the improvements, who is responsible for the ownership of the utility, and who is responsible for the maintenance of the utility. An example of this table, including the types of utilities to be listed, can be provided by the Engineering Division upon request. *(PUBLIC WORKS)*
51.	**PREPARATION OF ELECTRICAL PLANS**: The project electrical plans shall be prepared by a registered professional engineer experienced in preparing these types of plans. The applicant shall submit, with the improvement plans submitted with the initial plan submittal, a letter from the design Electrical or Civil Engineer that states the electrical plan conform to City Codes and Standards, and to the approved improvement plans. The letter shall be signed and stamped by the professional engineer that prepares the improvement plans. *(PUBLIC WORKS)*
52.	**EXISTING FACILITIES PROTECTION**: All existing public utilities shall be protected in place and if necessary relocated as approved by the City Engineer. No permanent structure is permitted within City easements without the approval of the City of Gilroy. *(PUBLIC WORKS)*
53.	**WATER QUALITY**: Project design shall comply with the Stormwater Management Guidance Manual for Low Impact Development & Post-Construction Requirements. The applicant shall submit the Source Control Checklist as well as the appropriate Performance Requirements Checklist found in Appendix A of the manual at the time of the initial submittal for building permit. The manual can be found at the following site: www.cityofgilroy.org/261/Storm-Water-Management *(PUBLIC WORKS)*

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54.	**DEVELOPER STORM WATER QUALITY RESPONSIBILITY**: The developer is responsible for ensuring that all contractors are aware of all storm water quality measures, and implement such measures. Failure to comply with the approved construction BMPs will result in the issuance of correction notices, citations, or a project stop order. *(PUBLIC WORKS)*
55.	**BEST MANAGEMENT PRACTICES (BMP)**: The applicant shall perform all construction activities in accordance with Gilroy Municipal Code Section 27C, Municipal Storm Water Quality Protection and Discharge Controls, and Section E.10, Construction Site Storm Water Run-Off Control Program of the Regional NPDES Permit. Detailed information can be located at: www.flowstobay.org/documents/business/construction/SWPPP.pdf. This sheet shall be printed and included in all building construction plan sets permitted for construction in the City of Gilroy. *(PUBLIC WORKS)*
56.	**FIRE DEPARTMENT HYDRANT FLOW TEST**: The applicant shall perform a Fire Hydrant flow test to confirm the water system will adequately serve the development, and will modify any part of the systems that does not perform to the standards established by the City. Applicant shall coordinate with Fire Department for the Fire Hydrant flow test. The flow test results shall be submitted with the initial plan submittal. *(PUBLIC WORKS)*
57.	**WATER CONSERVATION**: The project shall fully comply with the measures required by the City's Water Supply Shortage Regulations Ordinance (Gilroy City Code, Chapter 27, Article VI), and subsequent amendments to meet the requirements imposed by the State of California's Water Board. This ordinance established permanent voluntary water saving measures and temporary conservation standards. *(PUBLIC WORKS)*
58.	**PROJECT STUDIES**: The applicant shall submit, for City approval, any applicable water, sewer, storm drain or traffic studies for the development deemed appropriate by the City Engineer. These studies shall provide the supporting hydraulic calculation for pipe sizing per the City Standard Design Guidelines. The study shall be reviewed and approved by Engineering. If the results of the study indicate that this development contributes to the over-capacity of the trunk line, the applicant will be required to mitigate the impact by removing and replacing, or upsizing of the existing utilities to accommodate the appropriate level of project flows to the approval of the City Engineer. The improvements shall be addressed on the construction drawings, to the approval of the City Engineer, prior to the issuance of the first building permit. *(PUBLIC WORKS)*
59.	**IMPACT FEES:** The project is subject to the City's Street Tree, Storm, Sewer, Water, Traffic, and Public Facilities Development Impact Fees. The City's latest impact fee schedule is available on the City's website. Payment of all Impact Fees is required at first building permit issuance. Fees shall be based on the current fee schedule in effect at the time of fee payment, consistent with and in accordance with City policy. Note that impact fees increase at the beginning of each fiscal year, July 1. Specific fee language is provided further in these conditions of approval. *(PUBLIC WORKS)*

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60.	**STORMWATER MANAGEMENT PLAN**: At first improvement plan submittal, the applicant shall submit a Storm Water Management Plan (SWMP) prepared by a registered Civil Engineer. The SWMP shall analyze the existing and ultimate conditions and facilities, and the study shall include all off-site tributary areas. Study and the design shall be in compliance with the City's Stormwater Management Guidance Manual (latest edition). Existing off-site drainage patterns, i.e., tributary areas, drainage amount, and velocity shall not be altered by the development. The plan shall be to the approval of the City Engineer and shall be approved prior to the issuance of the building permit. *(PUBLIC WORKS)*
61.	**STORMWATER CONTROL PLAN**: At first improvement plan submittal, the applicant shall submit a design level Stormwater Control Plan Report (in 8 ½ x 11 report format), to include background, summary, and explanation of all aspects of stormwater management. The report shall also include exhibits, tables, calculations, and all technical information supporting facts, including but not limited to, exhibit of the proposed site conditions, which clearly delineates impervious and pervious areas on site. The plan shall provide a separate hatch or shading for landscaping/pervious areas on-site including those areas that are not bio-retention areas. This stormwater control plan report format does not replace, or is not in-lieu of any stormwater control plan sheet in the improvement plans. The stormwater control plan shall include a signed Performance Requirement Certifications specified in the Stormwater Guidance Manual. At applicant's sole expense, the stormwater control plan shall be submitted for review by an independent third party accepted by the City for compliance. Result of the peer review shall be submittal and approved by the City Engineer prior to the issuance of the first building permit. *(PUBLIC WORKS)*
62.	**BMP RAM INVENTORY DATA REPORT:** At the time of completion of the stormwater facilities for the project, the applicant shall acquire a qualified QSP to complete and submit the City of Gilroy's BMP RAM inventory data report sheet to the satisfaction of the City Engineer. The document shall be submitted directly to pcr.inspections@cityofgilroy.org for processing. *(PUBLIC WORKS)*
63.	**PCR BENMARK FORM:** At the time of completion of the stormwater facilities for the project, the applicant shall acquire a qualified QSP to complete and submit the City of Gilroy's PCR Benchmark form to the satisfaction of the City Engineer. The document shall be submitted directly to pcr.inspections@cityofgilroy.org for processing. *(PUBLIC WORKS)*
64.	**REPAIR OF PUBLIC IMPROVEMENTS**: The applicant shall repair or replace all existing improvements not designated for removal, and all new improvements that are damaged during construction or removed because of the applicant's operations. The applicant shall request a walk-through with the Engineering Construction Inspector before the start of construction to verify existing conditions. Said repairs shall be completed prior to the first occupancy of the project. *(PUBLIC WORKS)*

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65.	**SIGHT DISTANCE:** As part of your first submittal, provide sight distance plans that clearly show standard sight distance will be provided and no items obstruct sight distance for driveways, roadways, intersections, etc. Please note that private signs, fences, walls, buildings, landscape features, above ground utilities, guardrail, barriers, railing, etc. will not be allowed within sight distance triangles. Provide all Sight Distance plans per Caltrans, AASHTO, and NCHRP Requirements for all project frontage access points, roadways, and offsite mitigation measure locations. These calculations and drawings shall be completed as it is important to ensure the development meets sight distance standards and all roadways, intersections, and access points to these facilities are safe for motorists and pedestrians. *(PUBLIC WORKS)*
66.	**DRIVEWAY DESIGN**: Driveway grades shall be designed to keep a standard design vehicle from dragging or "bottoming out" on the street or driveway, and to keep water collected in the street from flowing onto the lots. The details of such design shall be provided on the site civil plans to the satisfaction of the City Engineer. *(PUBLIC WORKS)*
67.	**GRADING & DRAINAGE**: All grading activity shall address National Pollutant Discharge Elimination System (NPDES) concerns. There shall be no earthwork disturbance or grading activities between October 15th and April 15th unless otherwise approved by the City Engineer. If approved, the applicant shall submit a Winterization Erosion Control Plan to the City Engineer for review and approval. This plan shall incorporate erosion control devices and other techniques in accordance with Gilroy Municipal Code § 27C to minimize erosion. Specific measures to control sediment runoff, construction pollution and other potential construction contamination sediment runoff, construction pollution and other potential construction contamination shall be addressed through the Erosion Control Plan and Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall supplement the Erosion Control Plan and project improvement plans. These documents shall also be kept on-site while the project is under construction. A Notice of Intent (NOI) shall be filed with the State Water Resources Control Board, with a copy provided to the Engineering Division before a grading permit will be issued. A project WDID# shall be added to the grading plans prior to plan approval. *(PUBLIC WORKS)*
68.	**GEOTECHNICAL ENGINEER**: Prior to building permit issuance, the applicant's Geotechnical Engineer shall review the final grading, pavement design and drainage plans to ensure that said designs are in accordance with the recommendations or the project geotechnical study, and the peer review comments. The applicant's Geotechnical Engineer's approval shall then be conveyed to the City either by letter, or by signing the plans. All grading operations and soil compaction activities shall be per the approved project's design level geotechnical report. All grading activities shall be conducted under the observation of, and tested by, a licensed geotechnical engineer. A report

