RECIRCULATED DRAFT EIR

FOR THE

SCHULTE ROAD WAREHOUSE PROJECT
(SCH # 2023120437)

MARCH 2025

Prepared for:

City of Tracy
Planning Division
333 Civic Center Plaza
Tracy, CA 95376

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762
(916) 580-9818

D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm

RECIRCULATED DRAFT EIR

FOR THE

SCHULTE ROAD WAREHOUSE PROJECT
(SCH # 2023120437)

MARCH 2025

Prepared for:

City of Tracy
Planning Division
333 Civic Center Plaza
Tracy, CA 95376

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762
(916) 580-9818

RECIRCULATED DRAFT EIR

Chapters **Page Numbers**

ES Executive Summary ES-1

1.0 Introduction 1.0-1

1.1 Introduction 1.0-1

1.2 Summary of Revisions to the Draft EIR 1.0-1

1.3 Commenting on the Recirculated Draft EIR 1.0-2

2.0 Project Description 2.0-1

2.1 Project Location 2.0-1

2.2 Project Site Defined 2.0-1

2.3 Project Setting 2.0-1

2.4 Project Goals and Objectives 2.0-2

2.5 Uses of the EIR and Required Agency Approvals 2.0-3

3.3 Air Quality 3.3-1

3.3.1 Environmental Setting 3.3-1

3.3.2 Regulatory Setting 3.3-13

3.3.3 Impacts and Mitigation Measures 3.3-26

3.7 Greenhouse Gases, Climate Change and Energy 3.7-1

3.7.1 Environmental Setting 3.7-1

3.7.2 Regulatory Setting 3.7-8

3.7.3 Impacts and Mitigation Measures 3.7-20

4.0 Other CEQA-Required Topics 4.0-1

4.1 Cumulative Context Impact Analysis 4.0-1

4.2 Significant Irreversible Effects 4.0-20

4.3 Significant and Unavoidable Impacts 4.0-21

4.4 Growth-Inducing Impacts 4.0-21

Tables **Page Numbers**

Table ES-1: Comparison Summary of Alternatives to the Proposed Project ES-3

Table ES-2: Project Impacts and Proposed Mitigation Measures ES-5

Table 3.3-1: Federal and State Ambient Air Quality Standards 3.3-9

Table 3.3-2: State and National Attainment Status 3.3-11

Table 3.3-3: Ambient Air Quality Monitoring Data Summary (Tracy Airport) - Ozone 3.3-11

Table 3.3-4: Ambient Air Quality Monitoring Data Summary (San Joaquin Valley) - PM_{10} 3.3-11
Table 3.3-5: Ambient Air Quality Monitoring Data Summary (San Joaquin County) - $PM_{2.5}$ ..3.3-12
Table 3.3-6: San Joaquin Valley Air Pollution Control District Significance Thresholds 3.3-27
Table 3.3-7: SJVAPCD Daily Mass Emissions Screening Criteria.....3.3-27
Table 3.7-8: Project Consistency with State of California Department of Justice Best Practices When Studying Air Quality and Greenhouse Gas Emissions 3.7-28
Table 3.3-9: Construction Project Generated Emissions (tons per year).....3.3-32
Table 3.3-10: Construction Project Generated Emissions (pounds per day).....3.3-32
Table 3.3-11: Operational Project Generated Emissions (tons per year) 3.3-33
Table 3.3-12: Operational Project Generated Emissions (pounds per day) 3.3-34
Table 3.3-13: Operational Project Generated Emissions (tons per year) – Mitigated 3.3-34
Table 3.3-14: CARB Minimum Separation Recommendations on Siting Sensitive Land Uses.3.3-42
Table 3.7-1: PG&E and the State of California Power Mix in 2021.....3.7-7
Table 3.7-2: Project Mitigated Construction and Operational GHG Emissions (Metric Tons/Year) 3.7-22
Table 3.7-3: Project Consistency with CARB 2022 Scoping Plan.....3.7-23
Table 3.7-4: Project Consistency with SJCOG's 2022 RTP/SCS 3.7-27
Table 3.7-5: On-Road Mobile Fuel Usage by Project Construction Activities – by Phase.....3.7-36
Table 4.0-1: Growth Projections 4.0-2

Figures Page Numbers

Note: Figures are located at the end of Chapter 2.0.

Figure 2.0-1 Regional Project Location
Figure 2.0-2 Project Vicinity
Figure 2.0-3 Aerial View of Project Site
Figure 2.0-4 Site Plan
Figure 2.0-5 Project Renderings
Figure 2.0-6 Paving and Dimensioning Plan
Figure 2.0-7 Shrub and Groundcover Plan
Figure 2.0-8 Utility Plan
Figure 2.0-9 Existing General Plan Land Use Map
Figure 2.0-10 Existing and Proposed Zoning Map

Appendices

Appendix A: Plan Set
Appendix B: Air Quality, Greenhouse Gas, and Energy Appendix
Appendix B.1: CalEEMod Outputs
Appendix B.2: Screening Prioritization Calculator Output
Appendix B.3: Energy Calculations
Appendix C: VMT Memorandum

INTRODUCTION

The City of Tracy has determined that the Schulte Road Warehouse Project is a "Project" within the definition of the California Environmental Quality Act (CEQA). CEQA requires the preparation of an environmental impact report (EIR) prior to approving any project, which may have a significant impact on the environment. For the purposes of CEQA, the term "Project" refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]).

The EIR contains a description of the Project, description of the environmental setting, identification of Project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of Project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. This EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the Notice of Preparation (NOP) were considered in preparing the analysis in this EIR.

PROJECT DESCRIPTION

The Project site includes two distinct planning boundaries defined below. The following terms are used throughout this Draft EIR to describe the planning boundaries within the Project site:

- **Project Site** (or **Annexation Area**) – totals 21.92 acres and includes: (1) the proposed 20.92-acre Development Area (APN 209-230-250), and (2) the 1.00-acre Williams Communication Parcel along West Schulte Road (APN 209-230-260), which would not be developed as part of the proposed Project.
- **Development Area** – includes a 20.92-acre parcel (APN 209-230-250) that is intended for the development of up to 217,466-square foot (sf) of warehouse and office uses.

The Project would include the construction and subsequent operation of a 217,466-sqare-foot (sf) warehouse building. The 217,466-sf warehouse would include 206,593 sf of warehouse uses and 10,873-sf of office space. The City's General Plan land use designation for the project site is Industrial. Specific uses allowed in the industrial category range from flex/office space to manufacturing to warehousing and distribution. Although the tenants of the proposed warehouse are unknown at this time, this analysis assumes that business operations could occur 24 hours per day. No cold storage facilities or uses will be allowed on-site.

The proposed warehouse would include 31 dock level doors on the eastern side of the building. The maximum height of the one-story warehouse would be 42.6 feet, with the majority of the building at 40 feet. Landscaping would be provided throughout the site.

The principal objective of the proposed Project is the demolition of three single family residences and six ancillary structures and redevelopment of the Development Area with a one-story, 217,466 sf warehouse building and a surface parking lot.

The Project site is designated as Agriculture by San Joaquin County's General Plan Land Use Map and is zoned as AG-40 Agriculture by the County. The site currently has a City General Plan land use designation of Industrial (I). The San Joaquin County Local Agency Formation Commission (LAFCO) will require the Project site to be pre-zoned by the City of Tracy in conjunction with the proposed annexation. The City's pre-zoning will include the Light Industrial (M-1) zoning designation for the Project site. Additionally, the proposed Project would result in the annexation of the Annexation Area into the City of Tracy.

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

This Draft EIR addresses environmental impacts associated with the proposed Project that are known to the City of Tracy, were raised during the NOP process, or raised during preparation of the Draft EIR. This Draft EIR discusses potentially significant impacts associated with aesthetics, agricultural resources, air quality, biological resources, cultural and tribal resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, noise, and transportation and circulation.

The City of Tracy received 10 written comment letters on the NOP for the proposed Project from the agencies listed below. Copies of those NOP comment letters are provided in Appendix A of the original Draft EIR (2024). The City also held a public scoping meeting on January 9, 2024. No written or verbal comments were provided at that scoping meeting.

- California Department of Justice (December 20, 2023);
- California Highway Patrol (January 9, 2024);
- Central Valley Regional Water Quality Control Board (January 16, 2024);
- Chevron (January 8, 2024);
- State of California Native American Heritage Commission (December 19, 2023);
- San Joaquin Council of Governments, Inc. (December 14, 2023);
- San Joaquin County environmental Health Department (January 12, 2024);
- San Joaquin Local Agency Formation Commission (December 19, 2023);
- San Joaquin Valley Air Pollution Control District (January 16, 2024);
- San Luis & Delta-Mendota Water Authority (January 11, 2024).

ALTERNATIVES TO THE PROPOSED PROJECT

The CEQA Guidelines require an EIR to describe a reasonable range of alternatives to the Project or to the location of the Project which would reduce or avoid significant impacts, and which could feasibly accomplish the basic objectives of the proposed Project. Three alternatives to the proposed Project were developed based on input from City staff, various outside agencies during the NOP review period, and the technical analysis performed to identify the environmental effects of the proposed Project. The alternatives analyzed in this EIR include the following three alternatives in addition to the proposed Project.

- **No Project (No Build) Alternative**: Under this alternative, development of the Project site would not occur, and the Project site would remain in its current existing condition and not be annexed into the City.
- **Truck Parking Alternative:** Under this alternative, a truck parking facility with truck and trailer parking spaces and restroom facilities would be developed the Project site.
- **Reduced Project Alternative:** Under this alternative, the proposed Project would be developed with the same types of industrial uses as described in the Project Description, but the industrial square footage would decrease by 25 percent and the amount of developed land would decrease by 25 percent.

Alternatives are described in detail in Chapter 5.0. Table ES-1 provides a comparison of the alternatives using a qualitative matrix that compares each alternative relative to the other Project alternatives. As shown in the table, the No Project (No Build) Alternative is the environmentally superior alternative. However, as required by CEQA, when the No Project (No Build) Alternative is the environmentally superior alternative, the environmentally superior alternative among the others must be identified. Therefore, the Truck Parking Alternative and Reduced Project Alternative both rank higher than the proposed Project. The Truck Parking Alternative would have equal impacts in three areas, slightly less impacts in one area, and less impacts in eight areas. The Reduced Project Alternative would have slightly less impacts in six areas and less impacts in five areas. Therefore, the Reduced Project Alternative would be the next environmentally superior alternative. It is noted that the Reduced Project Alternative would not fully meet all of the Project objectives. See Section 5.4 in Chapter 5.0 for a comparative evaluation of the objectives for each alternative.

TABLE ES-1: COMPARISON SUMMARY OF ALTERNATIVES TO THE PROPOSED PROJECT

ENVIRONMENTAL ISSUE	*NO PROJECT (NO BUILD) ALTERNATIVE*	*TRUCK PARKING ALTERNATIVE*	*REDUCED PROJECT ALTERNATIVE*
Aesthetics and Visual Resources	Less (Best)	Slightly Less (2nd Best)	Slightly Less (3rd Best)
Agricultural Resources	Less (Best)	Equal (3rd Best)	Slightly Less (2nd Best)
Air Quality	Less (Best)	Less (2nd Best)	Less (3rd Best)
Biological Resources	Less (Best)	Equal (3rd Best)	Slightly Less (2nd Best)
Cultural and Tribal Resources	Less (Best)	Equal (3rd Best)	Slightly Less (2nd Best)
Geology and Soils	Less (Best)	Less (2nd Best)	Slightly Less (3rd Best)
Greenhouse Gases, Climate Change and Energy	Less (Best)	Less (2nd Best)	Less (3rd Best)
Hazards and Hazardous Materials	Less (Best)	Less (2nd Best)	Slightly Less (3rd Best)
Noise	Less (Best)	Less (2nd Best)	Less (3rd Best)
Transportation and Circulation	Less (Best)	Less (2nd Best)	Less (3rd Best)
Utilities and Service Systems	Less (Best)	Less (2nd Best)	Less (3rd Best)

GREATER = GREATER IMPACT THAN THAT OF THE PROPOSED PROJECT
LESS = LESS IMPACT THAN THAT OF THE PROPOSED PROJECT
EQUAL = NO SUBSTANTIAL CHANGE IN IMPACT FROM THAT OF THE PROPOSED PROJECT

SUMMARY OF IMPACTS AND MITIGATION MEASURES

In accordance with the CEQA Guidelines, this EIR focuses on the significant effects on the environment. The CEQA Guidelines define a significant effect as a substantial adverse change in the physical conditions which exist in the area affected by the proposed Project. A less than significant

effect is one in which there is no long or short-term significant adverse change in environmental conditions. Some impacts are reduced to a less than significant level with the implementation of mitigation measures and/or compliance with regulations.

The environmental impacts of the proposed Project, the impact level of significance prior to mitigation, the proposed mitigation measures and/or adopted policies and standard measures that are already in place to mitigate an impact, and the impact level of significance after mitigation are summarized in Table ES-2.

TABLE ES-2: PROJECT IMPACTS AND PROPOSED MITIGATION MEASURES

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
AESTHETICS AND VISUAL RESOURCES			
Impact 3.1-1: Project implementation may result in substantial adverse effects on scenic vistas and resources.	PS	*None feasible.*	SU
Impact 3.1-2: Project implementation may substantially damage scenic resources within a State Scenic Highway.	LS		--
Impact 3.1-3: In an urbanized area, Project implementation would not conflict with the applicable zoning and other regulations governing scenic quality.	LS		--
Impact 3.1-3: Project implementation may result in light and glare impacts.	LS		--
AGRICULTURAL RESOURCES			
Impact 3.2-1: The proposed Project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses.	PS		SU
Impact 3.2-2: The proposed Project would not conflict with existing zoning for agricultural use, or Williamson Act Contracts.	LS		--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 3.2-3: The proposed Project would not involve other changes in the environment which, due to their location or nature, could result in conversion of adjacent agricultural Farmland, to non-agricultural use or conversion of forest land to non-forest use.	LS		--
AIR QUALITY			
Impact 3.3-1: Project operation would not conflict or obstruct implementation of the District's air quality plan.	LS		--
Impact 3.3-2: The proposed Project would not result in a cumulatively considerable net increase of a criteria pollutant for which the region is in nonattainment under an applicable federal or State ambient air quality standard.	LS		--
Impact 3.3-3: The proposed Project would not expose sensitive receptors to substantial pollutant concentrations.	LS		--
Impact 3.3-4: The proposed Project would not cause exposure to other emissions (such as those leading to odors) adversely affecting a substantial number of people.	LS		--
BIOLOGICAL RESOURCES			
Impact 3.4-1: The proposed Project has the potential to have a direct or indirect effect on special-status invertebrate species.	PS	***Mitigation Measure 3.4-1****: Prior to commencement of any grading activities, the Project proponent shall obtain coverage under the SJMSCP to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through implementation of incidental take and minimization Measures*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		(ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a Project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.	
Impact 3.4-2: The proposed Project has the potential to have direct or indirect effects on special-status reptile and amphibian species.	PS	*Implement* ***Mitigation Measure 3.4-1.***	LS
Impact 3.4-3: The proposed Project has the potential to have direct or indirect effects on special-status bird species.	PS	*Implement* ***Mitigation Measure 3.4-1.***	LS
Impact 3.4-4: The proposed Project has the potential to result in direct or indirect effects on special-status mammal species.	PS	*Implement* ***Mitigation Measure 3.4-1.***	LS
Impact 3.4-5: The proposed Project has the potential for direct or indirect effects on candidate, sensitive, or special-status plant species.	LS		--
Impact 3.4-6: The proposed Project has the potential to effect protected wetlands and jurisdictional waters.	NI		--
Impact 3.4-7: The proposed Project has the potential to result in adverse effects on riparian habitat or a sensitive natural community.	NI		--
Impact 3.4-8: The proposed Project has the potential to result in interference with the	LS		--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
movement of native fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites.			
Impact 3.4-9: The proposed Project has the potential to conflict with an adopted Habitat Conservation Plan.	PS	*Implement* ***Mitigation Measure 3.4-1.***	LS
Impact 3.4-10: The proposed Project has the potential to conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	NI		--
CULTURAL AND TRIBAL RESOURCES			
Impact 3.5-1: Project implementation has the potential to cause a substantial adverse change to a significant historical resource, as defined in CEQA Guidelines §15064.5.	PS	***Mitigation Measure 3.5-1:*** *Prior to the demolition of the existing residential structures, a comprehensive evaluation of the structures shall be conducted to identify and document any aspects of historical significance. This evaluation shall be carried out by qualified professionals in cultural resources management or historic preservation, in accordance with the standards of the California Office of Historic Preservation. The assessment shall include, but not be limited to, an examination of architectural features, historical records, oral histories, and any other relevant sources of information to determine the historical significance of the residential structures. The findings from the assessment shall be recorded and documented in accordance with the standards set forth by the California Office of Historic Preservation. This documentation shall be submitted to the City of Tracy Community Development Department for review and approval prior to the issuance of any permits for demolition.* *In the event that significant historical or cultural resources are identified, appropriate measures shall be implemented in consultation with the project applicant to mitigate any adverse impacts to these resources to the extent feasible. The applicant shall submit a final report summarizing the implementation of this mitigation measure, including any findings,*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		documentation, and compliance verification activities, to the City of Tracy Community Development Department for cultural resources management. ***Mitigation Measure 3.5-2:*** *If any historical resources, cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources, are found during grading and construction activities during any phase of the Project, all work shall be halted immediately within a 200-foot radius of the discovery until an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, has evaluated the find(s).* *Work shall not continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR; or 3) not a significant Public Trust Resource.* *In addition, if the resource(s) identified is cultural or tribal in nature, the Confederated Villages of Lisjan shall be contacted to review and identify the resource, prior to work continuing at the discovery site.* *If Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, would also be required and, if Native American resources are identified, shall be retained at the Project applicant's expense.*	
Impact 3.5-2: Project implementation has the potential to cause a substantial adverse change to a significant archaeological resource, as defined in CEQA Guidelines §15064.5, or a significant tribal cultural resource, as defined in Public Resources Code §21074.	PS	*Implement* ***Mitigation Measure 3.5-2.*** ***Mitigation Measure 3.5-3:*** *If human remains are discovered during the course of construction during any phase of the Project, work shall be halted at the site and at any nearby area reasonably suspected to overlie adjacent human remains until the San Joaquin County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, either of the following steps will be taken:*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		• *The coroner shall contact the Native American Heritage Commission and the Confederated Villages of Lisjan in order to ascertain the Most Likely Descendant (MLD) from the deceased individual. If a MLD is identified, the MLD, with the permission of the owner of the land, or his or her authorized representative, in accordance with the law, may inspect the site discovery site and recommend to the landowner, or his or her representative, means for the treatment or disposition, with appropriate dignity' of the human remains and any associated grave goods. The landowner has no legal obligation to allow the MLD accesses to the property for the purpose of making a recommendation. The MLD must complete their inspection and make their recommendation within 48 hours of their notification by the NAHC. The recommendation may include the scientific removal and analysis of human remains and items associated with Native American burials. The coroner shall make a recommendation 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 any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains.* • *The landowner shall retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs:* o *The Native American Heritage Commission and Confederated Villages of Lisjan is unable to identify a descendent.* o *The descendant identified fails to make a recommendation.* o *The City of Tracy or its authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.*	
Impact 3.5-3: Project implementation has the potential to disturb human remains, including those interred outside of formal cemeteries.	PS	*Implement* ***Mitigation Measure 3.5-3.***	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
GEOLOGY AND SOILS			
Impact 3.6-1: The proposed Project would not cause substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, strong seismic ground shaking, seismic related ground failure (including liquefaction), or landslides.	LS		--
Impact 3.6-2: Implementation and construction of the proposed Project has the potential to result in substantial soil erosion or the loss of topsoil.	LS		--
Impact 3.6-3: The proposed Project has the potential to be located on a geologic unit or soil that is unstable, or that would become unstable as a result of Project implementation, and potentially result in landslide, lateral spreading, subsidence, liquefaction or collapse.	PS	***Mitigation Measure 3.6-1****: All site preparation, grading operations, and construction design shall be conducted in conformance with the recommendations included in the Preliminary Geotechnical Engineering Study – Proposed New One- Story Warehouse Building, 16286 W. Schulte Road [APN: 209-280-250], Tracy, California (Condor Earth Technologies, Inc., 2020). Specific recommendations in the Geotechnical Engineering Report generally address the following:* 1. *General grading and site preparation;* 2. *Overexcavation;* 3. *Subgrade Preparation;* 4. *Fill materials;* 5. *Engineered fill placement;* 6. *Lime treatment;* 7. *Excavations;* 8. *Earthwork shrinkage;* 9. *Underground utility trenches;* 10. *Surface drainage control;* 11. *General foundation;* 12. *Shallow foundation design*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		13. Lateral resistance; *14. Construction considerations;* *15. Interior concrete slabs;* *16. Exterior concrete slabs;* *17. Retaining walls;* *18. Pavements;* 19. *Corrosion potential.* *Additional site testing and final design evaluation shall be conducted by the Project Geotechnical Consultant to refine and enhance these requirements as part of a final Geotechnical Evaluation. The Project Applicant/Developer shall require the Project Geotechnical Consultant to assess whether the requirements in that report need to be modified or refined to address any changes in the Project features that occur prior to the start of grading. If the Project Geotechnical Consultant identifies modifications or refinements to the requirements, the Project Applicant/Developer shall require appropriate changes to the final Project design and specifications. These requirements shall be incorporated into the final Geotechnical Evaluation.*	
Impact 3.6-4: The proposed Project has the potential for expansive soils to create substantial risks to life or property.	PS	*Implement* ***Mitigation Measure 3.6-1.***	LS
Impact 3.6-5 The proposed Project has the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	PS	***Mitigation Measure 3.6-2:*** *If any paleontological resources are found during grading and construction activities of the Project, all work shall be halted immediately within a 200-foot radius of the discovery until a qualified paleontologist has evaluated the find. A paleontologist is a scientist with an advanced degree (Master's or Doctorate) who studies the history of life on Earth through the fossil record.* *Work shall not continue at the discovery site until the paleontologist evaluates the find and makes a determination regarding the significance of the resource and identifies recommendations for conservation of the resource, including preserving in place or relocating on the Project site, if feasible, or collecting the resource to the extent feasible and*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		documenting the find with the University of California Museum of Paleontology. The paleontologist recommendations shall be implemented.	
GREENHOUSE GASES, CLIMATE CHANGE AND ENERGY			
Impact 3.7-1: Project implementation would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	LS		--
Impact 3.7-2: Project implementation would not result in the inefficient, wasteful, or unnecessary use of energy resources, and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	LS		--
HAZARDS AND HAZARDOUS MATERIALS			
Impact 3.8-1: Potential to create a significant hazard through the routine transport, use, or disposal of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	PS	***Mitigation Measure 3.8-1****: In the event that hazardous materials are encountered during construction, a Soils Management Plan (SMP) shall be submitted and approved by the San Joaquin County Department of Environmental Health. The SMP shall establish management practices for handling hazardous materials, including fuels, paints, cleaners, solvents, etc., during construction. The approved SMP shall be posted and maintained onsite during construction activities and all construction personnel shall acknowledge that they have reviewed and understand the plan.* ***Mitigation Measure 3.8-2****: Prior to bringing hazardous materials onsite, the applicant shall submit a Hazardous Materials Business Plan (HMBP) to San Joaquin County Environmental Health Department (CUPA) for review and approval. If during the construction process the applicant or its subcontractors generates hazardous waste, the applicant must register with the CUPA as a generator of hazardous waste, obtain an EPA ID# and accumulate, ship and*	LS