	shall be filed with the City of Gilroy for each phase of construction, stating that all grading activities were performed in conformance with the requirements of the project's geotechnical report. The applicant shall add this condition to the general notes on the grading plan. Certification of grades and compaction are required prior to Building Permit final. This statement must be added as a general note to the Grading and Drainage Plan. *(PUBLIC WORKS)*
69.	**TREE REMOVAL PERMIT**: The applicant shall obtain a Tree Removal Permit from the Engineering Division for removal of existing trees in the public right-of-way, prior to the issuance of a building permit or demolition building permit, whichever is issued first. *(PUBLIC WORKS)*
70.	**ENCROACHMENT PERMITS, BONDS, AND INSURANCE**: The applicant must obtain an encroachment permit, posting the required bonds and insurance, and provide a one (1) year warranty for all work to be done in the City's right-of-way or City easement. This encroachment permit shall be obtained prior to the issuance of a foundation building permit and prior to any work being done in the City's right-of-way. All existing public utilities shall be protected in place and if necessary relocated as approved by the City Engineer. No permanent structures are permitted within the City right-of-way, or within any City easement unless otherwise approved by the City Engineer. The applicant shall have street improvement plans prepared for all work in the public right-of-way by a licensed civil engineer, whose signed engineer's stamp shall appear on the plans. Prior to issuance of the encroachment permit, the applicant shall submit any applicable pedestrian or traffic control plans for any lane or sidewalk closures. The traffic control plan shall comply with the State of California Manual of Uniform Traffic Control Devices (MUTCD), and standard construction practices. [(For major street improvements) Construction plans for improvements in the right-of-way shall be submitted to the City Engineer at 30%, 60%, and 90% design for review. All design assumptions and criteria shall be submitted with each phase of design submittal. Project specifications shall be included for review with the 90% design review.] Final construction plans and specifications shall be approved by the City Engineer, and released for construction, prior to the issuance of the encroachment permit. The applicant is required to confirm the location of existing utility lines along the project frontage by potholing. Prior to any potholing, applicant shall submit a pothole plan for City review and approval. Applicant shall provide the pothole result to the City Engineer prior to final design. Right-of-way improvements shall include, at a minimum, the following items: *(PUBLIC WORKS)* a. **STREET TREES**: The applicant shall plant street trees along the project frontage to match the City of Gilroy's Street Tree Plan in effect at the time of construction. The street tree plans shall be per City Standard Drawings, and

will include City Standard tree grates.

b. **STREET MARKINGS**: The applicant shall install necessary street markings of a material and design approved by the City Engineer, and replace any that are damaged during construction. These include but are not limited to all pavement markings, painted curbs and handicap markings. All permanent pavement markings shall be thermoplastic and comply with Caltrans Standards. Color and location of painted curbs shall be shown on the plans, and are subject to approval by the City Engineer. Any existing painted curb or pavement markings no longer required shall be removed by grinding if thermoplastic, or sand blasting if in paint.

c. **SIDEWALK**: The applicant shall install sidewalk along the project frontage per City standards.

d. **CURB AND GUTTER**: The applicant shall replace to existing City standards all damaged and substandard curb and gutter surrounding the project site. The actual amount of curb and gutter to be replaced shall be determined by the Public Works Construction Inspector in the field prior to construction. New curb and gutter shall be constructed per the City Standard Drawing STR-12.

e. **DRIVEWAY APPROACHES:** The applicant shall install City Standard non-residential driveway approaches as shown on the approved plans. The new commercial driveway approach shall be constructed per the City Standard.

f. **SEWER MAIN**: New sewer line shall be PVC, SDR 26 or equal. Applicant is required to submit plans and drawings for approval prior to submitting the first building permit. Construction of the new mainline shall be completed prior to issuance of the certificate of occupancy.

g. **SANITARY (STORM) SEWER MANHOLE(S)**: The applicant shall install standard sanitary sewer, per approved plans and in accordance with the City Standard Drawing.

h. **STORM WATER CATCH BASIN(S):** The applicant shall install standard storm water catch basins, in accordance with the City Standard Drawing.

i. **SIDEWALK UNDERDRAIN(S)**: The applicant shall install standard sidewalk underdrains in accordance with the City Standard Drawing STR-19.

j. **STREET LIGHT(S)**: The applicant shall provide and install standard aluminum electrolier street light(s) per City Standard Drawing EL-1 to EL-5. The applicant is responsible for all PG&E service fees and hook-up

	charges. Any new service point connection required to power the new lights shall be shown on the construction drawings along with the conduit, pull boxes and other items necessary to install the street lights. An Isometric lighting level needs to be provided by the designer/contractor. A separate light study may be required by the City Engineer. The new street light shall has 32' mounting height per Standard Drawing EL-3, with mounting arm length per Standard Drawing EL-4, the Fixture shall be Leotek GC1 or GC2 series in an approved configuration per detail EL-2 or approved equal. The arm shall be installed at the location as shown on the approved plans. k. **FIRE HYDRANTS**: The applicant shall install new fire hydrants along the project frontage. Spacing shall meet City and Fire Marshall requirements.
71.	**UTILITIES**: All new services to the development shall be "underground service" designed and installed in accordance with the Pacific Gas and Electric Company, AT&T (phone) Company and local cable company regulations. Transformers and switch gear cabinets shall be placed underground unless otherwise approved by the Planning Director and the City Engineer. Underground utility plans must be submitted to the City prior to installation. *(PUBLIC WORKS)*
72.	**SITE LIGHTING STANDARDS**: The applicant shall submit a photometric plan for on-site lighting showing lighting levels to Illuminating Engineering Society (IES) Standards. The plan shall comply with the requirement of an average of 1 foot-candle with a 4:1 minimum to average ratio and a minimum lighting of 0.3 foot-candle. This lighting standard is applicable to all accessibly parking lots, driveways, circulation areas, aisles, passageways, recesses, and accessible grounds contiguous to all buildings. The lighting system shall be so designed as to limit light spill beyond property lines and to shield the light source from view from off site. The photometric plan shall be approved by the City Engineer. *(PUBLIC WORKS)*
73.	**STREET LIGHTING STANDARDS**: The applicant shall submit plans for street/sidewalk showing lighting levels to Illuminating Engineering Society (IES) Standards. The plan shall comply with lighting requirements as follows: a. Arterial Streets: 1.0 fc with minimum lighting of 0.5 fc (Murray Avenue) b. Collector/Local Streets: 0.6 fc average with a 0.3 fc minimum (Forest Street) c. Low Volume Intersections: 0.6 fc with a 4:1 minimum to average ratio and a minimum lighting of 0.3 fc. (Forest Street and Nagareda Street) The applicant shall submit a photometric plan identifying how these lighting levels are being met given the site geometrics, using City Standard street lights, and a Type III lighting distribution. The width of the street and lighting levels shall determine the lighting spacing. Street lights and pull boxes shall be installed in the planter strip if one is present, or behind the back of walk where feasible so as to maintain sidewalk clear of obstructions to the approval of the City Engineer. The photometric plan shall be approved prior to the issuance of the building permit.

	(PUBLIC WORKS)
74.	**FENCES AND OTHER PERMANENT STRUCTURES WITHIN CITY RIGHT-OF-WAY**: The applicant shall locate all project fencing and foundation of a permanent nature within the project's property and out of the City right-of-way and limits of all public easements. *(PUBLIC WORKS)*
75.	**FLOOR DRAINS**: All floor drains shall be plumbed to connect to the sanitary sewer system, and shall not be connected to stormwater collection system. The plumbing connections shall be shown on the plans to the approval of the City Engineer. *(PUBLIC WORKS)*
76.	**STORM DRAIN INLETS AND WATERWAYS**: Per the City's Clean Water Program's requirements, the applicant shall mark with the words "No Dumping! Flows to Bay," or equivalent, using methods approved by the City standards on all storm inlets surrounding and within the project parcel. *(PUBLIC WORKS)*
77.	**GARBAGE/RECYCLE STORAGE AND SERVICE**: The applicant shall provide an adequate area for the purpose of storing garbage and recycling collection containers for scheduled servicing by the franchise solid waste collection service. The containers shall be placed at the service location allowing enough room for the truck to safely approach the containers. A letter shall be provided, to the approval of the City Engineer, from the City's franchise solid waste collection service provider (Recology) confirming serviceability of the solid waste pickup as designed and shown on the project plans. Contact Lisa Patton, Operations Manager 408-846-4421. Back up into City Right of Way or Easement is not allowed. *(PUBLIC WORKS)*
78.	**UNDERGROUND FRONTAGE UTILITY LINES**: The applicant must underground all overhead utilities, and remove all related utility poles, along the project frontage from utility pole to nearest existing offsite utility pole. The applicant shall be responsible for the coordination with all utility companies existing on the poles and coordinate for their undergrounding or relocation as necessary so that the project frontage is free from utilities to the approval of the City Engineer. The applicant shall submit plans for this underground work with the civil plans submitted with the first building permit. Permitting for this underground work shall occur prior to the issuance of the first building permit unless otherwise approved by the City Engineer. *(PUBLIC WORKS)*
79.	**DRAINAGE:** Drainage designed into landscaping with the purpose of reducing volume or improving quality of runoff from the site shall be implemented according to the requirements of the Stormwater Management Guidance Manual for Low Impact Development & Post Construction Requirements (June 2015) and shall also be, subject to the approval of the City Engineer. Where necessary, sidewalk drains per the City Standard Drawing shall be provided to direct the water under the

	sidewalk and through the curb. No increase to the peak discharge shall be permitted downstream. In addition, discharge must conform to any non-point source permit issued by the Regional Water Quality Control Board. Drainage improvements made on-site shall conform to standard engineering practices and shall not allow any site drainage to impact adjacent properties. All drainage capacity calculations shall be performed by a licensed Civil Engineer, whose signed engineer's stamp shall appear on the calculations sheets, and shall be submitted to the City for review and approval with the project civil plans. For projects that include permanent structural controls for water quality protection, the O&M (operation and maintenance) procedures for such control features shall be submitted in a site-specific Stormwater Control Plan (SWCP) which shall be reviewed and approved prior to occupancy. A formal O&M Agreement shall specify the owner's responsibility to ensure their ongoing effective operation and maintenance. Such O&M responsibility requirements shall be recorded on the property deed. If the project is proposing to connect to an existing storm drain system within or downstream from the site, the design engineer shall provide calculations with the final design plans to demonstrate that the downstream drainage system has adequate capacity to accommodate the additional site flows being added to the system for the design storm per City Standards. The calculations shall be to the approval of the City Engineer prior to the issuance of the first building permit. *(PUBLIC WORKS)*
80.	**STORMWATER MANAGEMENT**: At Developer's sole expense, Developer shall submit results from a third-party review of the project's stormwater design. The results shall confirm that the project is complying with requirements set in the City of Gilroy Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements. *(PUBLIC WORKS)*
81.	**SITE LANDSCAPING COORDINATION**: The site landscaping needs to be coordinated between the stormwater treatment area and the overall site landscaping plan area. The landscaping within the stormwater treatment area will not count towards the site landscaping requirement. Stormwater treatment areas should be identified on the site first, and then site landscaping to make sure the correct plant material is identified for each area. Some site landscaping plant material may not be suitable in stormwater treatment areas due to the nature of the facility. Sewer facilities cannot be aligned through stormwater treatment facilities. It is the applicant's responsibility to coordinate the civil stormwater treatment facilities and the plans from the project landscaper. *(PUBLIC WORKS)*
82.	**PARKING LOTS**: The applicant shall submit plans for all required off-street parking lots showing proper grading, drainage, ramps profile, and parking dimensions in conformance with City parking standards. The plans shall be approved by the City Engineer prior to the issuance of the first City permits. *(PUBLIC WORKS)*

83.	**BICYCLE PARKING**: The applicant shall provide both long-term bicycle lockers and short-term bicycle racks on-site, as shown on the approved site plan, to the approval of the Community Development Director and City Engineer. *(PUBLIC WORKS)*
84.	**ADDRESS PLAN**: The applicant shall submit to the Public Works Department a final address plan. The plan shall be substantially in conformance with the address plan approved with the Arch & Site application. Said submittal shall be approved by the City Engineer prior to the submittal of plans for any demolition permit, building permit, or site development permit and shall be satisfied prior to issuance of whichever permit is issued first. *(PUBLIC WORKS)*
85.	**PERMITS REQUIRED BY OTHER AGENCIES**: The applicant shall obtain all applicable permits from federal, state, and local agencies as required to construct the proposed improvements. The applicant is hereby informed that permits may be required by one (1) or more of the following: Caltrans, Army Corps of Engineers, UPRR, Fish and Wildlife, Regional Water Quality Control Board, Santa Clara County Roads and Airports, Santa Clara Valley Water District or Habitat Permit. If project is within jurisdiction of any of these agencies, verification of permit or waiver of permit must be given to the Public Works Department prior to issuance of any required City permits. If the City is required to be a party to the permit application and a fee is required, the applicant shall reimburse the City for its cost. A copy of these permits shall be provided to the satisfaction of the City Engineer prior to the issuance of the building permit. *(PUBLIC WORKS)*
86.	**CALTRANS PERMIT**: Prior to the issuance of a building permit, the applicant must submit evidence to the Public Works Department of approval by the State of California for the performance of any work within the State right-of-way. If the City is required to be a party to the permit application and a fee is required, the applicant shall reimburse the City for its cost. The Applicant is encouraged to contact the Caltrans permit office as soon as possible to learn what is required to obtain Caltrans approval and issuance of a State Encroachment Permit. *(PUBLIC WORKS)*
87.	**STREET TREE DEVELOPMENT IMPACT FEE**: The applicant shall pay a fee to prove funding towards additional tree planting in the City. The fee is based on the amount of added hardscape the project is adding. The estimated impact fee, based on the approved plans, is $3,005.47. This fee is only an estimate. The actual impact fee will be calculated based on building permit plans submitted, and the fees approved by the City Council in place at the time of the building permit submittal. The fee shall be collected by the Public Works Department and paid prior to issuance of the first building permit. *(PUBLIC WORKS)*
88.	**STORM DEVELOPMENT IMPACT FEE**: The applicant shall pay a fee proportional to the project's share of storm drainage flowing off-site, and shall be used to enhance the City's storm drainage system based on the recommendations of the

	adopted Storm Drainage Master Plan. The estimated impact fee, based on the approved plans, is $9,214.56. This fee is only an estimate. The actual impact fee will be calculated based on building permit plans submitted, and the fees approved by the City Council in place at the time of the building permit submittal. The fee shall be collected by the Public Works Department and paid prior to issuance of the first building permit. *(PUBLIC WORKS)*
89.	**SANITARY SEWER DEVELOPMENT IMPACT FEE**: The applicant shall pay a fee proportional to the project's share of the increase amount of sewage generated by the project, which shall be used to enhance the City's sewer system based on the adopted Sewer Master Plan. The estimated impact fee, based on the approved plans, is $251,955.52. This fee is only an estimate. The actual impact fee will be calculated based on building permit plans submitted, and the fees approved by the City Council in place at the time of the building permit submittal. The fee shall be collected by the Public Works Department and paid prior to issuance of the first building permit. At first improvement plan submittal, applicant's engineer shall submit a calculation for sanitary sewer and water generation per the City's Master Plan design criteria. The fee shall be collected by the Public Works Department and paid prior to issuance of the first building permit. *(PUBLIC WORKS)*
90.	**WATER DEVELOPMENT IMPACT FEE**: The applicant shall pay a fee proportional to the project's share of impact to the City's water system, and the water needs of the development. The fee shall be used to fund improvements identified in the City's Water Master Plan. The estimated impact fee, based on the approved plans, is $54,409.72. This fee is only an estimate. The actual impact fee will be calculated based on building permit plans submitted, and the fees approved by the City Council in place at the time of the building permit submittal. At first improvement plan submittal, applicant's engineer shall submit a calculation for water generation per the City's Master Plan design criteria. The fee shall be collected by the Public Works Department and paid prior to issuance of the first building permit. *(PUBLIC WORKS)*
91.	**TRANSPORTATION IMPROVEMENT FEE**: The applicant shall pay a fee proportional to the project's share of transportation improvements needed to serve cumulative development within the City of Gilroy. The funds shall be used to fund improvements identified in the City Traffic Circulation Master Plan. The estimated impact fee, based on the approved plans, is $730,996.87. This fee is only an estimate. The actual impact fee will be calculated based on building permit plans submitted, and the fees approved by the City Council in place at the time of the building permit submittal. The fee shall be collected by the Public Works Department and paid prior to issuance of the first building permit. *(PUBLIC WORKS)*
92.	**PUBLIC FACILITIES IMPACT FEE**: The applicant shall pay a fee proportional to the project's share of the increase to the use of City Public facilities. The estimated impact fee, based on the approved plans, is $192,532.88. This fee is only an

	estimate. The actual impact fee will be calculated based on building permit plans submitted, and the fees approved by the City Council in place at the time of the building permit submittal. The fee shall be collected by the Public Works Department and paid prior to issuance of the first building permit. *(PUBLIC WORKS)*
93.	**CONSTRUCTION NOTICING**: At least one week prior to commencement of any on or off-site work, the applicant shall post at the site, and to property owners within (300') three hundred feet of the exterior boundary of the project site a notice that construction work will commence on or around the stated date. The notice shall include a list of contact persons with name, title, phone number and area of responsibility. The person responsible for maintaining the list shall be included. The list shall be current at all times and shall consist of persons with authority to initiate corrective action in their area of responsibility. The names of individuals responsible for dust, noise and litter control shall be expressly identified in the notice. Noticing shall be in both English and Spanish. The notice shall be submitted for review to the approval of the City Engineer two weeks prior to the issuance of the building permit. *(PUBLIC WORKS)*
94.	**JOINT TRENCH UTILITY BOXES:** At initial improvement plan submittal, joint trench plans shall show a 3-ft horizontal clearance from the back of sidewalk to any proposed joint trench boxes, transformers, etc. Additionally, the plans shall include a detailed section showing the street ROW, curb & gutter, planter strip, sidewalk, 3-ft horizontal clearance and proposed JT structure. *(PUBLIC WORKS)*
95.	**OFFSITE IMPERVIOUS AREAS (TREATMENT & OWNERSHIP):** This project shall consider all disturbed areas, onsite and offsite, as part of the stormwater management design. Any offsite stormwater facilities shall be maintained by the developer. Any offsite stormwater facilities shall not exist within public easements. *(PUBLIC WORKS)*
96.	**EASEMENTS:** At initial submittal all disciplines shall update all plan sets, sections and plan views to show, label and dimension all easement identified by the title report. *(PUBLIC WORKS)*
97.	**TRAFFIC STUDY IMPROVEMENTS:** Project shall extend the southbound left turn lane on Murray prior to intersection with Leavesley Road per the requirements of the traffic study. All offsite traffic improvements shall be included as separate plan sheets. *(PUBLIC WORKS)*
98.	**STORMWATER CHAMBERS:** Each the proposed stormwater chambers shall be updated to include two access manholes per City Standard. At initial submittal, the stormwater control plan shall include two access manholes per chamber location; one immediately after the runoff enters the chambers and one immediately before