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		dispose of the hazardous waste per Health and Safety Code Ch. 6.5. (California Hazardous Waste Control Law). ***Mitigation Measure 3.8-3**: Prior to the issuance of grading permits, the applicant shall hire a qualified consultant to perform site-specific soil sampling to determine if chemicals of potential concern associated with the historical agricultural uses at the Project site are present in shallow soil at concentrations that would pose a threat to human health. In order to achieve this, a soil sampling and analysis workplan shall be submitted for approval by the San Joaquin County Department of Environmental Health prior to the work. The sampling and analysis plan shall meet the requirements of the Department of Toxic Substances Control Interim Guidance for Sampling Agricultural Properties (2008).* *If the sampling results indicate the presence of agrichemicals that exceed commercial screening levels, a removal action workplan shall be prepared in coordination with San Joaquin County Department of Environmental Health. The removal action workplan shall include a detailed engineering plan for conducting the removal action, a description of the onsite contamination, the goals to be achieved by the removal action, and any alternative removal options that were considered and rejected and the basis for that rejection. A no further action letter shall be issued by San Joaquin County Department of Environmental Health upon completion of the removal action. The removal action shall be deemed complete when the confirmation samples exhibit concentrations below the commercial screening levels, which will be established by the agencies.* ***Mitigation Measure 3.8-4**: Prior to the issuance of grading permits or demolition permits, the septic tank shall be abandoned and removed under permit from the San Joaquin County Department of Environmental Health.* ***Mitigation Measure 3.8-5**: Prior to ground disturbing activities, the applicant shall ensure that all debris/miscellaneous nonhazardous solid waste observed at the site during the Phase 1 Environmental Site Assessment be collected and disposed at an appropriate Solid Waste/Landfill facility.* ***Mitigation Measure 3.8-6**: Prior to any renovations or demolition of the existing structures within the Project site, surveys shall be conducted for the presence of lead-based paints or*	

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
		products, radon, mold, asbestos containing materials, as recommended by the Phase I ESA (dated November 4, 2020) prepared by ATC for the West Schulte Road property. The intent of the additional testing is to investigate whether any buildings, facilities, or soils contain hazardous materials, including petroleum products, agrichemical (including pesticides, herbicides, diesel, petrochemicals, etc.), asbestos, etc. *If asbestos-containing materials and/or lead are found in buildings, an Operations and Maintenance (O&M) Program shall be implemented in order to safely manage the suspect ACMs and LBP located at the subject property, and a California Occupational Safety and Health Administration (Cal/OSHA) certified asbestos containing building materials (ACBM) and lead based paint contractor shall be retained to remove the asbestos-containing materials and lead in accordance with EPA and Cal/OSHA standards. In addition, all activities (construction or demolition) in the vicinity of these materials shall comply with Cal/OSHA asbestos and lead worker construction standards. The ACBM and lead shall be disposed of properly at an appropriate offsite disposal facility.* ***Mitigation Measure 3.8-7****: Prior to any ground disturbance activities within 50 feet of a well on the Project site, the applicant shall hire a licensed well contractor to obtain a well destruction permit for any wells to be abandoned from the San Joaquin County Environmental Health Department, and properly abandon the on-site well(s) Any related subsurface piping, pursuant to review and approval by the City Engineer and the San Joaquin County Environmental Health Department.*	
Impact 3.8-2: Is the Project located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, the Project could create a significant hazard to the public or the environment.	NI		--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
NOISE			
Impact 3.9-1: The proposed Project has the potential to generate 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.	PS	***Mitigation Measure 3.9-1:*** *To reduce potential construction noise impacts during Project construction, the following multi-part mitigation measure shall be implemented for the Project:* • *All construction equipment powered by internal combustion engines shall be properly muffled and maintained.* • *Quiet construction equipment, particularly air compressors, shall be selected whenever possible.* • *All stationary noise-generating construction equipment such as generators or air compressors shall be located as far as is practical from existing residences. In addition, the Project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the Project site.* • *Unnecessary idling of internal combustion engines shall be prohibited.* • *The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the Project site during all Project construction.* • *Construction shall be limited to 7:00 a.m. to 10:00 p.m.* • *Staging areas on the Project site shall be located in areas that maximize, to the extent feasible, the distance between staging activity and sensitive receptors.* *These requirements shall be noted on the Project improvement plans*.	LS
Impact 3.9-2: The proposed Project would not generate excessive groundborne vibration or groundborne noise levels.	LS		--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
TRANSPORTATION AND CIRCULATION			
Impact 3.10-1: Project implementation would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	PS	***Mitigation Measure 3.13-1:*** *Prior to commencement of any operational activities, the project proponent shall implement either "Option 1" or "Option 2", as provided in the CEQA Transportation Analysis prepared by Kimley Horn on July 22, 2022. "Option 1" includes a combination of TDM measures plus a VMT Mitigation Banking Fee for the Project to achieve 15% VMT reductions (assuming the VMT Mitigation Banking Fee Program is adopted by the time the proposed project is ready to apply for permits). Alternatively, as described under "Option 2", if the VMT Mitigation Banking Fee Program is not adopted at the time the proposed project is ready to apply for permits), the proposed project would be required to provide TDM measures that fully reduce the VMT by 15%. See Table 2 of the CEQA Transportation Analysis prepared by Kimley Horn for the proposed list of TDM measures under this option.* *The TDM Plan shall be submitted to the City for review prior to approval of improvement plans, and the effectiveness of the TDM Plan shall be evaluated, monitored, and revised, if determined necessary by the City. The TDM Plan shall include the TDM strategies that will be implemented during the lifetime of the proposed Project and shall outline the anticipated effectiveness of the strategies. The anticipated effectiveness of the TDM Plan may be monitored through annual surveys to determine employee travel mode split and travel distance for home-based work trips, and/or the implementation of technology to determine the amount of traffic generated by and home-based work miles traveled by employees, which shall be determined in coordination with the City. The frequency and duration of the anticipated effectiveness would depend on the ultimate strategy determined in coordination with the City. Additionally, the Project applicant shall pay any VMT banking fee in effect at the time of building permit issuance to secure VMT credits of a total of 15 percent for the subject building, taking into account the stated percent efficacy for the TDM measures above.*	SU
Impact 3.10-2: Project implementation would not conflict with a program, plan, ordinance or policy addressing the circulation system, including	LS		--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
transit, roadway, bicycle, and pedestrian facilities.			
Impact 3.10-3: Project implementation would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	LS		--
Impact 3.10-4: Project implementation would not result in inadequate emergency access.	LS		--
UTILITIES AND SERVICE SYSTEMS			
Impact 3.11-1: The proposed project does not have the potential to result in a determination by the wastewater treatment and/or collection provider which serves the project that the provider does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	LS		--
Impact 3.11-2: The proposed Project has the potential to require or result in the construction of new wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	LS		--
Impact 3.11-3: The proposed Project has the potential to require construction of new water treatment facilities or expansion of existing	LS		--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
facilities, the construction of which could cause significant environmental effects.			
Impact 3.11-4: The proposed Project has the potential to have insufficient water supplies available to serve the Project from existing entitlements and resources.	LS		--
Impact 3.11-5: The proposed Project has the potential to require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	PS	***Mitigation Measure 3.11-1:*** *Prior to the issuance of a building or grading permit, the Project applicant shall submit a drainage plan to the City of Tracy for review and approval. The plan shall include an engineered storm drainage plan that demonstrates attainment of pre-Project runoff requirements prior to release at the outlet canal and describes the volume reduction measures and treatment controls used to reach attainment consistent with the Citywide Storm Drainage Master Plan.*	LS
CUMULATIVE IMPACTS			
Impact 4.1: Cumulative Damage to Scenic Resources within a State Scenic Highway	LS		--
Impact 4.2: Cumulative Degradation of the Existing Visual Character of the Region	PS		CC and SU
Impact 4.3: Cumulative Impact on Light and Glare	LS		--
Impact 4.4: Cumulative Impact on Agricultural Resources	LS		--
Impact 4.5: Cumulative Impact on the Region's Air Quality	PS		SU

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 4.6: Cumulative Loss of Biological Resources Including Habitats and Special Status Species	LS		--
Impact 4.7: Cumulative Impacts on Known and Undiscovered Cultural Resources	LS		--
Impact 4.8: Cumulative Impact on Geologic and Soils Resources	LS		--
Impact 4.9: Cumulative Impact on Climate Change from Increased Project-Related Greenhouse Gas Emissions	LS		--
Impact 4.10: Cumulative Impact Related to Hazards and Hazardous Materials	LS		--
Impact 4.11: Cumulative Exposure of Existing Noise-Sensitive Land Uses to Increased Noise Resulting from Cumulative Development	LS		--
Impact 4.12: Under Cumulative conditions, the proposed Project would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)	PS		CC and SU
Impact 4.13: Under Cumulative conditions, the proposed Project would not adversely affect pedestrian, bicycle, or transit facilities	LS		--
Impact 4.14: Cumulative Impact on Wastewater Utilities	LS		--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

ENVIRONMENTAL IMPACT	*LEVEL OF SIGNIFICANCE WITHOUT MITIGATION*	*MITIGATION MEASURE*	*RESULTING LEVEL OF SIGNIFICANCE*
Impact 4.15: Cumulative Impact on Water Utilities	LS		--
Impact 4.16: Cumulative Impact on Stormwater Facilities	LS		--

CC – cumulatively considerable *LCC – less than cumulatively considerable* *LS – less than significant*

PS – potentially significant *B – beneficial impact* *SU – significant and unavoidable*

This page left intentionally blank.

1.1 INTRODUCTION

The City of Tracy prepared and publicly circulated a Draft Environmental Impact Report (EIR) for the proposed Schulte Road Warehouse Project (proposed Project) on August 30, 2024, inviting comment from the general public, agencies, organizations, and other interested parties. A Notice of Availability (NOA) was filed with the State Clearinghouse (SCH # 2023120437) and the County Clerk, and was published in a local newspaper pursuant to the public noticing requirements of the California Environmental Quality Act (CEQA). The Draft EIR was available for public review and comment from August 30, 2024 through October 14, 2024.

Pursuant to the CEQA Guidelines Section 15088.5 (a), a lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the EIR for public review under Section 15087 but before certification of the EIR. New information can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. As identified in Section 15088 (a) of the CEQA Guidelines, "significant new information" requiring recirculation is defined to include disclosures of any of the following:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
4. The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

1.2 SUMMARY OF THE REVISIONS TO THE DRAFT EIR

Upon review of comment letters received on the Draft EIR during the prior (2024) public comment period, the City concluded that portions of the Draft EIR analysis should be revised and expanded to address issues raised in comment letters. Specifically, the City has determined that the greenhouse gas analysis and air quality analysis should be revised, and that an analysis of potential energy-related impacts should be included. These revisions and additional analysis have been prepared in response to letters received from the Sierra Club (October 3, 2024) and the Golden State Environmental Justice Alliance (October 9, 2024). This Recirculated Draft EIR includes revisions to the air quality and greenhouse gas emissions analysis that address the issues raised in the above-referenced comment letters. This Recirculated Draft EIR also includes a discussion of the Project's energy impacts, which were not originally included in the Draft EIR. The revised analysis in Sections

3.3, Air Quality, and 3.7, Greenhouse Gases, Climate Change and Energy, of this Recirculated Draft EIR fully address the comments received on these topics for the (2024) Draft EIR.

In accordance with CEQA Guidelines Section 15088.5 (c), if the revision is limited to a few chapters or portions of the EIR, the lead agency need only recirculate the chapters or portions that contain significant new information. This Recirculated Draft EIR includes the following chapters:

- Chapter ES: Executive Summary
- Chapter 1.0: Introduction
- Chapter 2.0: Project Description
- Section 3.2: Air Quality
- Section 3.7: Greenhouse Gases, Climate Change and Energy
- Chapter 4.0: Other CEQA-Required Topics

These chapters will substitute for and supersede those contained in the previously-circulated Draft EIR. Those chapters and sections of the previously-circulated Draft EIR that are not listed above remain valid and are operative and effective parts of the overall EIR. Because some of the Project's air quality, greenhouse gas emissions, and energy impacts are more severe than evaluated in the Draft EIR, the significance determinations for some impacts have changed compared to those in the Draft EIR.

1.3 COMMENTING ON THE RECIRCULATED DRAFT EIR

This Recirculated Draft EIR will be circulated for public comment for a period of 45 days. Pursuant to CEQA Guidelines Section 15088.5(f), recirculating an EIR can result in the lead agency receiving more than one set of comments from reviewers. The lead agency may request that reviewers limit their comments to only the revised chapter or portions of the Recirculated EIR. Accordingly, in this case, reviewers should limit their comments to only the new information provided in the Recirculated Draft EIR (i.e., Chapter 1.0, Chapter 2.0, Section 3.2, Section 3.7, and Chapter 4.0). Following the close of the public comment period on this Recirculated Draft EIR, the City will prepare responses to (a) the comments received during the original Draft EIR public review period on all sections of the Draft EIR not contained within this Recirculated Draft EIR and (b) all comments received on this Recirculated Draft EIR concerning the sections in this recirculated document. By way of example, all comments on the Biological Resources section that were received during the earlier public comment period on the Draft EIR will be responded to, but comments received on the Air Quality section during the earlier public comment period on the Draft EIR will not be responded to. However, responses will be prepared for all comments received on the Air Quality section within this Recirculated Draft EIR.

Written public comments may be submitted to the City's Planning Division during the specified public review and comment period. Written comments should be delivered in person or by courier service, or be sent by mail or email to:

Attn: Scott Claar, Planning Manager
Community and Economic Development Department, Planning Division
City of Tracy
333 Civic Center Plaza
Tracy, CA 95376
(209) 831-6429
Scott.Claar@cityoftracy.org

This page intentionally left blank.

2.1 PROJECT LOCATION

The Project site is located at 16286 West Schulte Road in unincorporated San Joaquin County, California (Figures 2.0-1 and 2.0-2). The Project site is within the Tracy Sphere of Influence (SOI) 10-Year Planning Horizon and is immediately adjacent to the Tracy city limits to the north of the site.

The Project site is located at the southeast corner of Hansen Road and West Schulte Road. The Project site is bounded on the north by West Schulte Road, on the west by Hansen Road, on the south by the Delta Mendota Canal, and on the east by vacant agricultural land. The Project site is located within Sections 35 of Township 2 South, Range 4 East Mount Diablo Base Meridian (MDBM). Figures 2.0-1 and 2.0-2 show the Project's regional location and vicinity.

2.2 PROJECT SITE DEFINED

The Project site includes two distinct planning boundaries defined below. The following terms are used throughout this Draft EIR to describe the planning boundaries within the Project site:

- **Project site** – totals 21.92 acres and includes: (1) the proposed 20.92-acre Development Area (APN 209-230-250), and (2) the 1.00-acre Williams Communication Parcel along West Schulte Road (APN 209-230-260), which would not be developed as part of the proposed Project.
- **Development Area** – includes a 20.92-acre parcel (APN 209-230-250) that is intended for the development of up to 217,466-square foot (sf) of warehouse and office uses.

2.3 PROJECT SETTING

EXISTING SITE CONDITIONS

The APN for the Project site is 209-230-250. The Project site is bound by Hansen Road to the west, West Schulte Road to the north, the Delta Mendota Canal to the south, and a private driveway and vacant land on the east. Surrounding land uses include the Cal Fire Station 26/ South San Joaquin County Fire Station 94 and vacant land to the west, vacant land previously used for agricultural uses to the east, two industrial warehouses to the north, and the Delta Mendota Canal and agricultural land to the south. It is noted that an industrial warehouse Project, the Costco Depot Annexation Project, is currently (as of July 2023) proposed adjacent east of the Project site. The area north of the Project site is part of the Cordes Ranch Specific Plan Area.

The southern portion of the Development Area is currently developed with three single-family residences and six ancillary structures (see Figure 2.0-3). The remainder of the Development Area consists primarily of ruderal grasses which are regularly disced. The Development Area topography is generally flat, with the exception of two five- to ten-foot historic ponds located along the eastern site boundary. The historic ponds were previously associated with on-site dairy operations and no longer contain water.

The Williams Communications Parcel is currently developed with a low voltage transmission station operated by Williams Communications, Inc. Permanent employees do not work on-site, and access to

the site is limited to maintenance vehicles and maintenance personnel. The use of this parcel as a low voltage transmission station would remain as existing.

In order to ensure a conservative analysis, and consistent with CEQA requirements, this EIR uses the vacant/undeveloped, on-the-ground conditions that existed at the time the environmental review process commenced with the release of the Notice of Preparation. Figure 2.0-3 shows the aerial view of the Project site.

SITE TOPOGRAPHY

The Project site is relatively flat with a natural gentle slope from southwest to northeast. The Project site topography ranges in elevation from approximately 148 to 187 feet above sea level[1].

EXISTING SURROUNDING USES

Surrounding land uses include warehouse distribution and other industrial uses to the north (within the Cordes Ranch Specific Plan Area, located in the City of Tracy), vacant agricultural land within unincorporated San Joaquin County to the east, the Delta Mendota Canal and agricultural land within unincorporated San Joaquin County to the south, and a rural residence, CalFire Station 26/ South San Joaquin County Fire Station 94, and Delta Mendota Canal to the west (within unincorporated San Joaquin County).

2.4 PROJECT GOALS AND OBJECTIVES

Consistent with the California Environmental Quality Act (CEQA) Guidelines Section 15124(b), a clear statement of objectives and the underlying purpose of the proposed Project shall be discussed. The principal objective of the proposed Project is the demolition of three single family residences and six ancillary structures and redevelopment of the Development Area with a one-story, 217,466 sf warehouse building and a surface parking lot.

The City and the Project applicant, Panattoni Development Company, Inc., have identified the following objectives:

- Construct and operate an industrial warehouse facility within one separate building containing ground-level shipping and receiving truck loading docks that is of sufficient size to efficiently operate for the future tenant(s).
- Annex the property into the City Limits and develop the site with light industrial uses, consistent with the City's General Plan land use designation for the site.
- Locate an industrial Project in an area with nearby access to a regional roadway network.
- Ensure that the industrial area along West Schulte Road continues to be developed in a visually pleasing manner.
- Increase contributions to the City's tax base.
- Provide site ingress access for trucks from West Schulte to allow for efficient on-site circulation.
- Complete the Project on schedule and within budget.

[1] San Joaquin County GIS; ArcGIS Online USGS Topographic Map Service. Map date: November 1, 2019.

2.5 USES OF THE EIR AND REQUIRED AGENCY APPROVALS

This EIR may be used for the following direct and indirect approvals and permits associated with adoption and implementation of the proposed Project.

CITY OF TRACY

The City of Tracy is the Lead Agency for the proposed Project, pursuant to the State Guidelines for Implementation of CEQA, Section 15050. If the City Council certifies the EIR in accordance with CEQA requirements, the City may use the EIR to support the following actions:

- Pre-zone of the property to the City's M-1 zoning district;
- Annexation of the Project site into the City (which requires approval by the San Joaquin County LAFCO);
- Development review permit for building design, landscaping, and other site features;
- A Conditional Use Permit to allow for food processing and canning in the M-1 Zoning District;
- Building, grading, and other permits as necessary for Project construction;
- Adopting a Mitigation Monitoring and Reporting Program (MMRP).

OTHER GOVERNMENTAL AGENCY APPROVALS

The following agencies may rely on the certified EIR to issue permits or approve certain aspects of the proposed Project:

- Regional Water Quality Control Board (RWQCB) – Construction activities must be covered under the National Pollution Discharge Elimination System (NPDES);
- RWQCB – A Storm Water Pollution Prevention Plan (SWPPP) must be approved prior to construction activities pursuant to the Clean Water Act;
- San Joaquin LAFCo – Approval of a petition for annexation of the Project site.
- San Joaquin Valley Air Pollution Control District (SJVAPCD) – Construction activities would be subject to the SJVAPCD codes and requirements.

2.6 PROJECT CHARACTERISTICS AND DESCRIPTION

PROJECT CHARACTERISTICS

The 217,466-sf warehouse would include 206,593 sf of warehouse uses and 10,873-sf of office space. The City's General Plan land use designation for the Project site is Industrial. Specific uses allowed in the industrial category range from flex/office space to manufacturing to warehousing and distribution. Although the tenant(s) of the proposed warehouse are unknown at this time, this analysis assumes that business operations could occur 24 hours per day. No cold storage facilities or uses will be allowed on-site.