	the runoff exists the chambers. Manholes shall be installed within the limits of the chambers. *(PUBLIC WORKS)*
99.	**CONFIRMING STORM DRAIN CONDITION:** The applicant shall survey the existing storm drain line along Murray Avenue and confirm the limits of the existing storm drain line in the public right of way. This shall be done at first plan submittal for Building 3. *PUBLIC WORKS)*
100.	**PHASED OFF-SITE IMPROVEMENTS:** The project applicant intends to build the project in 3 phases. Phase 1 shall include the following off-site improvement: 1) All Forest Street frontage improvements, 2) traffic related left turn extension on Murray Ave/Leavesley per the traffic study. Phase 3 shall include the following improvements: 1) All Murray Avenue frontage improvements. *(PUBLIC WORKS)*
101.	**DEDICATION OF EASEMENT**: The applicant shall dedicate a 10 foot PUE along the Murray Avenue project frontage to the City. The easement shall be conveyed by Easement Grant Deed. The applicant shall prepare the easement conveyance documents for review to the approval of the City Engineer. The easement shall be recorded with the County of Santa Clara prior to the issuance of the building permit. *(PUBLIC WORKS)*
102.	**PROPERTY IMPROVEMENT AGREEMENT (PIA)**: The applicant shall enter into a public improvement agreement with the City per Gov. Code Section 66462(a), and shall arrange to provide Payment and Performance bonds each for 100% of the cost of public infrastructure improvements to be constructed in the public right-of-way. These improvements shall include, but not be limited to, roadway construction, sidewalk, curb and gutter, water lines, storm lines, sewer lines, street lights, and signal equipment. City Standard insurance shall be provided per the terms of the agreement. The agreement will be forwarded to the City Council for approval with project (parcel or final) map. The PIA shall be approved by the City Council prior to the issuance of the project building permit. *(PUBLIC WORKS)*
103.	**RECORD DRAWINGS**: The applicant shall submit one full set of original record drawings and construction specifications for all off-site improvements to the Department of Public Works. All underground facilities shall be shown on the record drawings as constructed in the field. The applicant shall also provide the City with an electronic copy of the record drawings in the AutoCAD Version being used by the City at the time of completion of the work. The applicant shall also submit an AutoCAD drawing file of all consultants composite basemap linework showing all public improvements and utility layouts. This condition shall be met prior to the release of utilities, final inspection, or issuance of a certificate of occupancy, whichever occurs first. *(PUBLIC WORKS)*
104.	**PAVEMENT RESTORATION**: Due to the proposed development making pavement cuts into the existing roadway, additional construction traffic, and

	additional future traffic all reducing the City's Street Pavement Condition Index, the project shall mitigate the above by micro surfacing slurry along the Forest Street project frontage (curb to curb) and along the project frontage Murray Ave (curb to curb) to the limits of Storm Drain installation in the public right of way (full roadway width, i.e. curb to curb) with pavement section dig-out repairs. The extent of the pavement section dig-out repairs to be determined by the developer's geotechnical engineer and to be confirmed by the City Engineer. The City Engineer shall approve the roadway repair prior to the release of utilities, final inspection, or issuance of a certificate of occupancy, whichever occurs first. *(PUBLIC WORKS)*
105.	**STORMWATER MANAGEMENT FACILITIES MAINTENANCE AGREEMENT**: The applicant shall execute a Stormwater Management Facilities Maintenance Agreement with the City Engineer as specified in Chapter 7.39.210-230 of the Stormwater Management and Discharge Control ordinance. The agreement shall outline the operation and maintenance (O&M) plan for the permanent storm water treatment facilities. The City-Standard Stormwater BMP Operation and Maintenance Agreement will be provided by Public Works Engineering. The agreement shall include the following: a. This Agreement shall also provide that in the event that maintenance or repair is neglected, or the stormwater management facility becomes a danger to public health or safety, the city shall have the authority to perform maintenance and/or repair work and to recover the costs from the owner. b. All on-site stormwater management facilities shall be operated and maintained in good condition and promptly repaired/replaced by the property owner(s) or other legal entity approved by the City. c. Any repairs or restoration/replacement and maintenance shall be in accordance with City-approved plans. d. 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. This agreement shall be executed prior to the first occupancy of the building. *(PUBLIC WORKS)*
106.	**STORMWATER MANAGEMENT FACILITIES INSPECTION:** The Stormwater Management Facilities Maintenance Agreement work shall require inspections be performed which shall adhere to the following: a. To comply with the State Stormwater requirements and the NPDES permit, the applicant shall secure a QSD or QSP to maintain all erosion control and BMP measures during construction. The applicant's QSD or QSP shall provide the City weekly inspection reports to the approval of the City Engineer. b. Stormwater facility inspections shall be done at least twice per year, once in Fall by October 1st, in preparation for the wet season, and once in Winter by March 15th. Written records shall be kept of all inspections and shall

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	include, at minimum, the following information: 1. Site address; 2. Date and time of inspection; 3. Name of the person conducting the inspection; 4. List of stormwater facilities inspected; 5. Condition of each stormwater facility inspected; 6. Description of any needed maintenance or repairs; and 7. As applicable, the need for site re-inspection. c. Upon completion of each inspection, an inspection report shall be submitted to Public Works Engineering no later than October 1st for the Fall report, and no later than March 15th of the following year for the Winter report. d. Before commencing any grading or construction activities, the applicant shall obtain a National Pollutant Discharge Elimination System (NPDES) permit and provide evidence of filing of a Notice of Intent (NOI) with the State Water Resources Control Board. e. The applicant is responsible for ensuring that all contractors are aware of all storm water quality measures and implement such measures. Failure to comply with the approved construction BMPs will result in the issuance of correction notices, citations or a project stop order. f. Sequence of construction for all stormwater facilities (bioswales, detention/ retention basins, drain rock, etc.) shall be done toward final phases of project to prevent silting of facilities and reduce the intended use of the facilities. g. Prior to final inspection, all stormwater facilities will be tested by a certified QSP or QSD to meet the minimum design infiltration rate. All tests shall be made at on 20 ft x 20ft grid pattern over the surface of the completed stormwater facility unless otherwise approved by the City Engineer. All soil and infiltration properties for all stormwater facilities shall be evaluated by the geotechnical engineer. Percolation tests (using Double Ring Infiltrometer Testing with appropriate safety factors) at horizontal and vertical (at the depth of the stormwater facility) shall be conducted for each stormwater facility. A 50% safety factor shall be applied to the calculated percolation test and shall be used as the basis for design (the design percolation rate). The geotechnical report shall include a section designated for stormwater design, including percolation results and design parameters. *(PUBLIC WORKS)*
107.	**REGIONAL BOARD STORMWATER REVIEW**: This project may be subject to an audit by the Central Coast Regional Board. City may be required to provide the project stormwater design and storm water management plan for Regional Board review and comment. The project may need to provide the Regional Board any and all necessary documents (including reports, technical data, plans, etc.) for the Regional Board approval. *(PUBLIC WORKS)*
The following conditions shall be complied with AT ALL TIMES DURING THE CONSTRUCTION PHASE OF THE PROJECT, or if another deadline is specified in a condition, at that time.	

108.	**PUBLIC IMPROVEMENTS -** All required public improvements must be constructed and accepted by the City prior to issuance of the first and any subsequent certificate of occupancy, unless approved by City Engineer/Public Works Director.
109.	**PUBLIC WORKS CONSTRUCTION ACTIVITIES**: The City shall be notified at least ten (10) working days prior to the start of any construction work, and at that time the contractor shall provide a project construction and phasing schedule, and a 24-hour emergency telephone number list. The schedule shall be in Microsoft Project, or an approved equal, and shall identify the scheduled critical path for the installation of improvements to the approval of the City Engineer. The schedule shall be updated weekly. The approved construction and phasing schedule shall be shared with Gilroy Unified School District (GUSD) to avoid traffic impacts to surrounding school functions. An approved construction information handout(s) shall also be provided to GUSD to share with school parents. *(PUBLIC WORKS)* a. All work shown on the improvement plans shall be inspected to the approval of the City Engineer as applicable. Uninspected work shall be removed as deemed appropriate by the City Engineer. b. Construction activities related to the issuance of any Public Works permit shall be restricted to the weekday between 7:00 a.m. and 7:00 p.m., Saturday 9:00 a.m. to 7:00 p.m. for general construction activities. No work shall be done on Sundays and on City Holidays unless otherwise approved by the City Engineer. Please note that no work shall be allowed to take place within the City right-of-way after 5:00 p.m. Monday through Friday. In addition, no work being done under the issuance of a Public Works encroachment permit may be performed on the weekend unless prior approvals have been granted by Public Works. The City Engineer may apply additional construction period restrictions, as necessary, to accommodate standard commute traffic along arterial roadways and along school commute routes. Signs outlining the project construction times shall be posted at conspicuous locations on site where it is visible to the public. The signs shall be per the City Standard Drawing for posting construction hours. The sign shall be kept free of graffiti at all times. Contact the Public Works Department to obtain sample City Standard sign outlining hours of operation. c. The allowed hours of Public Works construction activities may be waived or modified through an exemption, for limited periods, if the City Engineer finds that the following criteria are met: i. Permitting extended hours of construction will decrease the total time needed to complete the project thus mitigating the total amount of noise associated with the project as a whole; or,

ii. Permitting extended hours of construction are required to accommodate design or engineering requirements, such as a large concrete pour. Such a need would be determined by the project's design engineer and require approval of the City Engineer.