The proposed warehouse would include 31 dock level doors on the eastern side of the building. The maximum height of the one-story warehouse would be 42.6 feet, with the majority of the building at 40 feet. Landscaping would be provided throughout the site.

The proposed Project would be subject to Development Review Permit approval by the City, during which City staff would ensure that the proposed Project would comply with all applicable City regulations including, but not limited to, landscaping and visual screening. Development Review would occur as part of the building design and landscape review.

Figure 2.0-4 shows the proposed site plan.

Warehouse Architecture

The proposed warehouse design would be contemporary in style and would use a variety of massing and materials appropriate for the scale of the buildings. Architectural metal with varied textures and horizontal and vertical orientations would be used, while varying parapet cap heights would break up the long elevations both horizontally and vertically. The parapets will also assist in concealing rooftop-mounted mechanical equipment. The proposed architecture places and focuses the design's detailed elements, varied building materials and color changes towards the front of the buildings along West Schulte Road.

Figure 2.0-5 shows the renderings for the proposed warehouse.

Landscape and Stormwater Plan

The landscape plan includes a mix of drought-tolerant shrubs and grasses, and a variety of shade trees appropriate for the climate in Tracy would be used throughout the parking lots and along the Project perimeter. The landscape design and plant palette would complement the existing street and building/development landscape character established by Prologis and the International Park of Commerce. Stormwater treatment/detention basins and stormwater bioretention treatment planters would be located throughout the Project site, mainly in the proposed landscaped areas and along West Schulte Road

Figure 2.0-6 shows the locations for the landscape areas, hardscapes, and stormwater treatment areas. Figure 2.0-7 shows the location of the shrubs, trees, and groundcovers.

Sustainability Features

The Project would incorporate the following sustainability features:

- During Project operation, the Project applicant and/or developer shall install the maximum amount of on-site rooftop solar generation permitted under applicable law.
- During Project operation, the Project applicant and/or developer shall ensure that building operations, including HVAC, water heating, and refrigeration, shall be powered by electricity for the lifetime of the Project. Neither natural gas nor propane shall be used for the purposes listed for those specific operational purposes.
- The Project applicant and/or developer shall plan for sufficient pre-wiring of the overall site to support the potential future usage of all-electric vehicles and equipment.
- Projects shall meet or exceed the California Green Building Standards Code (also known as CALGreen) standards for equipping passenger vehicle parking spaces with electric vehicles charging stations.

- All installed stations shall be maintained or replaced with equivalent or better-performing stations for the life of the Project.
- The Project developer and/or applicant shall design EV infrastructure to facilitate future expansion. At least one electric heavy-duty (Class 7 and 8) truck charger shall be installed by or before two years from the first final certificate of occupancy issued for the project.

CIRCULATION, TRANSPORTATION, AND PARKING

As shown in Figure 2.0-4, site access would be provided by two new driveways: one from the southwest, off of Hansen Road; and one from the north, off of West Schulte Road. The project would also involve improvements to Hansen Road adjacent to the Project site, including roadway resurfacing improvements and construction of an interim driveway access to the site off Hansen Road. In the future, the City may construct a roundabout at the southwestern site access point. The roundabout is a planned improvement in the City's Transportation Master Plan Update.

As shown in Figure 2.0-4, the proposed parking area would include approximately 206 vehicle parking stalls and 116 trailer parking stalls. The vehicle parking area would be located in the southern portion of the site and the trailer parking area would be located in the eastern portion of the site.

UTILITIES

The proposed Project would connect to existing City infrastructure to provide water, sewer, and storm drainage utilities. Existing storm drain, sewer, water, and gas lines/pipes are currently located along West Schulte Road.

The Project would be served by the following existing service providers:

1. City of Tracy for water;
2. City of Tracy for wastewater collection and treatment;
3. City of Tracy for stormwater collection;
4. Pacific Gas and Electric Company (PG&E) for gas and electricity.

Utility lines within the Project site and adjacent roadways would be extended throughout the Project site. Wastewater, water, and storm drainage lines would be connected via existing lines along West Schulte Road. The project would also connect to PG&E's existing electrical and natural gas infrastructure in the project vicinity.

Stormwater bioretention treatment planters would be located throughout the project site, mainly in the proposed landscaped areas and along Hansen Road and the east property line. Stormwater runoff from each of the drainage areas would be routed to a series of on-site stormwater bioretention treatment planters and treatment/detention basins. It is anticipated that runoff from the Project would be diverted to the proposed detention basin identified as LW-11 in the City's Storm Drain Master Plan, located on City land east of the Project site. Should the Project be operational prior to development of LW-11, temporary on-site retention basins would be provided on-site.

Best management practices (BMPs) will be applied to the proposed development to limit the concentrations of constituents in any site runoff to acceptable levels. Stormwater flows from the Project

site would be directed to the proposed stormwater treatment basins, treatment planters, and bioretention areas by a new stormwater conveyance system on the Project site. Stormwater runoff would not be allowed to discharge directly to the existing storm drains in West Schulte Road without first discharging to the bioretention areas. The landscaping plan includes stormwater treatment plantings in the treatment/detention basins. Additionally, erosion and sediment control measures would be implemented during construction.

The utility plan is shown in Figure 2.0-8.

GENERAL PLAN LAND USE AND ZONING

The City General Plan land use designations for the Project site and surrounding area are shown on Figure 2.0-9. The existing County zoning and proposed City prezoning are shown on Figure 2.0-10.

General Plan

Per the San Joaquin County General Plan, the Project site is designated General Agriculture (A/G). Per the City of Tracy General Plan, the Project site is designated Industrial. The proposed Project is consistent with the current City General Plan land use designation.

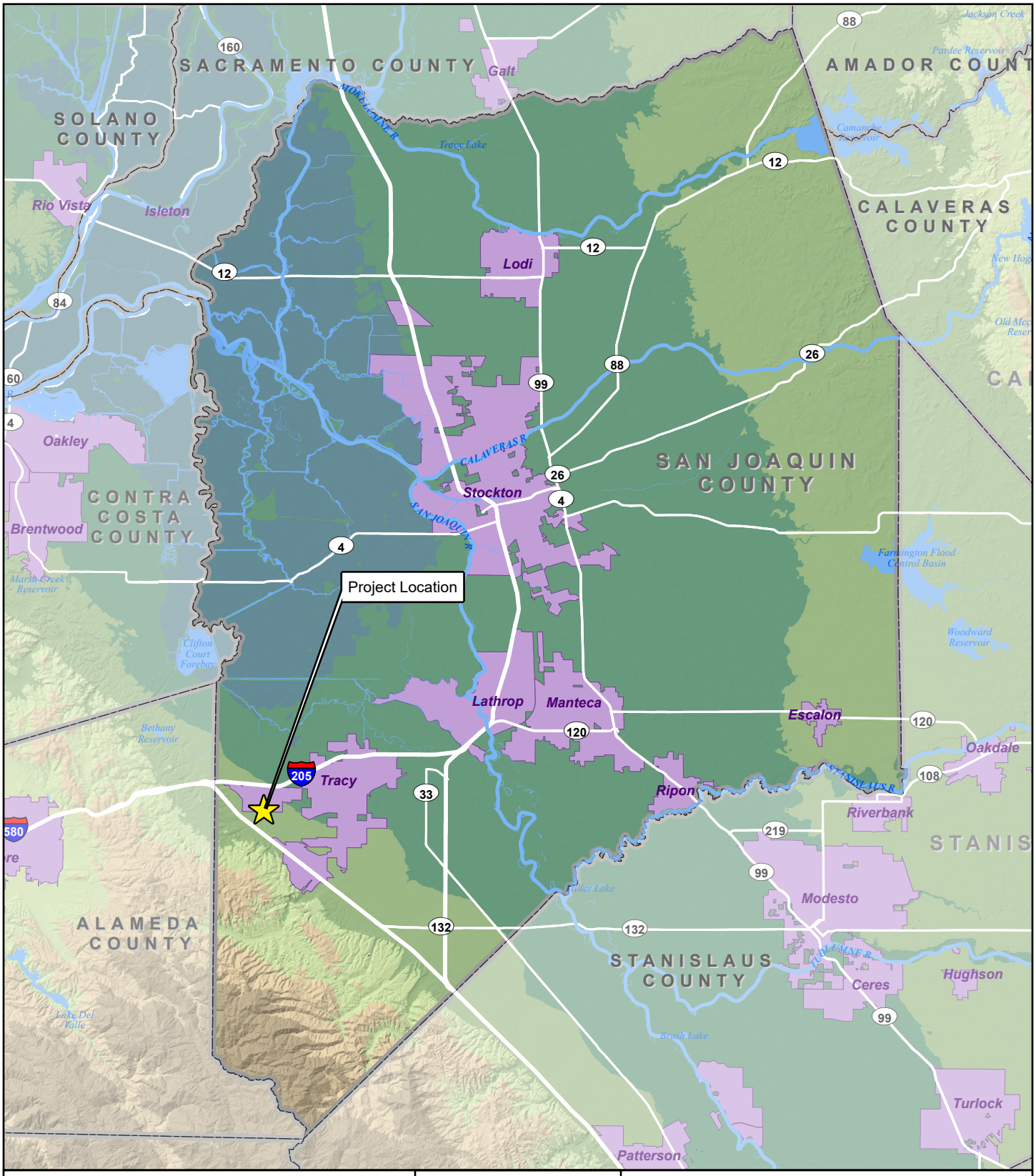
Pre-zoning

Because the Project site is located outside of the City limits, the site does not currently have a City zoning designation. The Project site is currently within the jurisdiction of San Joaquin County. The Project site is zoned General Agriculture (AG-40) by San Joaquin County.

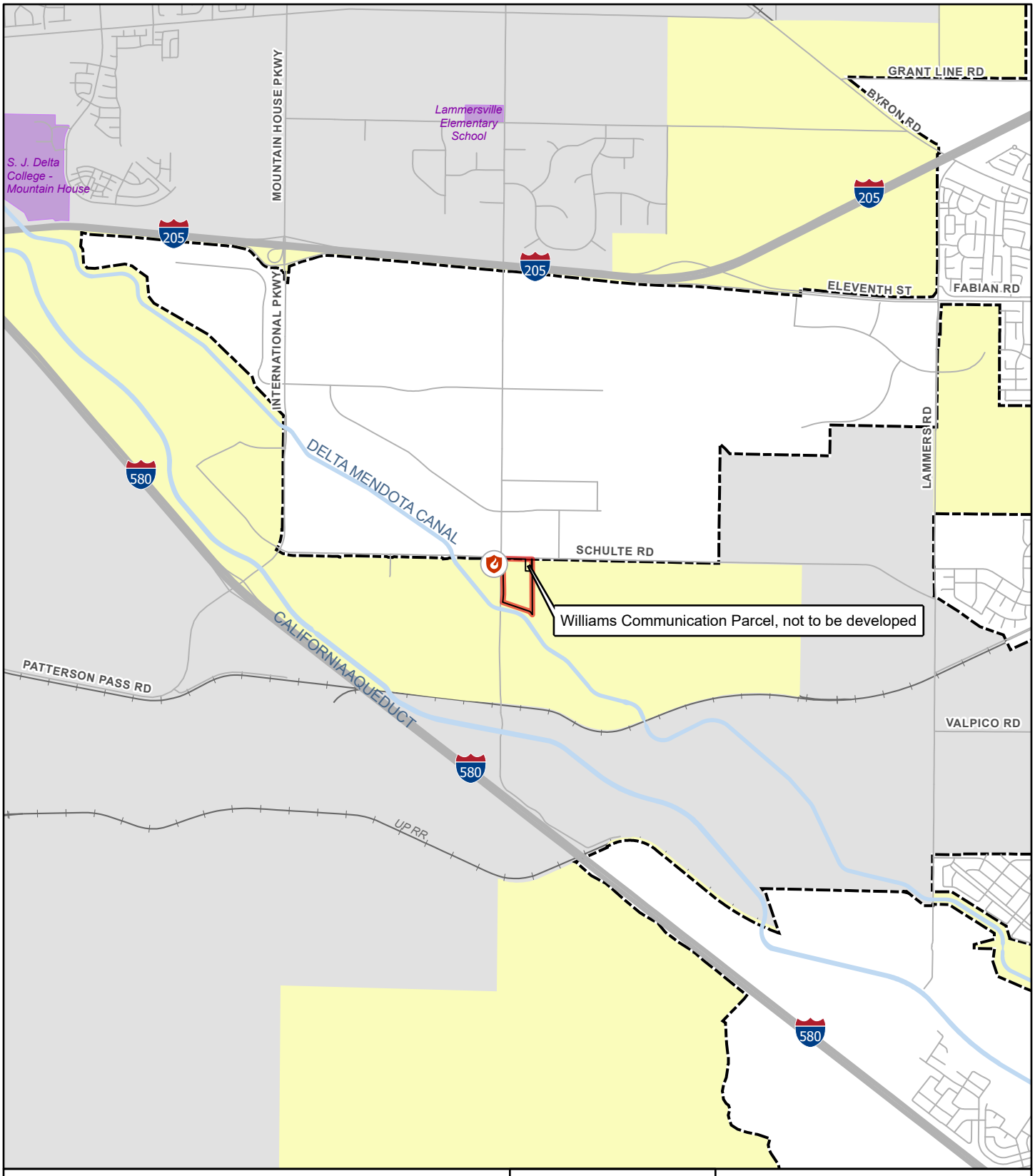
The San Joaquin County Local Agency Formation Commission (LAFCo) will require the Project site to be pre-zoned by the City of Tracy in conjunction with the proposed annexation. The City's pre-zoning for the Project site will be the Light Industrial (M-1) zoning designation. Upon annexation into the City of Tracy, the Light Industrial (M-1) pre-zoning designation would become the City's formal zoning designation. In the Light Industrial (M-1) Zone, only industrial activities and uses which are included in the following use groups are permitted without a conditional use permit under Section 10.08.4250 of the Tracy Municipal Code: minor public services uses; local public service and utility installations; temporary buildings and uses; crop and tree farming; specialty crops; accessory uses, except recreation facilities and residences; contract construction; warehousing and storage; small recycling collection facilities; and light manufacturing uses. The proposed project is consistent with the proposed M-1 pre-zoning and zoning.

ANNEXATION

The Project site is currently within San Joaquin County, and within the City of Tracy's SOI 10-Year Planning Horizon. The proposed Project would result in the annexation of the Project site into the City of Tracy. The EIR analyzes the potential environmental effects from annexation of the Project site into the City of Tracy. Annexation of the Project site is consistent with the growth plans for the City of Tracy.


SACRAMENTO COUNTY
SOLANO COUNTY
AMADOR COUNTY
CALAVERAS COUNTY
SAN JOAQUIN COUNTY
CONTRA COSTA COUNTY
ALAMEDA COUNTY
STANISLAUS COUNTY
Galt
Lodi
Rio Vista
Isleton
Oakley
Brentwood
Stockton
Lathrop
Manteca
Escalon
Tracy
Ripon
Oakdale
Riverbank
Modesto
Ceres
Hughson
Turlock
Patterson
Project Location
Tracy Lake
Farmington Flood Control Basin
Woodward Reservoir
Marsh Creek Reservoir
Clifton Court Forebay
Bethany Reservoir
Lake Del Valle
Jackson Creek
Pardee Reservoir
Camanche Reservoir
New Hogan
Old Mc Reser
Fuller Lake
Brush Lake
MOKELUMNE R
CALAVERAS R
SAN JOAQUIN R
STANISLAUS R
TUOLUMNE R
160
88
12
84
60
4
99
26
205
580
33
120
108
219
132
LEGEND
Incorporated Area
County Boundary
N
0
2½
5
Miles
Sources: San Joaquin County GIS. Map date: December10, 2021
CITY OF TRACY
SCHULTE ROAD WAREHOUSE PROJECT
Figure 2.0-1. Regional Project Location
De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



LEGEND

- Project Site/ Annexation Area
- Development Area
- Tracy City Limits
- Tracy Sphere of Influence

Public Facilities

- Schools
- Tracy Fire Department Station #94

Sources: San Joaquin County GIS. Map date: December10, 2021

N

0 ¼ ½

Miles

CITY OF TRACY
SCHULTE ROAD WAREHOUSE PROJECT

Figure 2.0-2. Project Vicinity

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

Path: C:\GIS_00\San Joaquin\Tracy\SchulteRoad\Tracy\SchulteRoad.aprx

This page intentionally left blank.

LEGEND

- Project Site/ Annexation Area
- Development Area
- Williams Communication Parcel, not to be developed
- Tracy City Limits
- Tracy Sphere of Influence

N

0 400 800

Feet

Sources: San Joaquin County GIS. ArcGIS Online World Imagery Map Service(10/22/2020).
Map date: December10, 2021

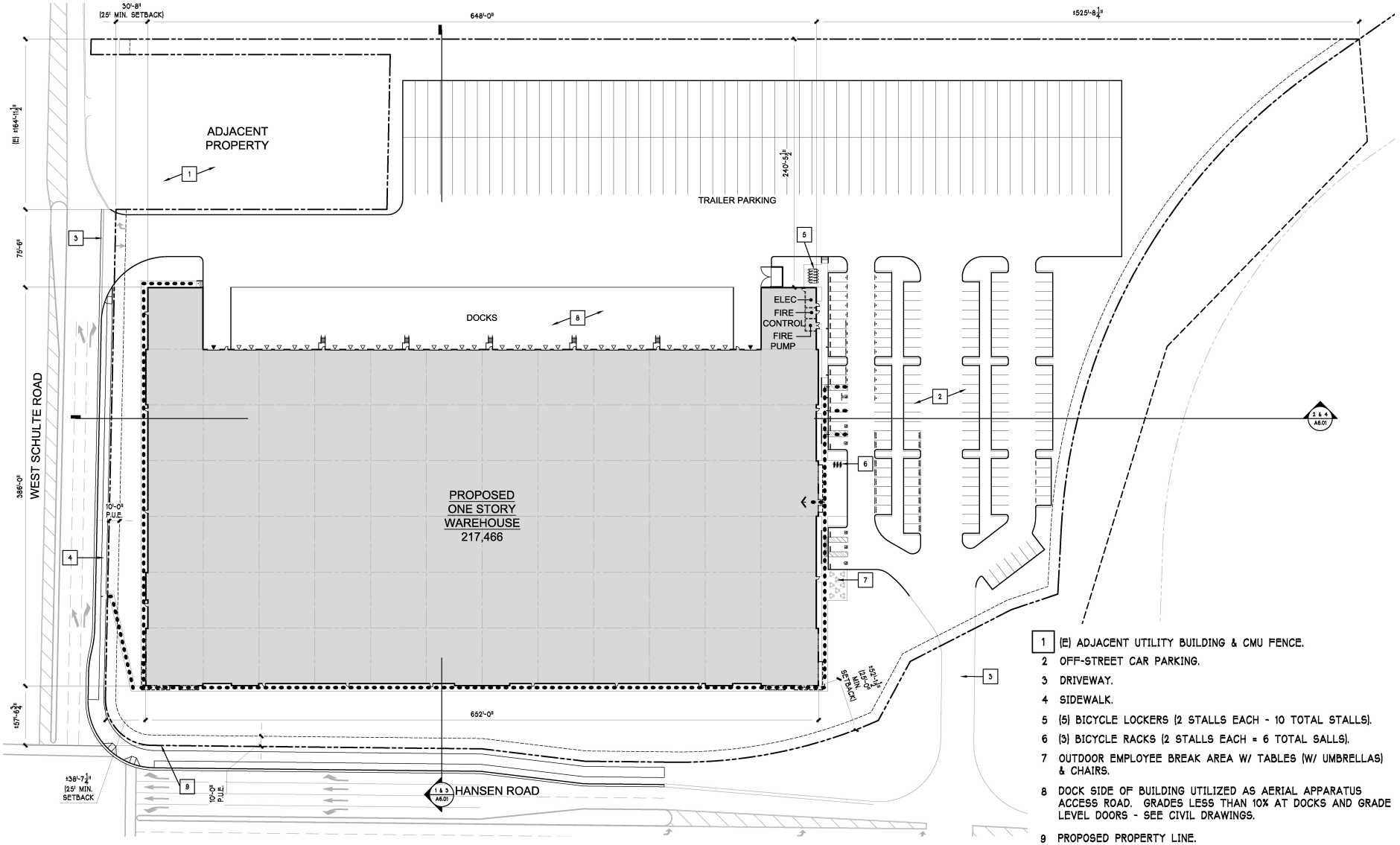
CITY OF TRACY
SCHULTE ROAD WAREHOUSE PROJECT

Figure 2.0-3. Aerial View of Project Site

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

Path: C:\GIS_Q\San Joaquin\Tracy\SchulteRoad\Tracy SchulteRoad.aprx

This page intentionally left blank.



LEGEND

PROPERTY LINE

ACCESSIBLE PATH OF TRAVEL

scale unknown

CITY OF TRACY
SCHULTE ROAD WAREHOUSE PROJECT

Figure 2.0-4. Site Plan

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

Source: SEIGFRIED 10/10/2024. Map date: July 29, 2024.

This page intentionally left blank.