iii. An emergency situation exists where the construction work is necessary to correct an unsafe or dangerous condition resulting in obvious and eminent peril to public health and safety. If such a condition exists, the City may waive any of the remaining requirements outlined below.

iv. The exemption will not conflict with any other condition of approval required by the City to mitigate significant impacts.

v. The contractor or owner of the property will notify residential and commercial occupants of property adjacent to the construction site of the hours of construction activity which may impact the area. This notification must be provided three days prior to the start of the extended construction activity.

vi. The approved hours of construction activity will be posted at the construction site in a place and manner that can be easily viewed by any interested member of the public.

vii. The City Engineer may revoke the exemption at any time if the contractor or owner of the property fails to abide by the conditions of exemption or if it is determined that the peace, comfort and tranquility of the occupants of adjacent residential or commercial properties are impaired because of the location and nature of the construction. The waiver application must be submitted to the Public Works Construction Inspector ten (10) working days prior to the requested date of waiver.

d. The following provision to control traffic congestion, noise, and dust shall be followed during site excavation, grading and construction:

i. All construction vehicles should be properly maintained and equipped with exhaust mufflers that meet State standards.

ii. Blowing dust shall be reduced by timing construction activities so that paving and building construction begin as soon as possible after completion of grading, and by landscaping disturbed soils as soon as possible.

iii. Further, water trucks shall be present and in use at the

	construction site. All portions of the site subject to blowing dust shall be watered as often as deemed necessary by the City, or a minimum of three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites in order to insure proper control of blowing dust for the duration of the project. iv. Watering on public streets, and wash down of dirt and debris into storm drain systems will not be allowed. Streets will be cleaned by street sweepers or by hand as often as deemed necessary by the Construction Inspector, or at least once a day. Watering associated with on-site construction activity shall take place between the hours of 8 a.m. and 5 p.m. and shall include at least one late-afternoon watering to minimize the effects of blowing dust. Recycled water shall be used for construction watering to manage dust control where possible, as determined by the City Engineer. Recycled water shall be billed at the municipal industrial rate based on the current Santa Clara Valley Water District's municipal industrial rate. Where recycled water is not available potable water shall be used. All potable construction water from fire hydrants shall be metered and billed at the current portable fire hydrant meter rate. v. All public streets soiled or littered due to this construction activity shall be cleaned and swept on a daily basis during the workweek to the satisfaction of the Construction Inspector. vi. Construction grading activity shall be discontinued in wind conditions that in the opinion of the Public Works Construction Inspector cause excessive neighborhood dust problems. vii. Site dirt shall not be tracked into the public right-of-way, and shall be cleaned immediately if done, or the project may risk being shut down. Mud, silt, concrete and other construction debris shall not be washed into the City's storm drains. viii. Construction activities shall be scheduled so that paving and foundation placement begin immediately upon completion of grading operation. ix. All aggregate materials transported to and from the site shall be covered in accordance with Section 23114 of the California Vehicle Code during transit to and from the site. x. Prior to issuance of any permit, the applicant shall submit any applicable pedestrian or traffic detour plans, to the satisfaction of

	the City Engineer, for any lane or sidewalk closures. The traffic control plan shall be prepared by a licensed professional engineer with experience in preparing such plans. The Traffic Control Plan shall be prepared by a licensed engineer in accordance with the requirements of the latest edition of the California Manual on Uniform Traffic Control Devices (MUTCD) and standard construction practices. The Traffic Control Plan shall be approved prior to the commencement of any work within the public right-of-way. xi. During construction, the applicant shall make accessible any or all City utilities as directed by the City Engineer. xii. The minimum soils sampling and testing frequency shall conform to Chapter 8 of the Caltrans Construction Manual. The applicant shall require the soils engineer submit to daily testing and sampling reports to the City Engineer.
110.	**JOB SITE SIGNAGE:** Prior to construction, A 36 inch by 48 inch weatherproof sign shall be located so it is clearly readable from the public right-of-way and shall include the following information: a. Address of the project site. b. Permitted hours of construction and of deliveries/off-haul. c. Name, e-mail address and direct phone number of the General Contractor. d. Name, e-mail address and direct phone number of responsible person managing the project. e. Name and phone number of person to call in case of an emergency. f. Code Enforcement complaint telephone number (408-846-0264).
111.	**PROJECT CLOSE-OUT**: Prior to City acceptance of onsite and offissite improvements and property improvement agreements, the applicant shall comply with all City construction close-out procedures to the approval of the City Engineer. Refer to the City's website for a copy of these procedures. Prior to final inspections, all pertinent conditions of approval and all improvements shall be completed to the satisfaction of the Planning Director and City Engineer. A letter indicating that all project conditions have been met shall be submitted prior to the first occupancy. All public improvements, including the complete installation of all improvements relative to streets, fencing, sanitary sewer, storm drainage, water system, underground utilities, etc., shall be completed and attested to by the City Engineer before approval of occupancy of any unit. Where facilities of other agencies are involved, such installation shall be verified as having been completed and accepted by those agencies. In addition, the applicant shall submit a detailed project cost estimate of all public improvements constructed on-site and within the public right-of-way. The cost estimate shall be prepared by the project engineer, and be to the approval of the City Engineer. The cost estimate shall be broken out into on-site and off-site improvements based on the format provided by the City.

	Until such time as all improvements required are fully completed and accepted by City, the applicant shall be responsible for the care maintenance of and any damage to such improvements. City shall not, nor shall any officer or employee thereof, be liable or responsible for any accident, loss or damage, regardless of cause, happening or occurring to the work or Improvements required for this project prior to the completion and acceptance of the work or Improvements. All such risks shall be the responsibility of, and are hereby assumed by the applicant. *(PUBLIC WORKS)*
112.	**MATERIAL HAULING ROUTE AND PERMIT**: For material delivery vehicles equal to, or larger than two-axle, six-tire single unit truck (SU) size or larger as defined by FHWA Standards, the applicant shall submit a truck hauling route and receive a haul permit that conforms to City of Gilroy Standards to the approval of the City Engineer. Note that the City requires a Haul Permit be issued for any hauling activities. The project sponsor shall require contractors to prohibit trucks from using "compression release engine brakes" on residential streets. The haul route for this project shall be: Hwy 101 to Leavesley Road, Leavesley Road to Murray Avenue. A letter from the applicant confirming the intention to use this hauling route shall be submitted to the Department of Public Works, and approved, prior to the issuance of any City permits. All material hauling activities including but not limited to, adherence to the approved route, hours of operation, staging of materials, dust control and street maintenance shall be the responsibility of the applicant. All storage and office trailers will be kept off the public right-of-way. Tracking of dirt onto City streets and walks will not be allowed. The applicant must provide an approved method of cleaning tires and trimming loads on-site. Any job-related dirt and/or debris that impacts the public right-of-way shall be removed immediately. No wash down of dirt into storm drains will be allowed. All material hauling activities shall be done in accordance with applicable City ordinances and conditions of approval. Mud, silt, concrete and other construction debris shall not be washed into the City's storm drains. Violation of such may be cause for suspension of work. *(PUBLIC WORKS)*
113.	**CONSTRUCTION WORKER PARKING**: The applicant shall provide a construction-parking plan that minimizes the effect of construction worker parking in the neighborhood and shall include an estimate of the number of workers that will be present on the site during the various phases of construction and indicate where sufficient off-street parking will be utilized and identify any locations for off-site material deliveries. Said plan shall be approved by the City Engineer prior to issuance of City permits and shall be complied with at all times during construction. Failure to enforce the parking plan may result in suspension of the City permits. No vehicle having a manufacturer's rated gross vehicle weight exceeding ten thousand (10,000) pounds shall be allowed to park on the portion of a street which abuts property in a residential zone without prior approval from the City Engineer (§15.40.070). *(PUBLIC WORKS)*

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The following conditions shall be complied with AT ALL TIMES that the use permitted by this entitlement occupies the premises	
114.	**POST CONSTRUCTION BEST MANAGEMENT PRACTICES (BMP)**: In accordance with Gilroy Municipal Code Chapter 27D *Post Construction Storm Water Pollution Prevention* all projects that meet the criteria described in the Storm Water Guidance Manual for Low Impact Development and Post-Construction Requirements shall prepare a storm water control plan (SWCP) and shall meet the requirements of the design standards and selection of best management practices and shall be selected and designed to the satisfaction of the City Engineer or designee. Requirements shall include: a. Owner/occupant shall inspect private storm drain facilities at least two (2) times per year and sweep parking lots immediately prior to and once during the storm season. b. The applicant shall be charged the cost of abatement for issues associated with, but not limited to, inspection of the private storm drain facilities, emergency maintenance needed to protect public health or watercourses, and facility replacement or repair in the event that the treatment facility is no longer able to meet performance standards or has deteriorated. Any abatement activity performed on the applicant's property by City staff will be charged to the applicant at the City's adopted hourly rate. c. Label new and redeveloped storm drain inlets with the phrase "No Dumping: Drains to Bay" plaques to alert the public to the destination of storm water and to prevent direct discharge of pollutants into the storm drain. Template ordering information is available at www.flowstobay.org. d. All process equipment, oils fuels, solvents, coolants, fertilizers, pesticides, and similar chemical products, as well as petroleum-based wastes, tallow, and grease planned for storage outdoors shall be stored in covered containers at all times. e. All public outdoor spaces and trails shall include installation and upkeep of dog waste stations. Garbage and recycling receptacles and bins shall be designed and maintained with permanent covers to prevent exposure of trash to rain. Trash enclosure drains shall be connected to the sanitary sewer system. *(PUBLIC WORKS)*

BUILDING DIVISION - Conditions of Approval

The following conditions outline specific terms that are a part of the project entitlements. These conditions must be addressed in the construction plans submitted for any building permit, grading permit, or superstructure. They must be satisfied before the issuance of the first permit or by any specified deadline indicated in a condition.	
115.	**CONDITIONS OF APPROVAL:** All conditions of approval must be included in the construction drawings submitted for a building permit.
116.	**PRE-CONSTRUCTION MEETING:** A pre-construction meeting will be held before construction begins, scheduled at the time of permit issuance at a mutually agreed time and location between the project building inspector and the responsible party. This meeting will review the conditions of approval, pre-occupancy requirements, construction hours, inspection requests, project expectations, and site procedures. The applicant must ensure representation from their design and construction staff, including subcontractors, and relevant approving departments are also welcome to attend.
117.	**CONSTRUCTION MANAGEMENT PLAN**: The project developer must provide a Construction Management Plan (CMP) as part of the building and/or grading permit application. The CMP will be reviewed and approved by the Building Official before the issuance of the permit and will serve as a binding document. Non-compliance with the CMP may result in a "Stop Work Notice." The plan shall be updated as project conditions change and designed to minimize public parking space loss, limiting the duration of any disruptions. The CMP must include, but is not limited to: • Locations for materials and equipment storage, scaffolding, safety measures, temporary fencing, construction trailers, and portable toilets. • A work schedule detailing the start date, road or lane closure dates, key milestones, and completion dates. • Hours of construction, a construction waste management plan, staging/storage locations, travel routes and turnaround areas, any necessary road/lane closures, and a phasing plan.
118.	**TEMPORARY FENCING:** Temporary fencing around a building site during construction is required to ensure security, public safety, and noise/dust mitigation. “Temporary” refers to fencing that is not permanently attached to the ground or any permanent structure. Acceptable materials include chain-link or plywood, up to 6 feet in height, which do not require permits. Temporary fencing must be placed entirely within the project property unless letters of permission from adjacent property owners or a City encroachment permit are obtained. All temporary fencing must be removed upon completion of construction. Fencing exceeding 6 feet in height requires review and permitting by the Building Department.

119.	**JOB SITE SIGNAGE:** Before construction begins, a weatherproof sign measuring 36 inches by 48 inches must be prominently displayed in a location that is clearly visible from the public right-of-way. The sign should include the following information: a. Address of the project site. b. Permitted hours for construction and deliveries/off-haul. c. Name, email address, and direct phone number of the General Contractor. d. Name, email address, and direct phone number of the project manager. e. Name and phone number of the emergency contact. f. Code Enforcement complaint phone number: 408-846-0251.
120.	**CONSTRUCTION ACTIVITIES:** To control traffic congestion, noise, and dust during excavation, grading, and construction, the following provisions apply: Construction activities are limited to 7 AM to 7 PM, Monday through Friday, and 9 AM to 7 PM on Saturdays, unless otherwise specified in a valid permit or approval.
121.	**FINAL GRADING AND DRAINAGE PLAN:** At the time of building permit submission, the project developer must provide a final grading and drainage plan prepared by a licensed civil engineer, showing final grades with accurate elevations and on-site drainage control measures to prevent stormwater runoff onto adjoining properties.
122.	**PAD ELEVATION CERTIFICATION:** The applicant or developer must submit a pad elevation certification letter from a licensed land surveyor or registered civil engineer to the Building Official, confirming that the pad elevations and building location (setbacks) comply with the approved plans, prior to foundation inspection.
123.	**SITE SURVEY:** The applicant must provide a site survey for the entire parcel, stamped and signed by a California-licensed land surveyor. The survey should include, but not be limited to, the following elements: property line locations and dimensions, streets and easements, existing buildings, topographic contour lines, and trees/landscaping.
124.	**PERMIT CARD:** The stamped and approved plans with the permit card must be present on-site at all times.
125.	**TITLE 24**: All structures must comply with the Title 24 Building Standards, including Building, Electrical, Mechanical, Plumbing, Energy, Fire, Green Building, and State and Federal accessibility requirements. Compliance must be according to the regulations in effect and amended by the City of Gilroy at the time of building permit submission.
126.	**GREEN BUILDING STANDARDS**: The building must incorporate mandatory green building measures from the California Green Building Standards Code. The applicant shall include the checklist, noting the locations of this information on the

	plans and specifications. All measures will be verified by the Building Inspector during the final inspection.
127.	**GEOTECHNICAL REPORT**: The applicant must submit a stamped, signed, and dated soil investigation report with design recommendations to the Building Official, based on observations and tests from borings or excavations. Additional studies may be needed for soil-related factors. A stamped, signed, and dated letter from a Geotechnical or Civil Engineer is also required, confirming compliance with recommendations for soil site observation. Before final inspection, the engineer must provide a report stating that the completed work conforms to approved plans and specifications.
128.	**WATER QUALITY:** Project design shall comply with the Stormwater Management Guidance Manual for Low Impact Development & Post-Construction Requirements. The applicant shall submit the Source Control Checklist as well as the appropriate Performance Requirements Checklist found in Appendix A of the manual at the time of the initial submittal for building permit. The manual can be found at the following site: www.cityofgilroy.org/261/Storm-Water-Management
129.	**DEVELOPER STORM WATER QUALITY RESPONSIBILITY:** The developer must ensure that all contractors are aware of and implement all storm water quality measures. Noncompliance with the approved construction Best Management Practices (BMPs) may result in correction notices, citations, or a project stop order.
130.	**BEST MANAGEMENT PRACTICES (BMP):** The applicant must conduct all construction activities in compliance with Gilroy Municipal Code Section 27C, which addresses Municipal Storm Water Quality Protection and Discharge Controls, as well as Section E.10 of the Regional NPDES Permit regarding Construction Site Storm Water Run-Off Control. Detailed information is available at: www.flowstobay.org/documents/business/construction/SWPPP.pdf. This document must be printed and included in all building construction plan sets submitted for permits in the City of Gilroy.
131.	**GRADING & DRAINAGE:** All grading activities must address National Pollutant Discharge Elimination System (NPDES) requirements. No earth disturbance or grading is allowed between October 15th and April 15th unless approved by the Building Official. If approved, the applicant must submit a Winterization Erosion Control Plan for review, which should include erosion control measures as per Gilroy Municipal Code § 27C to minimize erosion. The plan must outline specific methods to control sediment runoff and construction pollution, integrating with a Storm Water Pollution Prevention Plan (SWPPP). Both the Erosion Control Plan and SWPPP must be kept on-site during construction. A Notice of Intent (NOI) must be filed with the State Water Resources Control Board, and a copy submitted to the Building Department before a grading permit can be issued. Additionally, a project WDID# must be included on the grading plans prior to approval.

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132.	**SITE LANDSCAPING COORDINATION:** Landscaping must be coordinated between the stormwater treatment area and the overall site plan. Note that landscaping within the stormwater treatment area does not count towards site landscaping requirements. First, identify stormwater treatment areas, then select appropriate plants for each area, as some may not be suitable due to facility requirements. The applicant is responsible for coordinating between civil stormwater facilities and the landscape plans.
133.	**STORMWATER MANAGEMENT PLAN:** At the initial improvement plan submission, the applicant must provide a Storm Water Management Plan (SWMP) prepared by a registered Civil Engineer. The SWMP should analyze existing and future conditions and include all off-site tributary areas. The study and design must comply with the City's Stormwater Management Guidance Manual (latest edition). Development must not alter existing off-site drainage patterns, including tributary areas, drainage volume, and velocity. The plan requires approval from the Building Official before a building permit can be issued.
134.	**STORMWATER CONTROL PLAN:** At the initial improvement plan submission, the applicant must provide a design-level Stormwater Control Plan Report in 8 ½ x 11 format. This report should include background information, a summary, and an explanation of all stormwater management aspects, along with exhibits, tables, calculations, and supporting technical information. It must clearly delineate impervious and pervious areas on the site, with separate shading for landscaping and pervious areas, including those not designated as bio-retention areas. This report does not replace any stormwater control plan sheets in the improvement plans. The stormwater control plan must include a signed Performance Requirement Certification as specified in the Stormwater Guidance Manual. Additionally, at the applicant's expense, the plan must be submitted for review by an independent third party approved by the City for compliance. The results of this peer review must be submitted and approved by the Building Official before the first building permit is issued.
135.	**DRAINAGE:** Drainage designed into landscaping to reduce runoff volume or improve water quality must comply with the Stormwater Management Guidance Manual for Low Impact Development & Post Construction Requirements (June 2015) and is subject to the Building Official's approval. Sidewalk drains may be required to direct water under sidewalks and through curbs. No increase in peak discharge is permitted downstream, and discharges must adhere to any non-point source permit issued by the Regional Water Quality Control Board. All on-site drainage improvements must conform to standard engineering practices and should not adversely affect adjacent properties. A licensed Civil Engineer must perform all drainage capacity calculations, which should include their signature and stamp on the calculation sheets, and these must be submitted to the City with the project civil plans for review and approval. For projects with permanent structural controls for water quality, site-specific Operation and Maintenance (O&M)