1 VIEW FROM W SCHULTE RD & HANSEN RD

2 VIEW FROM HANSEN RD (MAIN ENTRY & PARKING)

3 VIEW FROM W SCHULTE RD

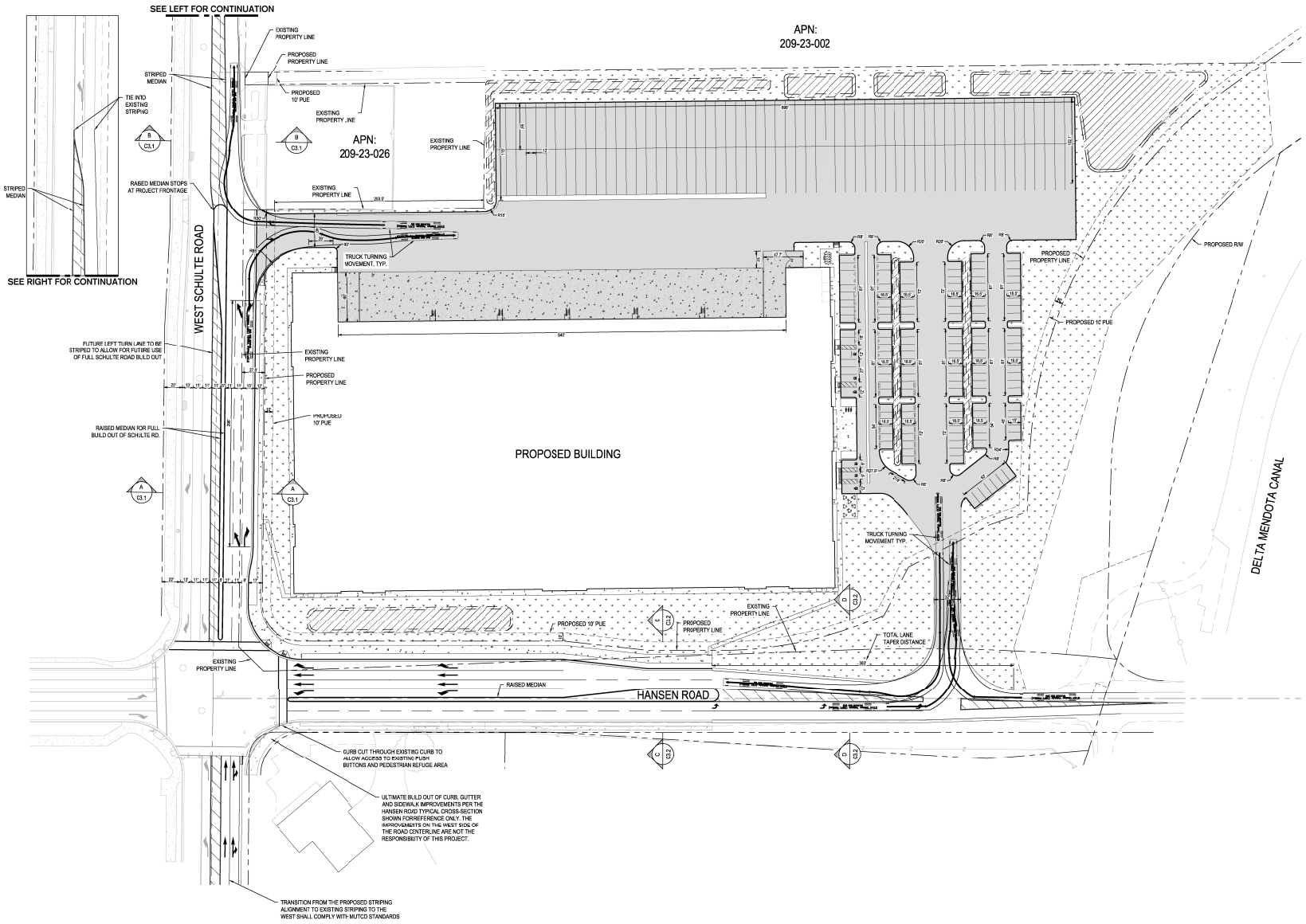
CITY OF TRACY
SCHULTE ROAD WAREHOUSE PROJECT

Figure 2.0-5. Project Renderings

Source: VITAE, 10-10-2024 . Map date: November 21, 2024.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.



LEGEND:

- HEAVY DUTY CONCRETE
- ASPHALT PAVEMENT
- PEDESTRIAN CONCRETE
- LANDSCAPE AREA
- STORM WATER TREATMENT AREA

scale unknown

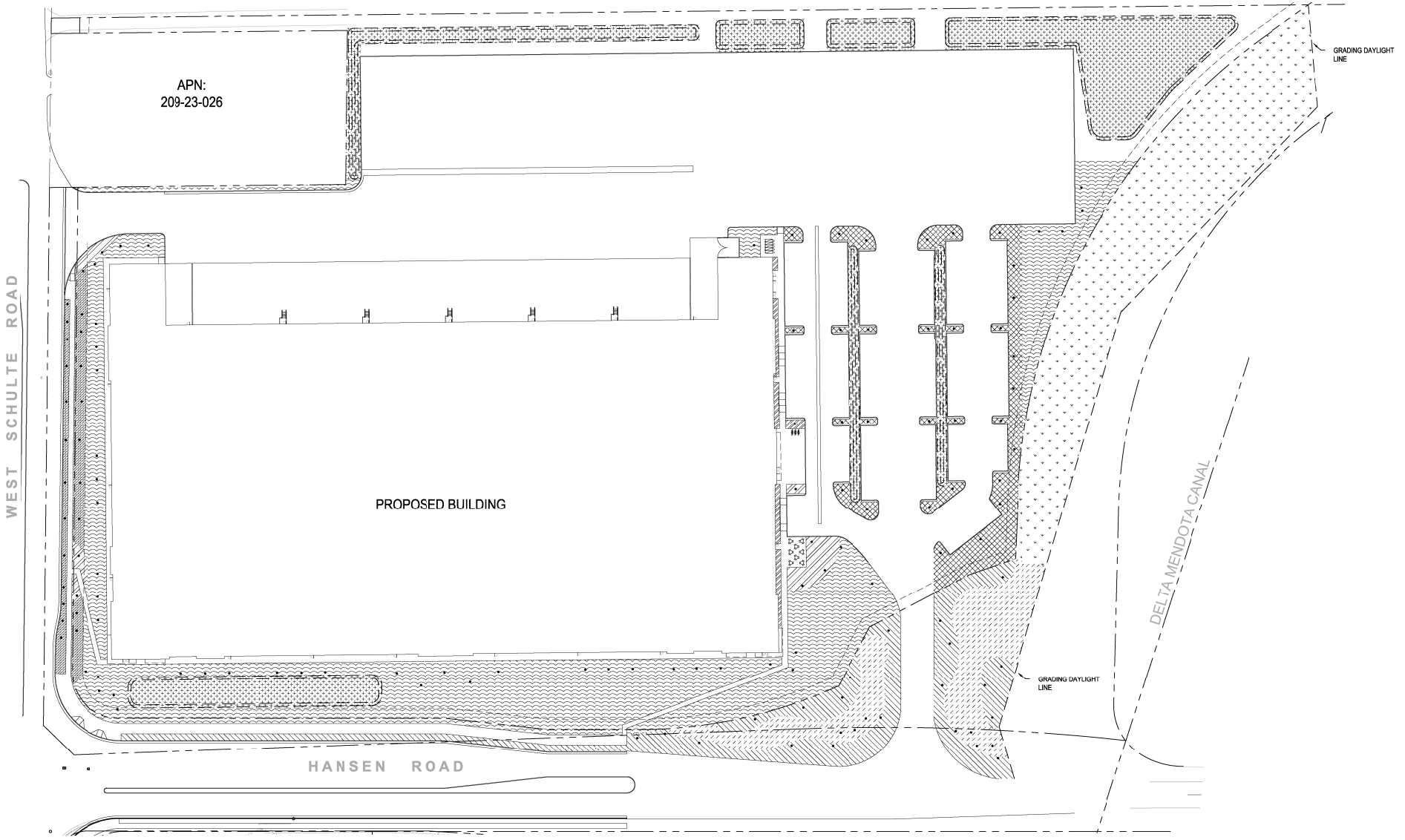
CITY OF TRACY
SCHULTE ROAD WAREHOUSE PROJECT

Figure 2.0-6. Paving and Dimensioning Plan

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

Source: SEIGFRIED 10/25/2024. Map date: November 21, 2024.

This page intentionally left blank.



Bioretention Basin - Shrub & Grass

Offsite - Non-Irrigated Hydroseed

Entry Accent - Shrub & Groundcovers

Site - Shrubs & Groundcovers

Parking Lot - Shrub & Groundcovers

Street Frontage - Shrub & Groundcovers

Hansen Road Entry - Shrubs & Groundcovers

Bark Mulch-Landscaped Areas

Tree Location (proposed for reference)

scale unknown

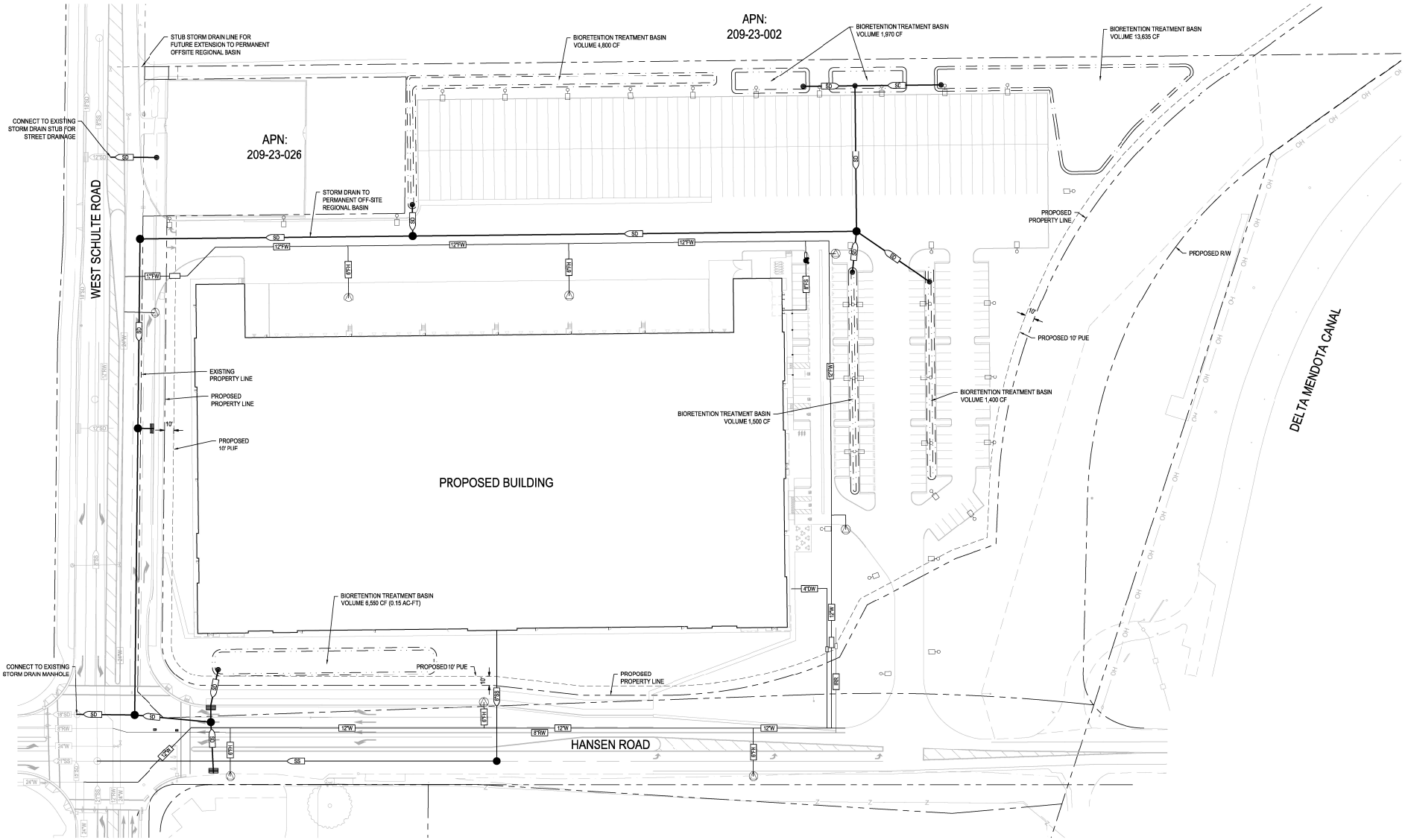
CITY OF TRACY
SCHULTE ROAD WAREHOUSE PROJECT

Figure 2.0-7. Shrub and Groundcover Plan

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

Source: SEIGFRIED 10/25/2024. Map date: November 21, 2024.

This page intentionally left blank.



LEGEND:

- PROPOSED MANHOLE
- PROPOSED CITY DRAIN STORM INLET
- PROPOSED SITE DRAIN INLET
- PROPOSED FIRE HYDRANT
- PROPOSED FDC
- PROPOSED SITE LIGHT SHOWN FOR REFERENCE ONLY
- SS — PROPOSED SANITARY SEWER LINE
- SD — PROPOSED STORM DRAIN PIPE
- W — PROPOSED WATER LINE
- FS — PROPOSED FIRE SERVICE LINE
- FH — PROPOSED FIRE HYDRANT LINE

scale unknown

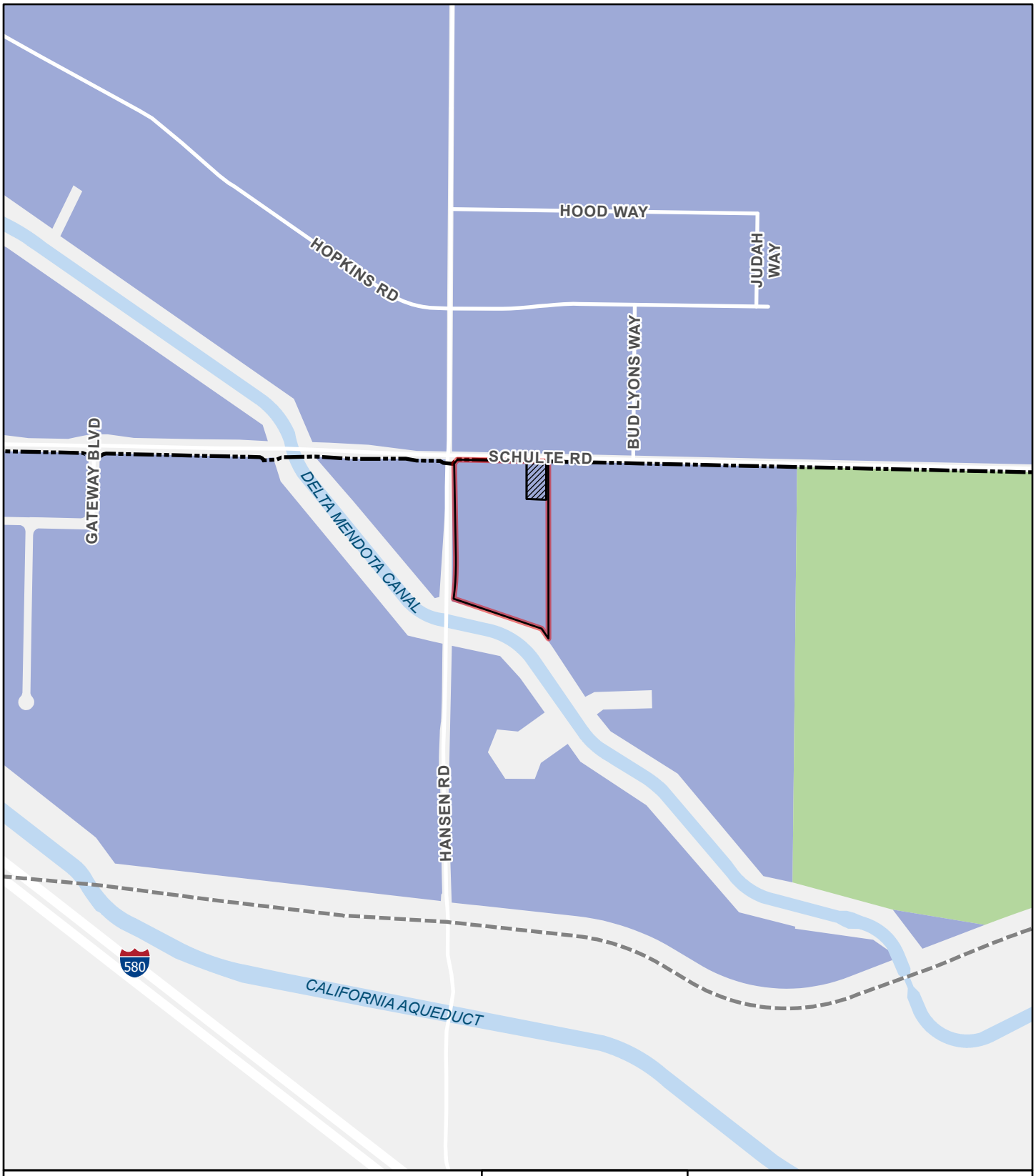
CITY OF TRACY
SCHULTE ROAD WAREHOUSE PROJECT

Figure 2.0-8. Utility Plan

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

Source: SEIGFRIED 10/25/2024. Map date: November 25, 2024.

This page intentionally left blank.



LEGEND

- Project Site/ Annexation Area
- Tracy City Limits
- Tracy Sphere of Influence

City of Tracy Land Use

- Industrial
- Park

Development Area

- Development Area
- Williams Communication Parcel, not to be developed

N

0 400 800

Feet

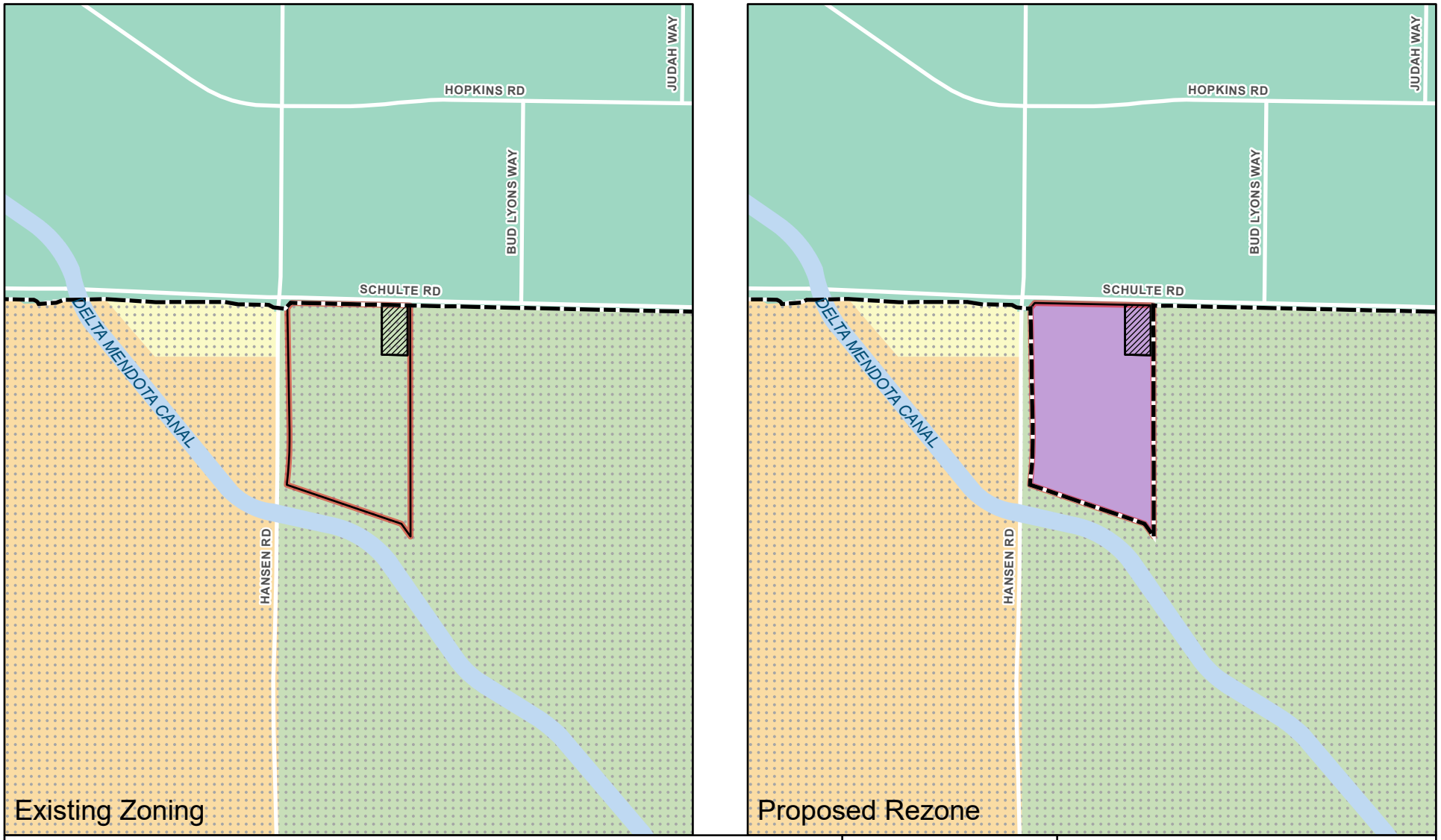
Sources: City of Tracy. San Joaquin County GIS. Map date: December10, 2021

CITY OF TRACY
SCHULTE ROAD WAREHOUSE PROJECT

Figure 2.0-9. Existing General Plan Land Use Map

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.


HOPKINS RD
JUDAH WAY
BUD LYONS WAY
SCHULTE RD
DELTA MENDOTA CANAL
HANSEN RD
Existing Zoning
HOPKINS RD
JUDAH WAY
BUD LYONS WAY
SCHULTE RD
DELTA MENDOTA CANAL
HANSEN RD
Proposed Rezone
LEGEND
Project Site/ Annexation Area
Tracy City Limits
Development Area
Development Area
Williams Communication Parcel, not to be developed
San Joaquin County Zoning
AG-40
I-L
P-F
City of Tracy Zoning
M-1
CRSP
N
0
400
800
Feet
Sources: City of Tracy. San Joaquin County GIS. Map date: December10, 2021
CITY OF TRACY
SCHULTE ROAD WAREHOUSE PROJECT
Figure 2.0-10. Existing and Proposed Zoning Map
De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

This page intentionally left blank.

This section describes the regional air quality, current attainment status of the air basin, local sensitive receptors, emission sources, and impacts that are likely to result from Project implementation. The analysis contained in this section is intended to be at a project-level, and covers impacts associated with the conversion of the entire site to urban uses. Following this discussion is an assessment of consistency of the proposed Project with applicable policies and local plans. The Greenhouse Gases, Climate Change, and Energy analysis is located in a separate section of this document (*see* Chapter 3.7 – Greenhouse Gases, Climate Change and Energy). This air quality section is based in part on the following technical studies: *Air Quality and Land Use Handbook: A Community Health Perspective* (California Air Resources Board [CARB], 2007), *Guide for Assessing and Mitigation Air Quality Impacts* (San Joaquin Valley Air Pollution Control District [SJAVPCD], 2002), *Guidance for Assessing and Mitigating Air Quality Impacts - 2015* (SJAVPCD, 2015), and CalEEMod *(v.2022.1)*.

Two comments were received during the public review period or scoping meeting for the Notice of Preparation regarding this topic: one from the State of California Department of Justice (December 20, 2023), and the other from the San Joaquin Valley Air Pollution Control District (January 16, 2024). The commenter from the California Department of Justice provided a guidance document *Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act*, as guidance for the City to consider in its evaluation of the proposed Project. The commentor from the San Joaquin Air Pollution Control District provided recommended mitigation measures and identified rules, regulations, and best practices for environmental analysis of the Project's air quality and greenhouse gas emissions. These comments are addressed within this section. The full comments are included in Appendix A of the original Draft EIR (August 2024).

3.3.1 ENVIRONMENTAL SETTING

SAN JOAQUIN VALLEY AIR BASIN

The City of Tracy (City) is in the northern portion of the San Joaquin Valley Air Basin (SJVAB). The SJVAB consists of eight counties: Fresno, Kern (western and central), Kings, Tulare, Madera, Merced, San Joaquin, and Stanislaus. Air pollution from significant activities in the SJVAB includes a variety of industrial-based sources as well as on- and off-road mobile sources. These sources, coupled with geographical and meteorological conditions unique to the area, stimulate the formation of unhealthy air.

The SJVAB is approximately 250 miles long and an average of 35 miles wide. It is bordered by the Sierra Nevada in the east, the Coast Ranges in the west, and the Tehachapi mountains in the south. There is a slight downward elevation gradient from Bakersfield in the southeast end (elevation 408 feet) to sea level at the northwest end where the valley opens to the San Francisco Bay at the Carquinez Straits. At its northern end is the Sacramento Valley, which comprises the northern half of California's Central Valley. The bowl-shaped topography inhibits movement of pollutants out of the valley (San Joaquin Valley Air Pollution Control District (SJVAPCD), 2015).

Climate

The SJVAB is in a Mediterranean climate zone and is influenced by a subtropical high-pressure cell most of the year. Mediterranean climates are characterized by sparse rainfall, which occurs mainly in winter. Summers are hot and dry. Summertime maximum temperatures often exceed 100°F in the valley.

The subtropical high-pressure cell is strongest during spring, summer, and fall and produces subsiding air, which can result in temperature inversions in the valley. A temperature inversion can act like a lid, inhibiting vertical mixing of the air mass at the surface. Any emissions of pollutants can be trapped below the inversion. Most of the surrounding mountains are above the normal height of summer inversions (1,500 to 3,000 feet).

Winter-time high pressure events can often last many weeks, with surface temperatures often lowering into the 30°F. During these events, fog can be present and inversions are extremely strong. These wintertime inversions can inhibit vertical mixing of pollutants to a few hundred feet (SJVAPCD, 2015).

Wind Patterns

Wind speed and direction play an important role in dispersion and transport of air pollutants. Wind at the surface and aloft can disperse pollution by mixing and transporting it to other locations.

Especially in summer, winds in the San Joaquin Valley most frequently blow from the northwest. The region's topographic features restrict air movement and channel the air mass towards the southeastern end of the valley. Marine air can flow into the basin from the San Joaquin River Delta and over Altamont Pass and Pacheco Pass, where it can flow along the axis of the valley, over the Tehachapi pass, into the Southeast Desert Air Basin. This wind pattern contributes to transporting pollutants from the Sacramento Valley and the Bay Area into the SJVAB. Approximately 27 percent of the total emissions in the northern portion, 11 percent of total emissions in the central region, and 7 percent of total emission in the south valley of the SJVAB are attributed to air pollution transported from these two areas.[1] The Coastal Range is a barrier to air movement to the west and the high Sierra Nevada range is a significant barrier to the east (the highest peaks in the southern Sierra Nevada reach almost halfway through the Earth's atmosphere). Many days in the winter are marked by stagnation events where winds are very weak. Transport of pollutants during winter can be very limited. A secondary but significant summer wind pattern is from the southeast and can be associated with nighttime drainage winds, prefrontal conditions, and summer monsoons.

Two significant diurnal wind cycles that occur frequently in the valley are the sea breeze and mountain-valley upslope and drainage flows. The sea breeze can accentuate the northwest wind flow, especially on summer afternoons. Nighttime drainage flows can accentuate the southeast movement of air down the valley. In the mountains during periods of weak synoptic scale winds, winds tend to be upslope during the day and downslope at night. Nighttime and drainage flows are

[1] SJVAPCD. Frequently Asked Questions, http://www.valleyair.org/general_info/frequently_asked_questions.htm#What%20is%20being%20done%20to%20improve%20ai r%20quality%20in%20the%20San%20Joaquin%20Valley, accessed April 8, 2024.

especially pronounced during the winter when flow from the easterly direction is enhanced by nighttime cooling in the Sierra Nevada. Eddies can form in the valley wind flow and can recirculate a polluted air mass for an extended period.

Temperature

Solar radiation and temperature are particularly important in the chemistry of ozone formation. The SJVAB averages over 260 sunny days per year. Photochemical air pollution (primarily ozone) is produced by the atmospheric reaction of organic substances (such as volatile organic compounds) and nitrogen dioxide under the influence of sunlight. Ozone concentrations are very dependent on the amount of solar radiation, especially during late spring, summer, and early fall. Ozone levels typically peak in the afternoon. After the sun goes down, the chemical reaction between nitrous oxide and ozone begins to dominate. This reaction tends to scavenge and remove the ozone in the metropolitan areas through the early morning hours, resulting in the lowest ozone levels, possibly reaching zero at sunrise in areas with high nitrogen oxides emissions. At sunrise, nitrogen oxides tend to peak, partly due to low levels of ozone at this time and also due to the morning commuter vehicle emissions of nitrogen oxides.

Generally, the higher the temperature, the more ozone formed, since reaction rates increase with temperature. However, extremely hot temperatures can "lift" or "break" the inversion layer. Typically, if the inversion layer does not lift to allow the buildup of contaminants to be dispersed, the ozone levels will peak in the late afternoon. If the inversion layer breaks and the resultant afternoon winds occur, the ozone will peak in the early afternoon and decrease in the late afternoon as the contaminants are dispersed or transported out of the SJVAB.

Ozone levels are low during winter periods when there is much less sunlight to drive the photochemical reaction (SJVAPCD, 2015).

Precipitation, Humidity, and Fog

Precipitation and fog may reduce or limit some pollutant concentrations. Ozone needs sunlight for its formation, and clouds and fog can block the required solar radiation. Wet fogs can cleanse the air during winter as moisture collects on particles and deposits them on the ground. Atmospheric moisture can also increase pollution levels. In fogs with less water content, the moisture acts to form secondary ammonium nitrate particulate matter. The winds and unstable air conditions experienced during the passage of winter storms result in periods of low pollutant concentrations and excellent visibility. Between winter storms, high pressure and light winds allow cold moist air to pool on the SJVAB floor. This creates strong low-level temperature inversions and very stable air conditions, which can lead to tule fog. Wintertime conditions favorable to fog formation are also conditions favorable to high concentrations of particulate matter (PM), including PM that have a diameter of less than 2.5 micrometers ($PM_{2.5}$) and 10 micrometers PM_{10} (SJVAPCD, 2015).

Inversions

The vertical dispersion of air pollutants in the San Joaquin Valley can be limited by persistent temperature inversions. Air temperature in the lowest layer of the atmosphere typically decreases

with altitude. A reversal of this atmospheric state, where the air temperature increases with height, is termed an inversion. The height of the base of the inversion is known as the "mixing height." This is the level to which pollutants can mix vertically. Mixing of air is minimized above and below the inversion base. The inversion base represents an abrupt density change where little air movement occurs.

Inversion layers are significant in determining pollutant concentrations. Concentration levels can be related to the amount of mixing space below the inversion. Temperature inversions that occur on the summer days are usually 2,000 to 2,500 feet above the valley floor. In winter months, overnight inversions occur 500 to 1,500 feet above the valley floor (SJVAPCD, 2015).

CRITERIA POLLUTANTS

All criteria pollutants can have human health and environmental effects at certain concentrations. The United States Environmental Protection Agency (U.S. EPA) uses six "criteria pollutants" as indicators of air quality and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS). In addition, California establishes ambient air quality standards, called California Ambient Air Quality Standards (CAAQS). California law does not require that the CAAQS be met by a specified date as is the case with NAAQS.

The ambient air quality standards for the six criteria pollutants (as shown in Table 3.3-1) are set to public health and the environment within an adequate margin of safety (as provided under Section 109 of the Federal Clean Air Act). Epidemiological, controlled human exposure, and toxicology studies evaluate potential health and environmental effects of criteria pollutants, and form the scientific basis for new and revised ambient air quality standards. Principal characteristics and possible health and environmental effects from exposure to the six primary criteria pollutants generated by the Project are discussed below.

Ozone (O_3) is a photochemical oxidant and the major component of smog. While O_3 in the upper atmosphere is beneficial to life by shielding the earth from harmful ultraviolet radiation from the sun, high concentrations of O_3 at ground level are a major health and environmental concern. O_3 is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of volatile organic compounds (ROG) and oxides of nitrogen (NO_x) in the presence of sunlight. These reactions are stimulated by sunlight and temperature so that peak O_3 levels occur typically during the warmer times of the year. Both ROGs and NO_x are emitted by transportation and industrial sources. ROGs are emitted from sources as diverse as autos, chemical manufacturing, dry cleaners, paint shops and other sources using solvents. Relatedly, reactive organic compounds (ROG) are defined as the subset of ROGs that are reactive enough to contribute substantially to atmospheric photochemistry.

The reactivity of O_3 causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O_3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O_3 for several hours at relatively low concentrations has been found to

significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Studies show associations between short-term ozone exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to ozone may increase the risk of respiratory-related deaths (U.S. EPA, 2022a). The concentration of ozone at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 parts per billion of ozone and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggest that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum ozone concentration reaches 80 parts per billion (U.S. EPA, 2022b). The average background level of ozone in the California and Nevada is approximately 48.3 parts per billion, which represents approximately 77 percent of the total ozone in the western region of the U.S. (NASA, 2015).

In addition to human health effect, ozone has been tied to crop damage, typically in the form of stunted growth, leaf discoloration, cell damage, and premature death. O_3 can also act as a corrosive and oxidant, resulting in property damage such as the degradation of rubber products and other materials.

Carbon monoxide (CO) is a colorless, odorless and poisonous gas produced by incomplete burning of carbon in fuels. Carbon monoxide is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Exposure to CO at high concentrations can also cause fatigue, headaches, confusion, dizziness, and chest pain. There are no ecological or environmental effects to ambient CO (CARB, 2023c).

Very high levels of CO are not likely to occur outdoors. However, when CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease. These people already have a reduced ability for getting oxygenated blood to their hearts in situations where the heart needs more oxygen than usual. They are especially vulnerable to the effects of CO when exercising or under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain also known as angina (USEPA, 2022d). Such acute effects may occur under current ambient conditions for some sensitive individuals, while increases in ambient CO levels increases the risk of such incidences.

Nitrogen oxides (NO_x) is a brownish, highly reactive gas that is present in all urban atmospheres. The main effect of increased NO_2 is the increased likelihood of respiratory problems. Under ambient

conditions, NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections. Nitrogen oxides are an important precursor both to ozone (O_3) and acid rain and may affect both terrestrial and aquatic ecosystems. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma, as well as children and the elderly are generally at greater risk for the health effects of NO_2.

The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO_x). NO_x plays a major role, together with ROGs, in the atmospheric reactions that produce O_3. NO_x forms when fuel is burned at high temperatures. The two major emission sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

Sulfur dioxide (SO_2) is one of the multiple gaseous oxidized sulfur species and is formed during the combustion of fuels containing sulfur, primarily coal and oil. The largest anthropogenic source of SO_2 emissions in the U.S. is fossil fuel combustion at electric utilities and other industrial facilities. SO_2 is also emitted from certain manufacturing processes and mobile sources, including locomotives, large ships, and construction equipment.

SO_2 affects breathing and may aggravate existing respiratory and cardiovascular disease in high doses. Sensitive populations include asthmatics, individuals with bronchitis or emphysema, children and the elderly. SO_2 is also a primary contributor to acid deposition, or acid rain, which causes acidification of lakes and streams and can damage trees, crops, historic buildings and statues. In addition, sulfur compounds in the air contribute to visibility impairment in large parts of the country. This is especially noticeable in national parks. Ambient SO_2 results largely from stationary sources such as coal and oil combustion, steel mills, refineries, pulp and paper mills and from nonferrous smelters.

Short-term exposure to ambient SO_2 has been associated with various adverse health effects. Multiple human clinical studies, epidemiological studies, and toxicological studies support a causal relationship between short-term exposure to ambient SO_2 and respiratory morbidity. The observed health effects include decreased lung function, respiratory symptoms, and increased emergency department visits and hospitalizations for all respiratory causes. These studies further suggest that people with asthma are potentially susceptible or vulnerable to these health effects. In addition, SO_2 reacts with other air pollutants to form sulfate particles, which are constituents of fine particulate matter ($PM_{2.5}$). Inhalation exposure to $PM_{2.5}$ has been associated with various cardiovascular and respiratory health effects (U.S. EPA, 2017). Increased ambient SO_2 levels would lead to increased risk of such effects.

SO_2 emissions that lead to high concentrations of SO_2 in the air generally also lead to the formation of other sulfur oxides (SOx). SOx can react with other compounds in the atmosphere to form small particles. These particles contribute to particulate matter (PM) pollution. Small particles may penetrate deeply into the lungs and in sufficient quantity can contribute to health problems.

Particulate matter (PM) includes dust, dirt, soot, smoke and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires and natural windblown dust. Particles formed in the atmosphere by condensation or the transformation of emitted gases such as SO_2 and ROGs are also considered particulate matter. PM is generally categorized based on the diameter of the particulate matter: PM_{10} is particulate matter 10 micrometers or less in diameter (known as respirable particulate matte*r*), and $PM_{2.5}$ is particulate matter 2.5 micrometers or less in diameter (known as fine particulate matter).

Based on studies of human populations exposed to high concentrations of particles (sometimes in the presence of SO_2) and laboratory studies of animals and humans, there are major effects of concern for human health. These include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense systems against foreign materials, damage to lung tissue, carcinogenesis and premature death. Small particulate pollution causes health impacts even at very low concentrations – indeed no threshold has been identified below which no damage to health is observed.

Respirable particulate matter (PM_{10}) consists of small particles, less than 10 microns in diameter, of dust, smoke, or droplets of liquid which penetrate the human respiratory system and cause irritation by themselves, or in combination with other gases. Particulate matter is caused primarily by dust from grading and excavation activities, from agricultural activities (as created by soil preparation activities, fertilizer and pesticide spraying, weed burning and animal husbandry), and from motor vehicles, particularly diesel-powered vehicles. PM_{10} causes a greater health risk than larger particles, since these fine particles can more easily penetrate the defenses of the human respiratory system.

$PM_{2.5}$ consists of fine particles that are less than 2.5 microns in size. Similar to PM_{10}, these particles are primarily the result of combustion in motor vehicles, particularly diesel engines, as well as from industrial sources and residential/agricultural activities such as burning. It is also formed through the reaction of other pollutants. As with PM_{10}, these particulates can increase the chance of respiratory disease, and cause lung damage and cancer. In 1997, the U.S. EPA created new Federal air quality standards for $PM_{2.5}$.

Although neither the U.S. EPA nor the California air districts have provided any thresholds for ultrafine particles (UFPs) (defined as fine particles of less than 0.1 microns in size, or $PM_{0.1}$), it should be noted that such particles may have the potential for even greater health effects than PM_{10} or $PM_{2.5}$, due to their even smaller sizes. UFPs are primarily generated by motor vehicle emissions (especially from diesel engines), braking, and tire wear. Specifically, UFPs are comprised mostly of metals that are known constituents of brake pads and drums, as well as additives in motor oil. Generally, all engines can create UFPs, but especially diesel engines, and any vehicle's braking system; traffic, particularly start-and-stop, generates UFPs.[2] Recent research suggests that UFPs pose considerable health risks, similar to but tending to be more severe than PM_{10} and $PM_{2.5}$, such as increased risk of cardiovascular disease and ischemic heart disease death rates, and loss of lung

[2] Aerosol Science and Technology. 2011. Thomas A. Cahill, David E. Barnes, Nicholas J. Spada, Jonathan A. Lawton, and Thomas M. Cahill. Very Fine and Ultrafine Metals and Ischemic Heart Disease in the California Central Valley 1: 2003-2007. July 13, 2011.

function.[3] Furthermore, unlike diesel exhaust or other larger TAC emissions, UFPs are more persistent and do not dissipate easily over distances.[4]

The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly and children. Particulate matter also impacts soils and damages materials and is a major cause of visibility impairment.

The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly and children. Particulate matter also impacts soils and damages materials and is a major cause of visibility impairment.

Numerous studies have linked PM exposure to premature death in people with preexisting heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lunch function, and increased respiratory symptoms. Studies show that every 1 microgram per cubic meter reduction in $PM_{2.5}$ results in a one percent reduction in mortality rate for individuals over 30 years old (Bay Area Air Quality Management District, 2017). Long-term exposures, such as those experienced by people living for many years in areas with high PM levels, have been associated with problems such as reduced lung function and the development of chronic bronchitis – and even premature death. Additionally, depending on its composition, both PM_{10} and $PM_{2.5}$ can also affect water quality and acidity, deplete soil nutrients, damage sensitive forests and crops, affect ecosystem diversity, and contribute to acid rain (U.S. EPA, 2022c).

Lead (Pb) exposure can occur through multiple pathways, including inhalation of air and ingestion of Pb in food, water, soil or dust. Once taken into the body, lead distributes throughout the body in the blood and is accumulated in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system. Lead exposure also affects the oxygen carrying capacity of the blood. Excessive Pb exposure can cause seizures, mental retardation and/or behavioral disorders. Low doses of Pb can lead to central nervous system damage. Recent studies have also shown that Pb may be a factor in high blood pressure and subsequent heart disease.

Lead is persistent in the environment and can be added to soils and sediments through deposition from sources of lead air pollution. Other sources of lead to ecosystems include direct discharge of waste streams to water bodies and mining. Elevated lead in the environment can result in

[3] Atmospheric Environment. 2016. Thomas A. Cahill, David E. Barnes, Leann Wuest, David Gribble, David Buscho, Roger S. Miller, Camille De la Croix. Artificial Ultra-fine Aerosol Tracers for Highway Transect Studies. April 7, 2016;
Aerosol Science and Technology. 2011. Thomas A. Cahil, David E. Barnes, Earl Withycombe, & Mitchell Watnik, and DELTA Group. Very Fine and Ultrafine Metals and Ischemic Heart Disease in the California Central Valley 1: 1974-1991. July 13, 2011.

[4] Atmospheric Environment. 2016. Transition Metals in Coarse, Fine, Very Fine and Ultra-fine Particles from an Interstate Highway Transect Near Detroit. September 12, 2016.

decreased growth and reproductive rates in plants and animals, and neurological effects in vertebrates.

Lead exposure is typically associated with industrial sources; major sources of lead in the air are ore and metals processing and piston-engine aircraft operating on leaded aviation fuel. Other sources are waste incinerators, utilities, and lead-acid battery manufacturers. The highest air concentrations of lead are usually found near lead smelters. As a result of the U.S. EPA's regulatory efforts, including the removal of lead from motor vehicle gasoline, levels of lead in the air decreased by 98 percent between 1980 and 2014 (U.S. EPA, 2022e). Based on this reduction of lead in the air over this period, and since most new developments to not generate an increase in lead exposure, the health impacts of ambient lead levels are not typically monitored by the California Air Resources Board (CARB).

AMBIENT AIR QUALITY STANDARDS

Both the U.S. EPA and the CARB have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The federal and State ambient air quality standards are summarized in Table 3.3-1 for important pollutants. The federal and State ambient standards were developed independently, although both processes were aimed at avoiding health-related effects. As a result, the federal and State standards differ in some cases. In general, the California standards are more stringent. This is particularly true for ozone, $PM_{2.5}$, and PM_{10}. The U.S. EPA signed a final rule for the federal ozone eight-hour standard of 0.070 ppm on October 1, 2015, which was effective as of December 28, 2015 (equivalent to the California state ambient air quality eight-hour standard for ozone).

TABLE 3.3-1: FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

POLLUTANT	*AVERAGING TIME*	*FEDERAL PRIMARY STANDARD*	*STATE STANDARD*
Ozone	1-Hour 8-Hour	-- 0.070 ppm	0.09 ppm 0.070 ppm
Carbon Monoxide	8-Hour 1-Hour	9.0 ppm 35.0 ppm	9.0 ppm 20.0 ppm
Nitrogen Dioxide	Annual 1-Hour	0.053 ppm 0.100 ppm	0.03 ppm 0.18 ppm
Sulfur Dioxide	Annual 24-Hour 1-Hour	0.03 ppm 0.14 ppm 0.075 ppm	-- 0.04 ppm 0.25 ppm
PM_{10}	Annual 24-Hour	-- 150 ug/m^3	20 ug/m^3 50 ug/m^3
$PM_{2.5}$	Annual 24-Hour	12 ug/m^3 35 ug/m^3	12 ug/m^3 --
Lead	30-Day Avg. 3-Month Avg.	-- 0.15 ug/m^3	1.5 ug/m^3 --

NOTES: PPM = PARTS PER MILLION, UG/M3 = MICROGRAMS PER CUBIC METER

SOURCE: CALIFORNIA AIR RESOURCES BOARD, 2023A.