	procedures must be included in the Stormwater Control Plan (SWCP) and approved prior to occupancy. An O&M Agreement will specify the owner's responsibilities for ongoing maintenance, which must be recorded on the property deed. If connecting to an existing storm drain system within or downstream of the site, the design engineer must provide calculations with the final design plans to demonstrate that the downstream system can accommodate additional site flows for the design storm, following City Standards. These calculations must be approved by the Building Official before the issuance of the first building permit.
136.	**STORMWATER MANAGEMENT FACILITIES MAINTENANCE AGREEMENT:** The applicant must execute a Stormwater Management Facilities Maintenance Agreement with the Building Official, as outlined in Chapter 7.39 210-230 of the Stormwater Management and Discharge Control ordinance. This agreement will detail the operation and maintenance (O&M) plan for the permanent stormwater treatment facilities and will be provided by the Building Division. The agreement shall include the following provisions: a. If maintenance or repair is neglected, or if the stormwater management facility poses a danger to public health or safety, the City shall have the authority to conduct maintenance or repair work and recover the costs from the owner. b. All on-site stormwater management facilities must be operated and maintained in good condition and promptly repaired or replaced by the property owner(s) or a legal entity approved by the City. c. Any repairs, restoration, or maintenance must be according to City-approved plans. The property owner(s) shall develop a maintenance schedule for the duration of the stormwater management facility, detailing the maintenance tasks, timelines, and responsible parties. This schedule must be included with the approved Stormwater Runoff Management Plan. The agreement must be executed before the first occupancy of the building.
137.	**STORMWATER MANAGEMENT FACILITIES INSPECTION**: The Stormwater Management Facilities Maintenance Agreement requires the following inspections: a. To comply with State Stormwater requirements and the NPDES permit, the applicant must secure a Qualified SWPPP Developer (QSD) or Qualified SWPPP Practitioner (QSP) to maintain all erosion control and Best Management Practices (BMP) measures during construction. The QSD or QSP must provide weekly inspection reports to the City for approval by the Building Official. b. Stormwater facility inspections must be conducted at least twice a year: once in Fall by October 1st, and once in Winter by March 15th. Written records of all inspections must be maintained and include, at a minimum: 1. Site address 2. Date and time of inspection 3. Name of the inspector

	4. List of inspected stormwater facilities 5. Condition of each facility 6. Description of needed maintenance or repairs 7. Need for site re-inspection, if applicable c. An inspection report must be submitted to the Building Division by October 1st for the Fall report and by March 15th of the following year for the Winter report. d. The applicant must obtain a National Pollutant Discharge Elimination System (NPDES) permit before starting any grading or construction activities and provide proof of filing a Notice of Intent (NOI) with the State Water Resources Control Board. e. The applicant is responsible for ensuring all contractors are aware of and implement all stormwater quality measures. Noncompliance with approved construction BMPs may result in correction notices, citations, or a project stop order. f. The construction sequence for all stormwater facilities (e.g., bioswales, detention/retention basins, drain rock) should be carried out in the final phases of the project to prevent siltation and maintain the intended function of the facilities. g. Before final inspection, all stormwater facilities must be tested by a certified QSP or QSD to verify they meet the minimum design infiltration rate. Testing shall follow a 20 ft x 20 ft grid pattern across the completed facility surface, unless otherwise approved by the Building Official. The geotechnical engineer must evaluate all soil and infiltration properties for the facilities. Percolation tests, using Double Ring Infiltrator Testing with appropriate safety factors, should be conducted both horizontally and vertically (at the stormwater facility depth). A 50% safety factor should be applied to the calculated percolation test results and used as the basis for design (the design percolation rate). The geotechnical report must include a stormwater design section with percolation results and design parameters.
138.	**REGIONAL BOARD STORMWATER REVIEW:** This project may be subject to an audit by the Central Coast Regional Board. The City may be required to submit the project's stormwater design and stormwater management plan for review and comment by the Regional Board. Prior to the issuance of a building permit, the project must receive approval or acknowledgment from the Regional Board. The project may also need to provide any necessary documents (including reports, technical data, plans, etc.) required for Regional Board approval.
139.	**POST CONSTRUCTION BEST MANAGEMENT PRATICES (BMP):** In accordance with Gilroy Municipal Code Chapter 27D regarding Post Construction Storm Water Pollution Prevention, all projects that meet the criteria outlined in the Storm Water Guidance Manual for Low Impact Development and Post-Construction Requirements must prepare a Storm Water Control Plan (SWCP). The plan must comply with design standards and best management practices (BMPs) to the satisfaction of the City Engineer or designee. The requirements include: a. Owners/occupants must inspect private storm drain facilities at least twice a year and sweep parking lots once before and once during the storm season. b. The applicant will be charged for the costs of abatement related to inspection of

	private storm drain facilities, emergency maintenance to protect public health or watercourses, and replacement or repair of facilities that fail to meet performance standards. Any abatement performed by City staff on the applicant's property will be billed at the City's adopted hourly rate. c. New and redeveloped storm drain inlets must be labeled with "No Dumping: Drains to Bay" plaques to inform the public of stormwater's destination and to prevent pollution. Template ordering information is available at www.flowstobay.org. d. All outdoor-stored process equipment, oils, fuels, solvents, coolants, fertilizers, pesticides, and similar chemicals, as well as petroleum-based wastes, tallow, and grease must be stored in covered containers at all times. e. Public outdoor spaces and trails must include dog waste stations, and garbage and recycling receptacles should have permanent covers to prevent trash exposure to rain. Trash enclosure drains must connect to the sanitary sewer system.
140.	**PRE-MANUFACTURED TRAILER**: A construction trailer shall be allowed to be placed on the project site for daily administration/coordination purposes during the construction period. At no time shall campers, trailers, motor homes, or any other vehicle be used as living or sleeping quarters on the construction site. All such vehicles shall be removed from the site at the end of each workday. A building permit is required for the installation of a pre-manufactured trailer.
141.	**PORTABLE TOILETS**: Portable toilets used during construction shall be emptied on a regular basis as necessary to prevent odor. A containment pan is required under all portable toilets.
142.	**CONSTRUCTION STORAGE**: All construction materials, debris and equipment shall be stored on site. If that is not physically possible, an encroachment permit shall be obtained from the Department of Public Works prior to placing any construction materials, debris, debris boxes or unlicensed equipment in the right-of-way. The placing of portable restroom facilities in the City right-of-way will not be permitted.
143.	**CONSTRUCTION SITE MAINTENANCE**: All portions of the job site shall be maintained in an organized and professional condition. All trash, debris, construction scraps and broken/deteriorated machinery shall be removed from the site at the end of each week. If offloaded construction materials are not used within 2 weeks, they shall be screened from view. All sidewalks, driveways and public/private roadways fronting the subject site shall be broom cleaned at the end of each business day.
144.	**DEMOLITION PERMIT**: Demolition permits will be issued in accordance with Section 6.1 of the Gilroy Municipal Code. Additionally, safeguards during construction must be implemented in accordance with Chapter 33 of the California Building Code.

145.	**PLAN MODIFICATIONS**: The acceptance of the plans does not absolve the developer from correcting any mistakes, errors, or omissions found in them. If the public interest necessitates changes during construction, the City has the authority to require modifications to the accepted plans and will specify how these changes should be implemented.
146.	**BICYCLE PARKING: Short-term bicycle parking.** Provide bicycle racks, for 5 percent of new visitor parking spaces added, with a minimum of one two-bike capacity "inverted U," or equivalent as approved by the Community Development Director. The bicycle rack must secure the frame and both wheels. Racks should be located near the building entrance (i.e., within constant visual range) unless it is demonstrated that they create a public hazard or locating them there is otherwise infeasible. If space is unavailable near building entrances, the racks must be designed to protect the lock from physical assault. Bicycle lockers may be provided in addition to bicycle racks. **Long-term bicycle parking**. Provide secure bicycle parking for 5 percent of the tenant-occupant parking spaces with a minimum of one bicycle parking facility.
147.	**SITE LIGHTING STANDARDS:** The applicant must submit a photometric plan for on-site lighting that meets Illuminating Engineering Society (IES) Standards. The plan must ensure an average of 1 foot-candle with a minimum-to-average ratio of 4:1, and a minimum lighting level of 0.3 foot-candle. This standard applies to all accessible parking lots, driveways, circulation areas, aisles, passageways, recesses, and accessible grounds adjacent to buildings. The lighting system must be designed to limit light spill beyond property lines and shield light sources from off-site view. The photometric plan requires approval from the Building Official.

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DATE: May 1, 2025

TO: Planning Commission

FROM: John Doughty, Public Works Director

SUBJECT: Finding of Consistency for the Capital Improvement Program for Fiscal Year 2026 and Fiscal Year 2027 to Determine Its Consistency with the City's General Plan and the California Environmental Quality Act (CEQA)

RECOMMENDATION:

Staff has analyzed the proposed projects and recommends the Planning Commission:

a) Receive report on proposed Capital Improvement Program (CIP) Project List for Fiscal Year 2026 and Fiscal Year 2027; and

b) Adopt a Resolution to make a Finding of Consistency with the General Plan. (roll call vote)

EXECUTIVE SUMMARY

The City of Gilroy's Capital Improvement Program ("CIP") represents an ongoing budget process through which the City identifies, prioritizes, and develops a multi-year work plan for major capital expenditures and their associated funding sources in an effort to improve and maintain the City of Gilroy's roadways, parks, facilities, and other infrastructure. Generally, CIP improvements are major expenditures that have a multiyear life and result in becoming City assets.

The CIP is a strategic planning tool focusing on City-owned infrastructure, summarizing in one document the City's overall capital project needs and associated funding requirements during a five-year period. The CIP document is a work plan and a planning tool and should be used as such in the biannual operating budget preparation process. There are a wide variety of funding sources for CIP projects, some steady and predictable, while others are dependent on outside agencies.

PROJECT DESCRIPTION:

Review of the Capital Improvement Program (CIP) for Fiscal Year 2026 through Fiscal Year 2027 to determine its consistency with the City's General Plan.