In 1997, new national standards for fine particulate matter diameter 2.5 microns or less ($PM_{2.5}$) were adopted for 24-hour and annual averaging periods. The existing PM_{10} standards were retained, but the method and form for determining compliance with the standards were revised.

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated. The identification, regulation, and monitoring of TACs is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated on the basis of risk rather than specification of safe levels of contamination.

Existing air quality concerns within San Joaquin County and the entire air basin are related to increases of regional criteria air pollutants (e.g., ozone and particulate matter), exposure to toxic air contaminants, odors, and increases in greenhouse gas emissions contributing to climate change. The primary source of ozone (smog) pollution is motor vehicles, which account for 70 percent of the ozone in the region. Particulate matter is caused by dust, primarily dust generated from construction and grading activities, and smoke emitted from fireplaces, wood-burning stoves, and agricultural burning.

Attainment Status

In accordance with the California Clean Air Act (CCAA), the CARB is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria.

Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data do not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The U.S. EPA designates areas for ozone, carbon monoxide, and nitrogen dioxide as "does not meet the primary standards," "cannot be classified," or "better than national standards." For sulfur dioxide, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used.

San Joaquin County has a State designation Attainment or Unclassified for all criteria pollutants except for ozone, PM_{10} and $PM_{2.5}$. San Joaquin County has a national designation of either Unclassified or Attainment for all criteria pollutants except for Ozone and $PM_{2.5}$. Table 3.3-2 presents the state and nation attainment status for San Joaquin County.

TABLE 3.3-2: STATE AND NATIONAL ATTAINMENT STATUS IN SAN JOAQUIN COUNTY

CRITERIA POLLUTANTS	*STATE DESIGNATIONS*	*NATIONAL DESIGNATIONS*
Ozone (O_3)	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen Dioxide (NO_2)	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO_2)	Attainment	Unclassified/Attainment
Sulfates	Attainment	
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	
Visibility Reducing Particles	Unclassified	

SOURCE: CALIFORNIA AIR RESOURCES BOARD, 2022.

San Joaquin County Air Quality Monitoring

The San Joaquin Valley Air Pollution District (SJVAPCD) and the CARB maintain air quality monitoring sites throughout San Joaquin County that collect data for ozone and $PM_{2.5}$. In addition, air quality monitoring sites for PM_{10} are located throughout the San Joaquin Valley (though not in San Joaquin County). The closest air quality monitoring station to the Project site is the Tracy-Airport location. It is important to note that while the State retains the one-hour ozone standard, the federal ozone 1-hour standard was revoked by the U.S. EPA and is no longer applicable for federal standards. Best available data obtained from the monitoring sites between 2019 and 2021 (latest year of data available) is shown in Table 3.3-3, Table 3.3-4, and Table 3.3-5.

TABLE 3.3-3 AMBIENT AIR QUALITY MONITORING DATA SUMMARY (TRACY-AIRPORT)* - OZONE

YEAR	*DAYS > STANDARD*				*1-HOUR OBSERVATIONS*			*8-HOUR AVERAGES*				*YEAR COVERAGE*	
	STATE		*NATIONAL*			*STATE*	*NAT'L*	*STATE*		*NATIONAL*			
	1-HR	*8-HR*	*1-HR*	*8-HR*	*MAX.*	*D.V.[1]*	*D.V.[2]*	*MAX.*	*D.V.[1]*	*MAX.*	*D.V.[2]*	*MIN*	*MAX*
2021	0	3	0	3	0.089	0.09	0.087	0.078	0.077	0.077	0.068	96	98
2020	0	3	0	3	0.086	0.09	0.092	0.078	0.082	0.078	0.070	95	96
2019	1	3	0	3	0.095	0.09	0.092	0.080	0.082	0.079	0.073	97	99

*NOTES: ALL CONCENTRATIONS EXPRESSED IN PARTS PER MILLION. THE NATIONAL 1-HOUR OZONE STANDARD WAS REVOKED IN JUNE 2005 AND IS NO LONGER IN EFFECT. STATISTICS RELATED TO THE REVOKED STANDARD ARE SHOWN IN ITALICS. D.V. [1]= STATE DESIGNATION VALUE. D.V. [2]= NATIONAL DESIGN VALUE. *TRACY-AIRPORT REPRESENTS THE CLOSEST MONITORING STATION TO THE PROJECT SITE.*

SOURCE: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES.

TABLE 3.3-4: AMBIENT AIR QUALITY MONITORING DATA SUMMARY (SAN JOAQUIN VALLEY)* – PM_{10}

YEAR	*EST. DAYS > STD.*		*ANNUAL AVERAGE*		*HIGH 24-HR AVERAGE*		*YEAR COVERAGE*
	NAT'L	*STATE*	*NAT'L*	*STATE*	*NAT'L*	*STATE*	
2021	16.3	151.7	54.9	52.8	437.5	439.3	0 - 97
2020	38.7	157.0	64.5	60.5	517.2	359.0	0 - 100
2019	16.2	129.7	55.6	55.6	652.2	664.2	0 – 100

NOTES: THE NATIONAL ANNUAL AVERAGE PM_{10} STANDARD WAS REVOKED IN DECEMBER 2006 AND IS NO LONGER IN EFFECT. AN EXCEEDANCE IS NOT NECESSARILY A VIOLATION. STATISTICS MAY INCLUDE DATA THAT ARE RELATED TO AN EXCEPTIONAL EVENT. STATE AND NATIONAL STATISTICS MAY DIFFER FOR THE FOLLOWING REASONS: STATE STATISTICS ARE BASED ON CALIFORNIA APPROVED SAMPLERS, WHEREAS NATIONAL STATISTICS ARE BASED ON SAMPLERS USING FEDERAL REFERENCE OR EQUIVALENT METHODS. STATE AND NATIONAL STATISTICS MAY THEREFORE BE BASED ON DIFFERENT

*SAMPLERS. NATIONAL STATISTICS ARE BASED ON STANDARD CONDITIONS. STATE CRITERIA FOR ENSURING THAT DATA ARE SUFFICIENTLY COMPLETE FOR CALCULATING VALID ANNUAL AVERAGES ARE MORE STRINGENT THAN THE NATIONAL CRITERIA. *THIS DATA REPRESENTS THE HIGHEST VALUES IDENTIFIED WITHIN SAN JOAQUIN VALLEY AS A WHOLE. DATA FOR THE NEAREST MONITORING SITE (TRACY-AIRPORT), AS WELL AS FOR SAN JOAQUIN COUNTY, HAD INSUFFICIENT DATA.*

SOURCE: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES.

TABLE 3.3-5 AMBIENT AIR QUALITY MONITORING DATA SUMMARY (SAN JOAQUIN COUNTY)* - $PM_{2.5}$

YEAR	EST. DAYS > NAT'L '06 STD.	ANNUAL AVERAGE		NAT'L ANN. STD. D.V.[1]	STATE ANNUAL D.V.[2]	NAT'L '06 STD. 98TH PERCENTILE	NAT'L '06 24-HR STD. D.V.[1]	HIGH 24-HOUR AVERAGE		YEAR COVERAGE	
		NAT'L	STATE					NAT'L	STATE	MIN	MAX
2021	1.3	11.7	ND	ND	15	39.9	52	58.7	58.7	14	100
2020	24.0	14.8	14.8	13.7	17	91.6	72	140.0	140.0	98	99
2019	6.4	9.3	6.2	13.0	17	32.9	56	50.1	50.1	77	95

*NOTES: ALL CONCENTRATIONS EXPRESSED IN PARTS PER MILLION. STATE AND NATIONAL STATISTICS MAY DIFFER FOR THE FOLLOWING REASONS: STATE STATISTICS ARE BASED ON CALIFORNIA APPROVED SAMPLERS, WHEREAS NATIONAL STATISTICS ARE BASED ON SAMPLERS USING FEDERAL REFERENCE OR EQUIVALENT METHODS. STATE AND NATIONAL STATISTICS MAY THEREFORE BE BASED ON DIFFERENT SAMPLERS. STATE CRITERIA FOR ENSURING THAT DATA ARE SUFFICIENTLY COMPLETE FOR CALCULATING VALID ANNUAL AVERAGES ARE MORE STRINGENT THAN THE NATIONAL CRITERIA. D.V. [1] = STATE DESIGNATION VALUE. D.V. [2]= NATIONAL DESIGN VALUE. *THIS DATA REPRESENTS THE HIGHEST VALUES IDENTIFIED WITHIN SAN JOAQUIN COUNTY AS A WHOLE. DATA FOR THE NEAREST MONITORING SITE (TRACY-AIRPORT) HAS INSUFFICIENT DATA. ND = NO DATA*

SOURCE: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES.

ODORS

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another.

It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

SENSITIVE RECEPTORS

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases. A sensitive receptor is a location where human populations, especially children, seniors, and sick persons, are present and where there is a reasonable expectation of continuous human exposure to pollutants. Examples of sensitive receptors include residences, hospitals, and schools. The closest sensitive receptors to the Project are located as follows:

- A residence is located approximately 0.70 miles (3,696 feet) to the east of the Project site;
- A cluster of residences is located approximately 0.50 miles (2,635 feet) to the south of the Project site; and
- Additional scattered residences are located approximately 0.64 miles (3,400) feet to the southwest of the Project site.

3.3.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The U.S. EPA is responsible for administering the FCAA. The FCAA requires the U.S. EPA to set NAAQS for several air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health (with an adequate margin of safety, including for sensitive populations such as children, the elderly, and individuals suffering from respiratory diseases), and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

NAAQS standards define clean air and represent the maximum amount of pollution that can be present in outdoor air without any harmful effects on people and the environment. Existing violations of the ozone and $PM_{2.5}$ ambient air quality standards indicate that certain individuals

exposed to these pollutants may experience certain health effects, including increased incidence of cardiovascular and respiratory ailments.

Although there is some variability among the health effects of the NAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations and emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing.

Federal Hazards Air Pollutants Program

The 1977 CAA Amendments required the USEPA to identify National Emissions Standards for Hazardous Air Pollutants (NESHAPs) to protect the public health and welfare. Hazardous air pollutants include certain VOCs, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 CAA Amendments, which expanded the control program for hazardous air pollutants, 189 substances and chemical families were identified as hazardous air pollutants.

Federal Heavy-duty Engines and Vehicles Fuel Efficiency Standards

In 2010, President Obama issued a memorandum directing federal agencies to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and National Highway Traffic Safety Administration (NHTSA) proposed stringent, coordinated federal GHG and fuel economy standards for model year 2017–2025 light-duty vehicles. The proposed standards are projected to achieve 163 grams/mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon (mpg) if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles.

In August 2016, the USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans and all types of sizes of buses and work trucks. The final standards are expected to lower carbon dioxide emissions by approximately 1.1 billion metric tons (MT) and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.[5]

[5] USEPA and NHTSA. 2016. Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium and Heavy-Duty Engines and Vehicles – Phase 2. Available at: https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed: February 2022.

In August 2017, the USEPA asked for additional information and data relevant to assessing whether the GHG emissions standards for model years 2022-2025 remain appropriate. In early 2018, the USEPA Administrator announced that the midterm evaluation for the GHG emissions standards for cars and light-duty trucks for model years 2022-2025 was completed and stated his determination that the current standards should be revised in light of recent data. Subsequently, in April 2018, the USEPA and NHTSA proposed to amend certain existing Corporate Average Fuel Economy (CAFE) standards for passenger cars and light trucks and establish new standards, covering model years 2022-2025. Compared to maintaining the post-2020 standards now in place, the pending proposal would increase U.S. fuel consumption.[6] California and other states have announced their intent to challenge federal actions that would delay or eliminate GHG reductions. In April 2020, NHTSA and EPA amended the CAFE and GHG emissions standards for passenger cars and light trucks and established new less stringent standards, covering model years 2021 through 2026.

On September 27, 2019, the USEPA and NHTSA published the SAFE Rule (Part One).[7] The SAFE Rule (Part One) went into effect in November 2019, and revoked California's authority to set its own GHGs standards and set zero emission vehicle mandates in California. The SAFE Rule (Part One) freezes new zero emission vehicles (ZEV) sales at model year 2020 levels for year 2021 and beyond, and will likely result in a lower number of future ZEVs and a corresponding greater number of future gasoline internal combustion engine vehicles. In response to the USEPA's adoption of the SAFE Rule (Part One), CARB has issued guidance regarding the adjustment of vehicle emissions factors to account for the rule's implications on criteria air pollutant and greenhouse gas emissions.[8,9] The SAFE Rule is subject to ongoing litigation and on February 8, 2021 the D.C. Circuit Court of Appeals granted the Biden Administration's motion to stay litigation over Part 1 of the SAFE Rule. On April 22 and April 28, 2021, respectively, NHTSA and USEPA formally announced their intent to reconsider the Safe Rule (Part One).[10] In August 2021, USEPA proposed to revise existing national greenhouse gas (GHG) emissions standards for passenger cars and light trucks for Model Years 2023- 2026 to make the standards more stringent. On August 5, 2021, USEPA announced plans to reduce

[6] NHTSA. 2018. Federal Register, Vol. 83, No. 72, Rules & Regulations, Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022-2025 Light Duty Vehicles. April 13. Available at: https://www.federalregister.gov/documents/2018/04/13/2018-07364/mid-term-evaluation-of-greenhouse-gas-emissions-standards-for-model-year-2022-2025-light-duty. Accessed: February 2022.

[7] USEPA and NHTSA. 2019. Federal Register, Vol. 84, No. 188, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. September 27. Available at: https://www.govinfo.gov/content/pkg/FR-2019-09-27/pdf/2019-20672.pdf. Accessed: February 2022.

[8] CARB. 2019. EMFAC Off-Model Adjustment Factors to Account for the SAFE Vehicle Rule Part One. November 20. Available at: https://ww3.arb.ca.gov/msei/emfac_off_model_adjustment_factors_final_draft.pdf. Accessed: February 2022.

[9] CARB. 2020. EMFAC Off-Model Adjustment Factors for Carbon Dioxide Emissions to Account for the SAFE Vehicles Rule Part One and the Final SAFE Rule. June 26. Available at: https://ww3.arb.ca.gov/msei/emfac_off_model_co2_adjustment_factors_06262020-final.pdf. Accessed: February 2022.

[10] USEPA. 2021. Federal Register, Vol. 86, No. 80, California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a previous Withdrawal of a Waiver of Preemption; Opportunity for Public Hearing and Public Comment. April 28. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/notice-reconsideration-previous-withdrawal-waiver. Accessed: February 2022.

greenhouse gas (GHG) emissions and other harmful air pollutants from heavy-duty trucks through a series of rulemakings over the next three years. The first rulemaking, to be finalized in 2022, will apply to heavy-duty vehicles starting in model year 2027, and will set new standards for criteria pollutants for the entire sector as well as targeted updates to the current GHG emissions standards.[11]

STATE

California Clean Air Act

The California Legislature enacted the California Clean Air Act (CCAA) in 1988 to address air quality issues of concern not adequately addressed by the federal CAA at the time. California's air quality problems were and continue to be some of the most severe in the nation and required additional actions beyond the federal mandates. The CARB administers California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the CCAA. The 10 State air pollutants are the six pollutants subject to federal standards listed above as well as visibility reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The U.S. EPA authorized California to adopt its own regulations for motor vehicles and other sources that are more stringent than similar federal regulations implementing the CAA. Generally, the planning requirements of the federal CAA are less stringent than the CCAA; therefore, consistency with the CCAA will also demonstrate consistency with the federal CAA.

CARB Mobile-Source Regulation

The State of California is responsible for controlling emissions from the operation of motor vehicles in the State. Rather than mandating the use of specific technology or the reliance on a specific fuel, the CARB motor vehicle standards specify the allowable grams of pollution per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved. Towards this end, the CARB has adopted regulations that require auto manufacturers to phase in less-polluting vehicles.

California Air Quality Standards

Although NAAQS are determined by the U.S. EPA, states have the ability to set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards. Federal and state ambient air quality standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates and lead. In addition, California has created standards for pollutants that are not covered by federal standards. Although there is some variability among the health effects of the CAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations and emergency department visits for exacerbated chronic disease, and increased symptoms such as

[11] USEPA. 2021. Clean Trucks Plan. https://www.epa.gov/regulations-emissions-vehicles-and-engines/clean-trucks-plan. Accessed: February 2022.

coughing and wheezing. The existing state and federal primary standards for major pollutants are shown in Table 3.3-1.

Tanner Air Toxics Act (TACs)

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and has adopted U.S. EPA's list of Hazardous Air Pollutants (HAPs) as TACs. Most recently, diesel PM was added to the CARB list of TACs. Once a TAC is identified, CARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technologies (BACT) to minimize emissions.

Toxic Air Contaminants Health Effects

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. The California Almanac of Emissions and Air Quality presents the relevant concentration and cancer risk data for the 10 TACs that pose the most substantial health risk in California based on available data. The 10 TACs are acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM).

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

DPM differs from other TACs in that it is not a single substance, but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The CARB has made preliminary concentration estimates based on a DPM exposure method. This method uses the CARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of DPM.

Transportation Control Measures

The State Implementation Plan (SIP) describes the infrastructure (authorities, resources, and programs) California has in place to implement, maintain, and enforce the NAAQS. One particular aspect of the development process is the consideration of potential control measures as a part of making progress towards clean air goals. While most SIP control measures are aimed at reducing emissions from stationary sources, some are typically also created to address mobile or transportation sources. These are known as transportation control measures (TCMs). TCM strategies are designed to reduce vehicle miles traveled and trips, or vehicle idling and associated air pollution. These goals are achieved by developing attractive and convenient alternatives to single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

Omnibus Low-NOx Rule

CARB approved the Omnibus Low-NOx Rule on August 28, 2020, which will require engine NOx emissions to be cut to approximately 75% below current standards beginning in 2024, and 90% below current standards in 2027. The rule also places nine additional regulatory requirements on new heavy-duty trucks and engines. Those additional requirements include a 50% reduction in particulate matter emissions, stringent new low-load and idle standards, a new in-use testing protocol, extended deterioration requirements, a new California-only credit program, and extended mandatory warranty requirements. The regulatory requirements in the Omnibus Low-NOx Rule will first become effective in 2024, at the same time as the Advanced Clean Trucks regulations that CARB approved that require manufacturers to convert increasing percentages of their heavy-duty trucks sold in California to zero-emission vehicles.

Low Emission Vehicle Program

The CARB first adopted Low Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 State Implementation Plan (SIP). In 2012, the CARB adopted the LEV III amendments to California's LEV regulations. These amendments, also known as the Advanced Clean Car Program, include more stringent emission standards for model years 2017 through 2025 for both criteria pollutants and greenhouse gas (GHG) emissions for new passenger vehicles.

On September 23, 2020, Governor Gavin Newsom issued Executive Order N-79-20 establishing a goal that 100 percent of new passenger cars and trucks sold in California shall be zero-emission by 2035. The Executive Order also sets a goal that, where feasible, all operations include zero-emission medium- and heavy-duty trucks by 2045, and drayage trucks by 2035. Off-road vehicles have a goal to transition to 100 percent zero-emission vehicles by 2035, where feasible.

On-Road Heavy-Duty Vehicle Program

The CARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. The CARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others.

California Air Resources Board Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the CARB adopted a regulation to reduce DPM and NOx emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than five consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. The CARB is enforcing that part of the rule with fines up to $10,000 per day for each vehicle in violation. Performance requirements of the rule are based on a fleet's average NOx emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirements, making the first compliance deadline January 1, 2014, for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less).

The latest amendments became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter (PM) filter requirements beginning January 1, 2012. Lighter and older heavier trucks were required to be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.[12]

Diesel Risk Reduction Plan

The CARB's Diesel Risk Reduction Plan has led to the adoption of new State regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions by about 90 percent overall from year 2000 levels. The projected emission benefits

[12] California Air Resources Board (CARB). 2021. Truck and Bus Regulation. Website: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm. Accessed February 16, 2021.

associated with the full implementation of this plan, including federal measures, are reductions in DPM emissions and associated cancer risks of 75 percent by 2010, and 85 percent by 2020.[13]

LOCAL

City of Tracy General Plan

The City of Tracy General Plan includes several policies that are relevant to air quality. General Plan policies applicable to the Project are identified below:

POLICIES: AIR QUALITY ELEMENT

- AQ-1.1-P1. The City shall promote land use patterns that reduce the number and length of motor vehicle trips.
- AQ-1.1-P2. To the extent feasible, the City shall maintain a balance and match between jobs and housing.
- AQ-1.1-P4. Employment areas should include a mix of support services to minimize the number of trips.
- AQ-1.2-P1. The City shall assess air quality impacts using the latest version of the CEQA Guidelines and guidelines prepared by the San Joaquin Valley Air Pollution Control District.
- AQ-1.2-P2. The City shall assess through the CEQA process any air quality impacts of development projects that may be insignificant by themselves, but cumulatively significant.
- AQ-1.2-P3. Developers shall implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects.
- AQ-1.2-P4. New development projects should incorporate energy efficient design features for HVAC, lighting systems and insulation that exceed Title 24.
- AQ-1.2-P5. Use of solar water and pool heaters is encouraged.
- AQ-1.2-P6. Installation of solar voltaic panels on new homes and businesses shall be encouraged.
- AQ-1.2-P7. Trees should be planted on the south- and west-facing sides of new buildings or buildings undergoing substantial renovation in order to reduce energy usage.
- AQ-1.2-P9. New developments shall follow the current requirements of the SJVAPCD with respect to wood burning fireplaces and heaters.
- AQ-1.2-P10. Stationary air pollutant emission sources (e.g. factories) shall be located an appropriate distance away and down-wind from residential areas and other sensitive receptors.
- AQ-1.2-P12. New sources of toxic air pollutants shall prepare a Health Risk Assessment as required under the Air Toxics "Hot Spots" Act and, based on the results of the Assessment, establish appropriate land use buffer zones around those areas posing substantial health risks.

[13] California Air Resources Board (CARB). 2021. Diesel Risk Reduction Plan. Website: https://ww2.arb.ca.gov/our-work/programs/diesel-risk-reduction-plan. Accessed February 16, 2021.

- AQ-1.2-P13. Dust control measures consistent with San Joaquin Valley Air Pollution Control District rules shall be required as a condition of approval for subdivision maps, site plans, and all grading permits.
- AQ-1.2-P14. Developments that significantly impact air quality shall only be approved if all feasible mitigation measures to avoid, minimize or offset the impact are implemented.
- AQ-1.2-P15. Encourage businesses to electrify loading docks or implement idling-reduction systems so that trucks transporting refrigerated goods can continue to power cab cooling elements during loading, layovers, and rest periods.
- AQ-1.2-P16. Encourage the use of Best Management Practices in agriculture and animal operations.
- AQ-1.3-P1. The City shall continue to work with the San Joaquin Council of Governments on regional transportation solutions.
- AQ-1.3-P3. The City shall encourage employers to establish Transportation Demand Management programs.
- AQ-1.3-P5. The City shall require direct pedestrian and bicycle linkages from residential areas to parks, schools, retail areas, high-frequency transit facilities and major employment areas.

San Joaquin Valley Air Pollution Control District

The primary role of SJVAPCD is to develop plans and implement control measures in the SJVAB to control air pollution. These controls primarily affect stationary sources such as industry and power plants. Rules and regulations have been developed by SJVAPCD to control air pollution from a wide range of air pollution sources. SJVAPCD also provides uniform procedures for assessing potential air quality impacts of proposed projects and for preparing the air quality section of environmental documents.

AIR QUALITY PLANNING

The U.S. EPA requires states that have areas that do not meet the National AAQS to prepare and submit air quality plans showing how the National AAQS will be met. If the states cannot show how the National AAQS will be met, then the states must show progress toward meeting the National AAQS. These plans are referred to as the SIP. In October 2018, the CARB adopted the 2018 Updates to the California State Implementation Plan.

In addition, the CARB requires regions that do not meet California AAQS for ozone to submit clean air plans (CAPs) that describe measures to attain the standard or show progress toward attainment. To ensure federal CAA compliance, SJVAPCD is currently developing plans for meeting new National AAQS for ozone and $PM_{2.5}$ and the California AAQS for PM_{10} in the SJVAB (for California CAA compliance). The following describes the air plans prepared by the SJVAPCD.

8-HOUR OZONE PLAN

The SJVAPCD's Governing Board adopted the 2007 Ozone Plan on April 30, 2007. This far-reaching plan, with innovative measures and a "dual path" strategy, assures expeditious attainment of the

federal 8-hour ozone standard as set by U.S. EPA in 1997. The CARB approved the plan on June 14, 2007. The U.S. EPA approved the 2007 Ozone Plan effective April 30, 2012. SJVAPCD adopted the 2016 Ozone Plan to address the federal 2008 8-hour ozone standard, which must be attained by end of 2031.[14,15] More recently, a new ozone attainment plan is under development. Specifically, the 2022 Ozone Plan for the Attainment of the 2015 Federal 8-hour Ozone Standard is anticipated to be submitted in August 2022 to the U.S. EPA.

PM_{10} PLAN

Based on PM_{10} measurements from 2003 to 2006, the U.S. EPA found that the SJVAB has reached federal PM_{10} standards. On September 21, 2007, the SJVAPCD's Governing Board adopted the 2007 PM_{10} Maintenance Plan and Request for Redesignation. This plan demonstrated that the valley would continue to meet the PM_{10} standard. U.S. EPA approved the document and on September 25, 2008, the SJVAB was redesignated to attainment/maintenance (SJVAPCD, 2015).

PM2.5 PLAN

The SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards on November 15, 2018.[16] This plan addresses the U.S. EPA federal 1997 annual $PM_{2.5}$ standard of 15 µg/m³ and 24-hour $PM_{2.5}$ standard of 65 µg/m³; the 2006 24-hour $PM_{2.5}$ standard of 35 µg/m³; and the 2012 annual $PM_{2.5}$ standard of 12 µg/m³. This plan demonstrates attainment of the federal $PM_{2.5}$ standards as expeditiously as practicable (SJVAPCD, 2020).

All of the above-referenced plans include measures (i.e., federal, state, and local) that would be implemented through rule making or program funding to reduce air pollutant emissions in the SJVAB. Transportation control measures are part of these plans.

SJVAPCD RULES AND REGULATIONS

SJVAPCD Indirect Source Review

On December 15, 2005, SJVAPCD adopted the Indirect Source Review Rule (ISR or Rule 9510) to reduce ozone precursors (i.e., ROG and NOx) and PM_{10} emissions from new land use development projects. Specifically, Rule 9510 targets the indirect emissions from vehicles and construction equipment associated with these projects and applies to both construction and operational-related impacts. The rule applies to the proposed Project since it proposes more than 25,000 square feet of light industrial uses.

This rule requires the applicants of certain development projects which equal or exceed established applicability thresholds to apply to the SJVAPCD when applying for the development's last discretionary approval. Projects subject to the rule are required to quantify indirect emissions

[14] SJVAPCD. Ozone Plans. http://www.valleyair.org/ Air_Quality_Plans/Ozone_Plans.htm, accessed March 3, 2020.
[15] SJVAPCD. 2016 Plan for the 2008 8-Hour Ozone Standard, http://www.valleyair.org/Air_Quality_Plans/Ozone-Plan-2016.htm, accessed March 3, 2020.
[16] SJVAPCD. Particulate Matter Plans. http://valleyair.org/Air_Quality_Plans/PM_Plans.htm, accessed March 9, 2020.

(mobile source emissions), area source emissions and construction exhaust emissions and to mitigate a portion of these emissions. The Indirect Source Rule was adopted December 2005 and last amended December 2017. Rule 9510 was adopted to reduce the impacts of growth in emissions from all new development in the San Joaquin Valley. Developers of projects subject to Rule 9510 must reduce emissions occurring during construction and operational phases through on-site measures or pay off-site mitigation fees. One hundred percent of all off-site mitigation fees are used by the SJVAPCD to fund emission reduction projects through its Incentive Programs, achieving emission reductions on behalf of the project. The emission reduction expected from the rule allow the SJVAPCD to achieve attainment of the federal air quality standards for ozone by 2031.

The rule requires all subject, nonexempt projects to mitigate both construction and operational period emissions by (1) applying feasible SJVAPCD-approved mitigation measures, or (2) paying any applicable fees to support programs that reduce emissions. Off-site emissions reduction fees (off-site fees) are required for projects that do not achieve the required emissions reductions through on-site emission reduction measures. Phased projects can defer payment of fees in accordance with an Off-site Emissions Reduction Fee Deferral Schedule (FDS) approved by the SJVAPCD.

To determine how an individual project would satisfy Rule 9510, each project would submit an air quality impact assessment (AIA) to the SJVAPCD as early as possible, but no later than prior to the project's final discretionary approval, to identify the project's baseline unmitigated emissions inventory for indirect sources: on-site exhaust emissions from construction activities and operational activities from mobile and area sources of emissions (excludes fugitive dust and permitted sources). Rule 9510 requires the following reductions, which are levels that the SJVAPCD has identified as necessary, based on its air quality management plans, to reach attainment for ozone and particulate matter:

Construction Equipment Emissions

The exhaust emissions for construction equipment greater than 50 horsepower (hp) used or associated with the development project shall be reduced by the following amounts from the statewide average as estimated by CARB:

- 20 percent of the total NOx emissions
- 45 percent of the total PM_{10} exhaust emissions

AIA mitigation strategies may include those that reduce construction emissions on-site by using less polluting construction equipment, which can be achieved by utilizing add-on controls, cleaner fuels, or newer, lower emitting equipment.

Operational Emissions

- NOx Emissions. Applicants shall reduce 33.3 percent of the project's operational baseline NOx emissions over a period of 10 years as quantified in the approved AIA.
- PM_{10} Emissions. Applicants shall reduce 50 percent of the project's operational baseline PM_{10} emissions over a period of 10 years as quantified in the approved AIA.

These requirements listed above can be met through any combination of on-site emissions reduction measures. In the event that a project cannot achieve the above standards through imposition of mitigation measures, then the project would be required to pay the applicable off-site fees. These fees are used to fund various incentive programs that cover the purchase of new equipment, engine retrofit, and education and outreach.

Fugitive PM_{10} Prohibitions

SJVAPCD controls fugitive PM_{10} through Regulation VIII, Fugitive PM_{10} Prohibitions. The purpose of this regulation is to reduce ambient concentrations of PM_{10} and $PM_{2.5}$ by requiring actions to prevent, reduce, or mitigate anthropogenic (human caused) fugitive dust emissions.

- Regulation VIII, Rule 8021 applies to any construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, travel on-site, and travel on access roads to and from the site.
- Regulation VIII, Rule 8031 applies to the outdoor handling, storage, and transport of any bulk material.
- Regulation VIII, Rule 8041 applies to sites where carryout or trackout has occurred or may occur on paved roads or the paved shoulders of public roads.
- Regulation VIII, Rule 8051 applies to any open area having 0.5 acre or more within urban areas or 3.0 acres or more within rural areas, and contains at least 1,000 square feet of disturbed surface area.
- Regulation VIII, Rule 8061 applies to any new or existing public or private paved or unpaved road, road construction project, or road modification project.
- Regulation VIII, Rule 8071 applies to any unpaved vehicle/equipment traffic area.
- Regulation VIII, Rule 8081 applies to off-field agricultural sources.

Sources regulated are required to provide Dust Control Plans that meet the regulation requirements. Under Rule 8021, a Dust Control Plan is required for any residential project that will include 10 or more acres of disturbed surface area, a nonresidential project with 5 or more acres of disturbed surface area, or a project that relocates 2,500 cubic yards per day of bulk materials for at least three days. The Dust Control Plan is required to be submitted to SJVAPCD prior to the start of any construction activity. The Dust Control Plan must also describe fugitive dust control measures to be implemented before, during, and after any dust-generating activity.

Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations

If asphalt paving will be used, then paving operations of the proposed Project will be subject to Rule 4641. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.

Nuisance Odors

SJVAPCD controls nuisance odors through implementation of Rule 4102, Nuisance. Pursuant to this rule, "a person shall not discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any

such person or the public or which cause or have a natural tendency to cause injury or damage to business or property."

Employer Based Trip Reduction Program

SJVAPCD has implemented Rule 9410, Employer Based Trip Reduction. The purpose of this rule is to reduce VMT from private vehicles used by employees to commute to and from their worksites to reduce emissions of NOx, ROG, and particulate matter (PM_{10} and $PM_{2.5}$). The rule applies to employers with at least 100 employees. Employers are required to implement an Employer Trip Reduction Implementation Plan (ETRIP) for each worksite with 100 or more eligible employees to meet applicable targets specified in the rule. Employers are required to facilitate the participation of the development of ETRIPs by providing information to their employees explaining the requirements and applicability of this rule. Employers are required to prepare and submit an ETRIP for each worksite to the District. The ETRIP must be updated annually. Under this rule, employers shall collect information on the modes of transportation used for each eligible employee's commutes both to and from work for every day of the commute verification period, as defined in using either the mandatory commute verification method or a representative survey method. Annual reporting includes the results of the commute verification for the previous calendar year along with the measures implemented as outlined in the ETRIP and, if necessary, any updates to the ETRIP.

Visible Emissions

SJVAPCD controls visible emissions through Rule 4101, Visible Emissions. The purpose of this regulation is to prohibit visible air contaminants in the atmosphere. This rule requires that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

- As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.
- Of such opacity as to obscure an observer's view to a degree equal to or greater than the smoke described in Section 5.1 of this rule.

Architectural Coatings

The purpose of SJVAPCD Rule 4601 is to limit VOC emissions from architectural coatings. This rule specifies architectural coatings storage, cleanup, and labeling requirements. This rule is applicable to any person who supplies, markets, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures, blends or repackages any architectural coating for use within the District.

3.3.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact on the environment associated with air quality if it will:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; and/or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

APPROACH TO ANALYSIS

While the final determination of whether a project's potential effect is significant is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, the SJVAPCD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions. If the Lead Agency finds that the project would exceed these air pollution thresholds, the project should be considered to have significant air quality impacts. The applicable SJVAPCD thresholds and methodologies are contained under each impact statement below, as the City, in its discretion, has determined to utilize these thresholds and methodologies, which are based on scientific and factual data.

This analysis was performed consistent with the guidance and methodologies provided by the SJVAPCD's GAMAQI.[17] Based on the SJVAPCD New Source Review (NSR) offset requirements for stationary sources, the SJVAPCD has established thresholds of significance for criteria pollutant emissions, shown in Table 3.3-6. These thresholds apply to the project because these air pollutants would be generated during project construction and operation and constitute criteria pollutants or precursor emissions for criteria pollutants, which are regulated by the federal and State Clean Air Acts.

The SJVAPCD has also established significance thresholds to assess the impacts of project-related construction and operational emissions on regional and local ambient air quality. Table 3.3-7 shows the daily mass emissions screening criteria for construction and operation as adopted by the SJVAPCD for CAP and TAC emissions. The analysis summarized in this report estimates project-related construction and operational mass emissions and compares the emissions to these significance thresholds.

[17] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impact. Website: https://www.valleyair.org/transportation/CEQA%20Rules/GAMAQI%20Jan%202002%20Rev.pdf Accessed June 8, 2022.

TABLE 3.3-6: SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT SIGNIFICANCE THRESHOLDS

POLLUTANT	*CONSTRUCTION THRESHOLDS (TPY)*	*OPERATIONAL THRESHOLDS (TPY)*
ROG	10	10
NOx	10	10
CO	100	100
SOx	27	27
PM_{10}	15	15
$PM_{2.5}$	15	15

SOURCES: SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT (SJVAPCD). 2015. GUIDANCE FOR ASSESSING AND MITIGATING AIR QUALITY IMPACT. WEBSITE: HTTPS://WWW.VALLEYAIR.ORG/TRANSPORTATION/CEQA%20RULES/GAMAQI%20JAN%202002%20REV.PDF ACCESSED JUNE 8, 2022.

TABLE 3.3-7: SJVAPCD DAILY MASS EMISSIONS SCREENING CRITERIA

POLLUTANT	*CONSTRUCTION THRESHOLDS (POUNDS PER DAY)*	*OPERATIONAL THRESHOLDS (POUNDS PER DAY)*
ROG	100	100
NOx	100	100
CO	100	100
SOx	100	100
PM_{10}	100	100
$PM_{2.5}$	100	100

SOURCES: SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT (SJVAPCD). 2015. GUIDANCE FOR ASSESSING AND MITIGATING AIR QUALITY IMPACT. WEBSITE: HTTPS://WWW.VALLEYAIR.ORG/TRANSPORTATION/CEQA%20RULES/GAMAQI%20JAN%202002%20REV.PDF ACCESSED JUNE 8, 2022.

The daily mass emissions screening criteria provided in Table 3.3-7 represent screening-level thresholds that can be used to evaluate whether project-related emissions would cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. In the event that emissions exceed those thresholds, modeling would be required to demonstrate that the project's total air quality impacts result in ground-level concentrations that are below the CAAQS and NAAQS, including appropriate background levels.

CRITERIA POLLUTANT EMISSIONS MODELING

California Emission Estimator Model (CalEEMod)™ (v.2022.1), developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with California air districts, was used to estimate emissions for the proposed Project. CalEEMod is recommended by the SJVAPCD for purposes of modeling criteria pollutant air emissions within the San Joaquin Valley. Project construction was assumed to begin in 2025 and be completed in 2027. It should be noted that exact timing of the construction schedule would be based on market demand; assuming an earlier construction schedule than would occur represents a conservative estimate, since construction-based emissions rates would improve with time, due to increasing efficiency of equipment over time.

The assumptions for the modeling are: Unrefrigerated Warehouse – No Rail (207,000 square feet); General Office Building (10,900 square feet); Other Asphalt Surfaces (15.9 acres). Vehicle trips and

fleet mix estimated in the modeling are consistent with those as provided by Kimley Horn in its traffic analysis (see Appendix G of the original Draft EIR for further detail). The construction phase includes demolition, site preparation, grading, building construction, paving, and architectural coating phases. See Appendix B of this Recirculated Draft EIR for further detail.

STATE OF CALIFORNIA DEPARTMENT OF JUSTICE BEST PRACTICES WHEN STUDYING AIR QUALITY AND GREENHOUSE GAS EMISSIONS

The following analysis complies with all of the example best practices when studying air quality and greenhouse gas emissions, as cited by the California Department of Justice's Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act. Specifically, the proposed Project complies with each of the example best practices when studying air quality and greenhouse gas impacts listed within the California Department of Justice's comment letter on the Project NOP on December 20, 2023, as follows:

- Fully analyzing all reasonably foreseeable project impacts, including cumulative impacts;
- When analyzing cumulative impacts, thoroughly considering the project's incremental impact in combination with past, present, and reasonably foreseeable future projects, even if the project's individual impacts alone do not exceed the applicable significance thresholds;
- Preparing a quantitative air quality study in accordance with local air district guidelines;
- Preparing a quantitative health risk assessment in accordance with California Office of Environmental Health Hazard Assessment and local air district guidelines;
- Refraining from labeling compliance with CARB or air district regulations as a mitigation measure—compliance with applicable regulations is required regardless of CEQA;
- Disclosing air pollution from the entire expected length of truck trips. CEQA requires full public disclosure of a project's anticipated truck trips, which entails calculating truck trip length based on likely truck trip destinations, rather than the distance from the facility to the edge of the air basin, local jurisdiction, or other truncated endpoint. All air pollution associated with the project must be considered, regardless of where those impacts occur.
- Accounting for all reasonably foreseeable greenhouse gas emissions from the project, without discounting projected emissions based on participation in California's Cap-and-Trade Program.

Table 3.3-8, below, provides an analysis of the Project's consistency with each of these best practices.

TABLE 3.3-8: PROJECT CONSISTENCY WITH STATE OF CALIFORNIA DEPARTMENT OF JUSTICE BEST PRACTICES WHEN STUDYING AIR QUALITY AND GREENHOUSE GAS EMISSIONS

BEST PRACTICE	*PROJECT CONSISTENCY*
Fully analyzing all reasonably foreseeable project impacts, including cumulative impacts.	**Consistent**. This Draft EIR fully analyzes all reasonably foreseeable CEQA-related project impacts, including cumulative impacts. See the individual environmental topic impacts analyzed throughout Chapter 3.0 of this Draft EIR. Additionally, see Chapter 4.0: Other CEQA-Required

BEST PRACTICE	*PROJECT CONSISTENCY*
	Topics of this Draft EIR, for analysis of all proposed Project cumulative impacts.
When analyzing cumulative impacts, thoroughly considering the project's incremental impact in combination with past, present, and reasonably foreseeable future projects, even if the project's individual impacts alone do not exceed the applicable significance thresholds.	**Consistent**. This Draft EIR, when analyzing cumulative impacts, thoroughly considered the project's incremental impact in combination with past, present, and reasonably foreseeable future projects, even if the project's individual impacts alone did not exceed the applicable significance thresholds. As described in Chapter 4.0: Other CEQA-Required Topics, the list of past, present, and probable future projects used for the cumulative analysis is restricted to those projects that are planned to occur within the City of Tracy and SOI, upon buildout of the Tracy General Plan. See Chapter 4.0 of this Draft EIR, for further detail.
Preparing a quantitative air quality study in accordance with local air district guidelines.	**Consistent**. This Draft EIR thoroughly studies air quality impacts, in accordance with local air district guidelines. For example, propose Project emissions are quantified using the Air District-recommended modeling software, 'CalEEMod'. Additionally, toxic air contaminant impacts are analyzed utilizing the Air District's screening calculator, the SJVAPCD's "Prioritization Calculator". See the impact discussion, below, under 'Impacts and Mitigation Measures', for further detail.
Preparing a quantitative health risk assessment in accordance with California Office of Environmental Health Hazard Assessment and local air district guidelines.	**Consistent**. Toxic air contaminant impacts are analyzed utilizing the Air District's screening calculator, the SJVAPCD's "Prioritization Calculator". This is consistent with the California Office of Environmental Health Hazard Assessment (OEHHA) and local air district (SJVAPCD) guidelines. See the impact discussion in Section 3.7: Greenhouse Gases, Climate Change, and Energy, for further detail.
Refraining from labeling compliance with CARB or air district regulations as a mitigation measure—compliance with applicable regulations is required regardless of CEQA.	**Consistent**. CARB and other air district regulations are not included as mitigation measures, as compliance with applicable regulations is required, regardless of CEQA.
Disclosing air pollution from the entire expected length of truck trips. CEQA requires full public disclosure of a project's anticipated truck trips, which entails calculating truck trip length based on likely truck trip destinations, rather than the distance from the facility to the edge of the air basin, local jurisdiction, or other truncated endpoint. All air pollution associated with the project must be considered, regardless of where those impacts occur.	**Consistent**. The relevant (i.e. Air Quality/Greenhouse Gases and Climate Change/Energy) CEQA analyses disclose air pollution from the entire expected length of truck trips. The modeling software utilized (i.e. CalEEMod) is recommended by the SJVAPCD, and utilizes Institute of Transportation Engineer (ITE) trip lengths, which are the industry standard. These trip lengths are based on the Project land use, as well as other relevant factors, which are taken into account by the model. Therefore, all air pollution associated with the proposed Project is considered, consistent with this best practice.

BEST PRACTICE	*PROJECT CONSISTENCY*
Accounting for all reasonably foreseeable greenhouse gas emissions from the project, without discounting projected emissions based on participation in California's Cap-and-Trade Program.	**Consistent**. The greenhouse gas emissions analysis for the proposed Project, which is contained within Section 3.7: Greenhouse Gas Emissions and Climate Change of the Draft EIR, accounts for all reasonably foreseeable greenhouse gas emissions from the proposed Project and does not discount any emissions based on participation in California's Cap-and-Trade Program. Therefore, this analysis is consistent with this best practice.