BACKGROUND

As part of the City's budget process, the Planning Commission evaluates projects proposed for the Capital Improvement Program (CIP) for consistency with the City's General Plan. The Commission is requested to review the CIP and report its findings and recommendations, relative to consistency with the General Plan, to the City Council.

Environmental Review: Staff has reviewed the list of projects identified in the CIP and determined that a number of projects will likely involve the need for preparation of environmental documentation in accordance with the California Environmental Quality Act (CEQA). As individual projects are selected to move forward through the CIP process, the appropriate CEQA documents will be prepared as the project scopes are more clearly defined.

The CIP General Plan conformity determination report is not a project per CEQA Guidelines Section 15378. The CIP is a budgeting and fiscal planning tool. It does not commit the City to construct or implement any specific project.

DISCUSSION AND ANALYSIS:

The Draft FY26-FY27 CIP Project List is provided in Attachment 1. Staff has reviewed the projects included in the proposed Capital Improvement Program for Fiscal Year 2026 and Fiscal Year 2027 for General Plan consistency. A list of the proposed CIP Projects with their associated General Plan Policies and/or Goals to indicate consistency with the document is provided in Attachment 2. A draft resolution to make a Finding of Consistency with the General Plan is provided in Attachment 3.

NEXT STEPS:

The CIP Budget is scheduled for adoption by the City Council on June 2, 2025. While none are anticipated, any significant changes made by the City Council would need to return to the Planning Commission for review of General Plan consistency.

Attachments:

1. FY26-FY27 Draft CIP Project List (New Projects)
2. FY26-FY27 CIP General Plan Consistency Table
3. Resolution for CIP General Plan Conformity

New Projects Proposed for FY26-FY27 CIP Project List

801000 Library Improvements
This project will remodel sections of the existing library to convert upstairs study space into small and medium-sized meeting rooms, combine teen study room and teen area into one space, remodel all service points to support more flexible technology, convert computer room into flexible space, extend children's room programming space, and combine the coffee nook, Friends of the Library, and downstairs meeting room into one Community room.

801020 Parks/Civic Facilities Sidewalk Improvements Citywide
This project would correct defective sidewalks and walkways at City-owned properties including the Civic Center, Library, Police Station, various parks, and parking lots. This project would analyze the sidewalk condition along the frontage of City-owned properties and design and implement corrective measures to repair the defective areas to City Standards.

801030 Parking Lot Resurfacing - Downtown
This project would resurface and restripe City-owned parking lots in the Downtown area. The scope of work includes asphalt resurfacing, pavement markings, wheel stops, striping, ADA parking stalls, signage, and storm water management.

801040 Citywide Park Improvement Program
This project would implement various improvements at City parks, including but not limited to replacing restrooms, upgrading and replacing playground structures, resurfacing sports courts, and replacing bleachers.

801050 Pickleball Courts
This project would design and construct pickleball courts at City parks.

801060 Well 8/8a Rehabilitation
This project will rehabilitate Well #8/8a to restore production of potable water. Well 8/8a was taken offline following an exceedance of the Drinking Water Standard for Nitrates, and receipt of a Citation from the Regional Water Quality Control Board. This project would install mitigation measures to reduce nitrates and meet standards such that Well 8/8a could resume water production.

801090 City Facilities Repairs and Maintenance
This project will provide for the repair and maintenance of various City-owned facilities throughout the City.

801100 Annex Server Room AC Replacement
This project will replace the air conditioning at the City Hall Annex building.

801120 Citywide Safety Improvements
This project will fund various safety improvements including traffic calming and safe routes to schools.

801130 Parking Lot Resurfacing – Parks
This project will resurface and restripe parking lots at City parks. The scope of work includes asphalt resurfacing, pavement markings, wheel stops, striping, ADA parking stalls, signage, and storm water management.

FY26 to FY27 Capital Improvement Program General Plan Consistency

Project Number and Title		General Plan Consistency
801000	Library Improvements	Policy 15.01 Public Facilities and Development. Develop a system of public facilities that will: b) Minimize adverse impacts on the environment, and adverse fiscal, economic and social impacts on the community. Policy 15.04 Partnering. Seek opportunities to partner or form joint ventures with commercial and nonprofit organizations to facilitate the development of community facilities, programs, and services.
801020	Parks/Civic Facilities Sidewalk Improvements Citywide	Policy 1.05 Existing Neighborhoods. Maintain and enhance the quality of existing residential neighborhoods, ensuring adequate public facilities such as parks, schools, streets, water supply, and drainage. Policy 16.09 Physical Access. Ensure that all facilities and parks comply with State and Federal accessibility codes and standards, such as those established by the Americans with Disabilities Act (ADA), and California Building Standards Code (Title 24, California Code of Regulations).
801030	Parking Lot Resurfacing - Downtown	
801040	Citywide Park Improvement Program	
801050	Pickleball Courts	
801090	City Facilities Repairs and Maintenance	
801130	Parking Lot Resurfacing - Parks	
801060	Well 8/8a Rehabilitation	Policy 1.05 Existing Neighborhoods. Maintain and enhance the quality of existing residential neighborhoods, ensuring adequate public facilities such as parks, schools, streets, water supply, and drainage.
801100	Annex Server Room AC Replacement	Policy 15.06 Service Delivery. Provide adequate staffing and program support to maintain high quality service to residents at all community facilities.
801120	Citywide Safety Improvements	Policy 1.05 Existing Neighborhoods. Maintain and enhance the quality of existing residential neighborhoods, ensuring adequate public facilities such as parks, schools, streets, water supply, and drainage. Policy 12.02 System Function and Neighborhood Protection. Ensure that the existing and proposed highways, streets, bikeways and pedestrian paths serve the functions they are intended to serve, while protecting the character of residential neighborhoods. Policy 12.03 Residential Street System Design. Design street systems in residential areas to encourage direct connections between neighborhoods; to encourage internal movement by bicycling and walking; and to provide safer and quieter neighborhoods.

RESOLUTION NO. 2025-XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF GILROY FINDING THE PROPOSED 2026-2027 CAPITAL IMPROVEMENT PROGRAM PROJECT LIST IN CONFORMANCE WITH THE GENERAL PLAN

WHEREAS, the City of Gilroy Capital Improvement Program (CIP) is a five-year program adjusted annually that outlines public improvements and estimated expenditures to construct improvements. The current CIP project list has been updated for the 2026-2027 time period for City Council review and consideration; and

WHEREAS, California Government Code Section 65401 requires that the City's Planning Commission make a determination that the annual CIP is in conformance with the City's General Plan; and

WHEREAS, the Planning Division completed an environmental assessment for the project in accordance with the California Environmental Quality Act (CEQA), and recommends that the Planning Commission determine that the General Plan Conformity Finding is not subject to the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15378 in that the General Plan conformance finding as required by State law is not a project as defined under CEQA; and

WHEREAS, on May 1, 2025, the Planning Commission held a public meeting and reviewed the 2026-2027 CIP Project List for consistency with the General Plan 2040.

NOW, THEREFORE, the Planning Commission of the City of Gilroy hereby finds, determines and resolves as follows:

Section 1: The Planning Commission has duly considered the full record before it, including the City staff report, the 2026-2027 CIP Project List, testimony by staff and the public, and other materials and evidence submitted or provided to the Commission. Furthermore, the recitals set forth above are found to be true and correct and are incorporated herein by reference.

Section 2: The Planning Commission determines that the General Plan Conformity Finding is not subject to the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15378 since it is not a project as defined under CEQA.

Section 3: The Planning Commission finds that each of the Capital Improvement Projects contained in the proposed 2026-2027 Capital Improvement Program Project List is in conformance with the City of Gilroy General Plan 2040 as outlined in the General Plan Consistency Table attached to the Planning Commission staff report dated May 1, 2025.

Section 4: The Planning Commission of the City of Gilroy hereby adopts this Resolution finding the proposed 2026-2027 Capital Improvement Program Project List is in conformity with the General Plan and directs staff to transmit this finding to the City Council in compliance with Government Code section 65401.

PASSED AND ADOPTED this 1st day of May, 2025 by the following roll call vote:

AYES:

NOES:

ABSENT:

ATTEST:

Sharon Goei, Secretary
Community Development Director

APPROVED:

Manny Bhandal, Chairperson

Community Development Department

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TO: Planning Commission
FROM: Sharon Goei, Community Development Director
Ariana Fabian, Planning Technician
DATE: May 1, 2025
SUBJECT: Planning Division Staff Approvals

In conformance with Gilroy Municipal Code Sections 30.50.20(b) and 30.50.46, the following table lists all Minor Deviation approvals and all Architectural and Site approval/denial actions taken by the Planning Division since the last report was provided to the Planning Commission at its April 3, 2025 meeting.[i]

APPROVED	PROJECT #	LOCATION	PROJECT NAME & DESCRIPTION
3/3/2025	AS 24-21	641 Leavesley Road	This application approved the installation of traffic gates at various locations throughout the Gilroy Premium Outlets.
4/15/2025	AS 24-05	5955 Travel Park Circle	This application approved the demolition of a restaurant and construction of a new fuel and food mart.

DENIED	PROJECT #	LOCATION	PROJECT NAME & DESCRIPTION
None			

AS = Architectural and Site Review
VMD = Minor Deviation

The current status of other planning projects is available online at:
https://www.cityofgilroy.org/298/Development-Activity-Projects

[i] Submitted in conformance with Gilroy Municipal Code Sections 30.50.20(b) and 30.50.46