IMPACTS AND MITIGATION MEASURES

Impact 3.3-1: Project operation would not conflict or obstruct implementation of the District's air quality plan. (Less than Significant)

The CEQA Guidelines indicate that a significant impact would occur if the proposed Project would conflict with or obstruct implementation of the applicable Air Quality Attainment Plan (AQAP). The CARB has developed a three-step approach to determine project conformity with the applicable Air Quality Attainment Plan (AQAP):

- *Determination that an AQAP is being implemented in the area where the project is being proposed.*
- *The proposed project must be consistent with the growth assumptions of the applicable AQAP.*
- *The project must contain in its design all reasonably available and feasible air quality control measures.*

The proposed Project is in conformance with the AQAP, based on these criteria, as follows:

- *Determination that an AQAP is being implemented in the area where the project is being proposed.*

The SJVAPCD has implemented the current, modified 2016 8-hour AQAP as approved by CARB and approved by USEPA for the 2008 8-hour O_3 standard.

- *The proposed project must be consistent with the growth assumptions of the applicable AQAP.*

The SJCOG RTP/SCS growth projections provide for future employment/population factors. The development of the SJVAPCD AQAP is based in part on the land use general plan projections of the various cities and counties that constitute the Air Basin. The City of Tracy General Plan Land Use Element designates the Project site as Industrial, which is intended to accommodate flex/office space, manufacturing, warehousing and distribution, and ancillary uses for workers' needs. Therefore, the proposed Project, which involves the development of light industrial, warehouse and distribution and related uses, is considered consistent with the site's General Plan land use

designation and its traffic would be included in volumes projected for analysis of the General Plan. The SJVAPCD AQP is based on the growth assumptions of the City of Tracy General Plan and SJCOG RTP/SCS. Since the Project is consistent with the SJCOG RTP/SCS, and SJCOG RTP/SCS projections are incorporated into the SIP, the Project is also consistent with the SIP.

- *The project must contain in its design all reasonably available and feasible air quality control measures.*

The Project incorporates various policy and rule-required implementation measures that would reduce related emissions, including all of the current Air District rules and regulations.[18] For example, the proposed Project would be required to implement Air District Rule 9510, which ensures that the Project would fulfill the Air District's emissions reduction commitments in the relevant PM_{10} and Ozone Attainment plans. In addition, the Project would comply with all applicable stationary source permitting rules implemented by SJVAPCD, which further confirms the Project would not cause or contribute to any ambient air quality standard exceedances. Therefore, the proposed Project's potential impact relating to conflicts with the SJVAPCD's air quality plan is considered ***less than significant.***

Impact 3.3-2: The proposed Project would not result in a cumulatively considerable net increase of a criteria pollutant for which the region is in nonattainment under an applicable federal or State ambient air quality standard. (Less than Significant)

If an area is in nonattainment for a criteria pollutant, then the background concentration of that pollutant has historically exceeded the ambient air quality standard. It follows that if a Project exceeds the regional threshold for that nonattainment pollutant, then it would result in a cumulatively considerable net increase of that pollutant and result in a significant cumulative impact.

The Air Basin is in nonattainment for PM_{10}, $PM_{2.5}$, and ozone. Therefore, if the proposed Project exceeds the regional thresholds for PM_{10}, or $PM_{2.5}$, then it would contribute to a cumulatively considerable impact for those pollutants. If the proposed Project exceeds the regional threshold for NOx or ROG (which are precursors to ozone), then it follows that the proposed Project would result in a cumulatively considerable contribution and thus result in a significant cumulative impact for ozone.

Regional emissions include those generated from all on-site and off-site activities. Regional significance thresholds have been established by the SJVAPCD because emissions from projects in the Air Basin can potentially contribute to the existing emission burden and possibly affect the attainment and maintenance of ambient air quality standards. Projects within the Air Basin with regional emissions that exceed any of the thresholds presented previously are considered to have a significant regional air quality impact.

[18] See here for further detail: https://www.valleyair.org/rules/1ruleslist.htm

CONSTRUCTION EMISSIONS

Emissions from construction activities represent temporary impacts that are typically short in duration, depending on the size, phasing, and type of project. Construction-related activities would result in Project-generated emissions from site preparation, grading, paving, building construction, and architectural coatings. CalEEMod™ (v.2022.1) was used to estimate construction emissions for the proposed Project. Table 3.3-9, below, provides the construction criteria pollutant emissions and thresholds associated with implementation of the proposed Project. It should be noted that the SJVAPCD recommends the same criteria pollutant thresholds for both construction and operational emissions, as provided within the *SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts* (2015).

TABLE 3.3-9: CONSTRUCTION PROJECT GENERATED EMISSIONS (TONS PER YEAR)

POLLUTANT	*CO*	*NOX*	*ROG*	*SOX*	*PM_{10}*	*$PM_{2.5}$*
THRESHOLD	100	10	10	27	15	15
MAXIMUM EMISSIONS	2.20	1.48	0.65	<0.01	0.38	0.18
EXCEEDS THRESHOLD?	**N**	**N**	**N**	**N**	**N**	**N**

SOURCE: CALEEMOD (V. 2022.1)

Additionally, the SJVAPCD has also developed daily mass emissions screening criteria for ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ to determine whether project emissions would result in a violation of an AAQS. Because the NAAQS and CAAQS are concentration-based standards presented hourly, daily mass emissions are a more suitable estimate to determine whether a project would contribute to a violation of an AAQS. These screening criteria are 100 pounds per day for any pollutant. The following table (Table 3.3-10) provides the proposed Project's unmitigated construction emissions in pounds per day in comparison to this screening thresholds.

TABLE 3.3-10: CONSTRUCTION PROJECT GENERATED EMISSIONS (POUNDS PER DAY)

POLLUTANT	*CO*	*NOX*	*ROG*	*SOX*	*PM_{10}*	*$PM_{2.5}$*
THRESHOLD (POUNDS/DAY)	100	100	100	100	100	100
MAXIMUM EMISSIONS	12.1	8.12	3.57	0.02	2.07	0.99
EXCEEDS THRESHOLD?	**N**	**N**	**N**	**N**	**N**	**N**

SOURCE: CALEEMOD (V.2022.1)

If the proposed Project's emissions will exceed the SJVAPCD's threshold of significance for construction-generated emissions, the proposed Project would have a significant impact on air quality. As shown in Table 3.3-9, the proposed Project, without mitigation, would not exceed the SJVAPCD thresholds of significance for construction criteria pollutants. Additionally, as shown in Table 3.3-10, the proposed Project would not exceed the daily mass screening criteria thresholds during Project construction. Therefore, the Project's construction-related criteria pollutant emissions would be considered to have a ***less than significant*** impact, and no mitigation for construction-related criteria pollutant emissions is warranted.

OPERATIONAL EMISSIONS

The SJVAPCD is tasked with implementing programs and regulations required by the Federal Clean Air Act and the California Clean Air Act. In that capacity, the SJVAPCD has prepared plans to attain Federal and State ambient air quality standards. To achieve attainment with the standards, the SJVAPCD has established thresholds of significance for criteria pollutant emissions in its *SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts* (2015). Projects with emissions below the thresholds of significance for criteria pollutants would be determined to "Not conflict or obstruct implementation of the District's air quality plan", and also to not have a cumulatively considerable net increase of a criteria pollutant for which the project region is in non-attainment. If the proposed Project's emissions will exceed the SJVAPCD's threshold of significance for operational-generated emissions, the proposed Project will have a significant impact on air quality and all feasible mitigation measures are required to be implemented to reduce emissions to below the threshold of significance, to the extent feasible.

A main source of pollution generated by the proposed Project would be due to the generation of mobile source emissions by vehicles traveling to and from the Project site. According to Kimley Horn (as provided by the Traffic Analysis prepared for the proposed Project), the proposed Project is anticipated to generate approximately the proposed Project would increase total vehicle trips by approximately 382 new daily trips.

CalEEMod™ (v.2022.1) was used to model operational emissions of the proposed Project. The SJVAPCD provides a list of applicable air quality emissions thresholds. Table 3.3-11 shows proposed Project emissions as provided by CalEEMod. As shown in Table 3.3-11 below, Project operational emissions would not exceed any of the SJVACPD operational thresholds of significance.

TABLE 3.3-11: OPERATIONAL PROJECT GENERATED EMISSIONS (TONS PER YEAR)

POLLUTANT	*CO*	*NOX*	*ROG*	*SOX*	*PM_{10}*	*$PM_{2.5}$*
THRESHOLD	100	10	10	27	15	15
EMISSIONS	2.51	1.68	1.18	0.02	0.79	0.23
EXCEEDS THRESHOLD?	**N**	**N**	**N**	**N**	**N**	**N**

SOURCE: CALEEMOD (V.2022.1)

Additionally, the SJVAPCD has also developed daily mass emissions screening criteria for ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ to determine whether project emissions would result in a violation of an AAQS. Because the NAAQS and CAAQS are concentration-based standards presented hourly, daily mass emissions are a more suitable estimate to determine whether a project would contribute to a violation of an AAQS. These screening criteria are 100 pounds per day for any pollutant. The following table (Table 3.3-12) provides the proposed Project's unmitigated operational emissions in pounds per day in comparison to this screening thresholds. As shown in Table 3.3-12, the proposed Project's operational emissions would not exceed any of the daily mass screening criteria thresholds.

TABLE 3.3-12: OPERATIONAL PROJECT GENERATED EMISSIONS (POUNDS PER DAY)

POLLUTANT	CO	NOX	ROG	SOX	PM_{10}	$PM_{2.5}$
THRESHOLD (POUNDS/DAY)	100	100	100	100	100	100
EMISSIONS	13.7	9.23	6.46	0.08	4.34	1.24
EXCEEDS THRESHOLD?	**N**	**N**	**N**	**N**	**N**	**N**

SOURCE: CALEEMOD (V.2022.1)

Since the operational emissions shown in Table 3.3-12 would not exceed any of the SJVAPCD's operational significance thresholds this impact would be less than significant.

REGULATORY COMPLIANCE

SJVAPCD Rule 9510

In accordance with SJVAPCD Rule 9510, an Air Impact Assessment (AIA) would be prepared for the Project based on the applicability and exemption criteria of the rule.[19] The rule includes general mitigation requirements for construction and/or operational emissions. Per the general mitigation requirements of Rule 9510, the Project would reduce the project's operational baseline NOx emissions 33.3% over a period of ten years as quantified in the approved AIA. The project would pay any off-site fees in full by the invoice due date or prior to generating the emissions associated with the Project or any phase thereof, whichever occurs first.

Proposed Project operational emissions are shown in Table 3.3-13 based on implementation of SJVAPCD Rule 9510. While compliance with SJVAPCD Rule 9510 is regulatorily required, the rule itself is an indirect source rule designed to achieve emission reductions from development projects. Thus, it is included here to represent the SJVAPCD regulatory requirement to reduce the operational emissions.[20]

TABLE 3.3-13: OPERATIONAL PROJECT GENERATED EMISSIONS (TONS PER YEAR) – WITH SJVAPCD RULE 9510

POLLUTANT	CO	NOX	ROG	SOX	PM_{10}	$PM_{2.5}$
THRESHOLD	100	10	10	27	15	15
EMISSIONS	2.51	1.12	1.18	0.02	0.79	0.23
EXCEEDS THRESHOLD?	**N**	**N**	**N**	**N**	**N**	**N**

SOURCE: CALEEMOD (V.2022.1)

Rule 8021

Separately, prior to the issuance of a Grading Permit for each phase of the Project, the Project Proponent shall prepare and submit a Dust Control Plan that meets all of the applicable requirements of APCD Rule 8021, Section 6.3. Additionally, the Project would be required to implement dust control measures that include application of water or chemical dust suppressants to unpaved roads and graded areas, covering or stabilization of transported bulk materials,

[19] Available at: https://www.valleyair.org/rules/currntrules/r9510-a.pdf. Accessed: September 2022.

[20] The NOx emissions were adjusted to reflect the 33.3% reduction required, per compliance with Air District Rule 9510.

prevention of carryout or trackout of soil materials to public roads, limiting the area subject to soil disturbance, construction of wind barriers, access restrictions to inactive sites, as required by the applicable rules. The Project would also be required to, during all construction activities, implement the dust control practices identified in Tables 6-2 and 6-3 of the GAMAQI (2002).

PROJECT EFFECTS ON PUBLIC HEALTH

Criteria pollutants generated by the Project are associated with some form of health risk (e.g., asthma). Criteria pollutants can be classified as either regional or localized pollutants. Regional pollutants can be transported over long distances and affect ambient air quality far from the emissions source. Localized pollutants affect ambient air quality near the emissions source. Ozone is considered a regional criteria pollutant, whereas CO, NO_2, SO_2, and lead (Pb) are localized pollutants. PM can be both a local and a regional pollutant, depending on its composition. The SJVAPCD establishes thresholds at levels allow the SJVAPCD to come into compliance with the CAAQS and NAAQS. The CAAQS and NAAQS are set at levels protective of human health, and emissions below the SJVAPCD thresholds are deemed to not have a significant impact on human health.

Ozone

O_3 is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of volatile organic compounds (VOC) (also known as ROG) and oxides of nitrogen (NO_x) in the presence of sunlight. The reactivity of O_3 causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O_3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O_3 for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Studies show associations between short-term ozone exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to ozone may increase the risk of respiratory-related deaths (U.S. Environmental Protection Agency 2019a). The concentration of ozone at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 parts per billion of ozone and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggest that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum ozone concentration reaches 80 parts per billion (U.S. Environmental Protection Agency 2019b).

The Project would generate emissions of ROG and NOx during Project operational activities, as shown in Table 3.3-11 through Table 3.3-13. Increases in ROG and NOx could affect people with impaired respiratory systems, but also healthy adults and children. However, the increases of these

pollutants generated by the proposed Project are under the applicable thresholds, which are set to be protective of human health, accounting for cumulative emissions in the air district. The increases in ROG and NOx generated by the proposed Project when combined with the existing ROG and NOx emitted regionally, would have a less than significant health impact.

Particulate Matter

Based on studies of human populations exposed to high concentrations of particles (sometimes in the presence of SO_2) and laboratory studies of animals and humans, PM can cause major effects of concern for human health. These include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense systems against foreign materials, damage to lung tissue, carcinogenesis and premature death. Small particulate pollution has health impacts even at very low concentrations – indeed no threshold has been identified below which no damage to health is observed. The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly and children.

Numerous studies have linked PM exposure to premature death in people with preexisting heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms. Studies show that every 1 microgram per cubic meter reduction in $PM_{2.5}$ results in a one percent reduction in mortality rate for individuals over 30 years old (Bay Area Air Quality Management District, 2017). Long-term exposures, such as those experienced by people living for many years in areas with high particle levels, have been associated with problems such as reduced lung function and the development of chronic bronchitis – and even premature death. Additionally, depending on its composition, both PM_{10} and $PM_{2.5}$ can also affect water quality and acidity, deplete soil nutrients, damage sensitive forests and crops, affect ecosystem diversity, and contribute to acid rain (U.S. Environmental Protection Agency 2019c).

The Project would generate emissions of PM during Project operational activities, as shown in Table 3.3-11 through Table 3.3-13. Although the exact effects of such emissions on local health are not known, it is likely that the increases in PM generated by the proposed Project would be minimal, even for people with impaired respiratory systems, located in the immediate vicinity of the Project site. The increases of these pollutants generated by the proposed Project would not on their own generate an increase in the number of days exceeding the NAAQS or CAAQS standards. In addition, because PM generated by the proposed Project is less than the air district's threshold, such emissions when combined with the existing PM emitted regionally would have minimal health effect on people located in the immediate vicinity of the Project site.

UFPs are a subset of PM and represent a health concern. Such particles have been shown to have the potential for even greater health effects than PM_{10} or $PM_{2.5}$, due to their even smaller particle sizes. However, there are no adopted rules or regulations by the U.S. EPA or California air districts regarding UFPs. Moreover, attainment status related to UFPs is not monitored by the U.S. EPA or California air districts, and the SJVAPCD does not provide any guidance for assessment, thresholds, or mitigation associated with UFPs. Additionally, air districts are not required to monitor UFPs. Nevertheless, funding for harm reduction and monitoring of UFPs is occurring throughout California.

For example, the Bay Area Air Quality Management District (BAAQMD), a neighboring air district, established in 2011 a comprehensive program to study UFPs. As part of this program, the BAAQMD began making measurements at four air monitoring stations, with additional monitoring stations expected to be online soon. At each station, the number of particles in a specified volume of air is counted every second. In addition to the number counts, sampling began in 2015 at two stations to gather data on UFP composition. Collected samples are analyzed for nineteen metals. Data obtained from these measurements is used to identify major UFP sources in the San Francisco Bay Area, and to evaluate models and refine estimates of UFP's public health impact.[21] Separately, the SJVAPCD provides grant funding for off-road engine projects through their grants and incentives programs, which reduce UFPs[22]; the U.S. EPA Pacific Southwest region has provided funding for both the South Coast Air Quality Management District and the San Joaquin Valley Air Pollution Control District to help spur early-stage, innovative technologies that need further testing and demonstration prior to massive deployment and commercialization of California Clean Air Initiative (CATI) projects.[23] Examples of such projects include Hybrid Natural Gas-Electric and Fully Electric Class 8 Trucks, Zero Emission Heavy-Duty Electric Trucks, Zero- and Near-Zero Emission School Buses, Electric Delivery Trucks, and School Bus Air Filtration. Other, numerous efforts are underway throughout the state to reduce PM emissions, which also tend to reduce emissions of UFPs (since UFPs are a subset of PM).

Different sources of PM generate differing levels of UFPs. For example, almost all the PM emitted by natural gas combustion is in the $PM_{0.1}$ size fraction, whereas this is only true for less than half of the PM emitted by gasoline and diesel fuel combustion.[24] Therefore, estimating $PM_{0.1}$ can be difficult, given that it is not incorporated into the modeling software recommended by the CARB and the California air districts (i.e. CalEEMod). Nevertheless, a quantitative estimate of the Project's $PM_{0.1}$ is provided under Impact 3.3-3, based on assumptions provided in available literature.

Discussion

It is well documented from scientific studies that criteria pollutants can have adverse health effects. The federal and state governments have established the NAAQS or CAAQS as an attempt to regionally, and cumulatively, assess and control the health effects that criteria pollutants have within Air Basins. It is anticipated that public health will continue to be affected by the emission of criteria pollutants, especially by those with impaired respiratory systems in the City of Tracy and the surrounding region so long as the region does not attain the CAAQS or NAAQS. However, the Project's emissions are below the SJVAPCD's thresholds of significance, where were established to enable the Air Basin to achieve attainment for the NAAQS and CAAQS standards. As such, the Project emissions would not be a cumulatively considerable contribution.

[21] See: https://www.baaqmd.gov/about-air-quality/air-quality-measurement/special-air-monitoring-projects/special-reports/ultrafine-particulate-matter?sc_lang=en&switch_lang=true

[22] See: https://ww2.valleyair.org/grants/

[23] See: https://www.epa.gov/cati/california-clean-air-technology-initiative-cati-projects

[24] Venecek, M. A., Yu, X., and Kleeman, M. J.: Predicted ultrafine particulate matter source contribution across the continental United States during summertime air pollution events, Atmos. Chem. Phys., 19, 9399–9412, https://doi.org/10.5194/acp-19-9399-2019, 2019.

CONCLUSION

Criteria pollutant emissions generated by the proposed Project during operation would not exceed applicable thresholds of significance for Project operation or construction. Therefore, this impact would be ***less than significant***.

Impact 3.3-3: The proposed Project would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant)

Sensitive receptors are those individuals within the population that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptors include children, the elderly, and those with pre-existing serious health problems affected by air quality, and sensitive receptor locations include schools, parks and playgrounds, day care center, nursing homes, hospitals, and residences. The closest sensitive receptors are the residences located approximately 0.50 miles (2,635 feet) to the south of the Project site.

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the U.S. EPA regulate 188 air toxics, also known as hazardous air pollutants. The U.S. EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007) and identified a group of 93 compounds emitted from mobile sources. In addition, the U.S. EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment. These are acrolein, benzene, 1,3-butidiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter.

The 2007 U.S. EPA rule requires controls that will dramatically decrease Mobile Source Air Toxics (MSAT) emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (VMT) increases by 145 percent, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050. California maintains stricter standards for clean fuels and emissions compared to the national standards, therefore it is expected that MSAT trends in California will decrease consistent with or more than the U.S. EPA's national projections.

CONSTRUCTION-RELATED DIESEL PARTICULATE MATTER

Project construction would generate diesel particulate matter emissions from the use of off-road diesel equipment required. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to toxic air contaminant emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

The use of diesel-powered construction equipment would be temporary and episodic. The duration of exposure would be short and exhaust from construction equipment would dissipate rapidly. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. The closest sensitive receptors to the Project site are located as follows:

- A residence is located approximately 0.70 miles (3,696 feet) to the east of the Project site;
- A cluster of residences is located approximately 0.50 miles (2,635 feet) to the south of the Project site; and
- Additional scattered residences are located approximately 0.64 miles (3,400) feet to the southwest of the Project site.

The California Office of Environmental Health Hazard Assessment has not identified short-term health effects from diesel particulate matter. Construction is temporary and would be transient throughout the site (i.e., move from location to location) and would not generate emissions in a fixed location for extended periods of time. Construction activities would be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than five minutes to further reduce nearby sensitive receptors' exposure to temporary and variable diesel particulate matter emissions. For these reasons, diesel particulate matter generated by Project construction activities, in and of itself, would not expose sensitive receptors to substantial amounts of air toxins. Moreover, as shown in Table 3.3-9, the proposed project's construction-related criteria pollutant emissions would not exceed the applicable criteria pollutant thresholds from PM (including both $PM1_0$ and $PM_{2.5}$). Lastly, as provided in the Toxic Air Contaminants discussion below, construction-related DPM was analyzed along with operational-related DPM with the SJVAPCD's screening calculator, and overall risks associated with TACs were found to well below the SJVAPCD threshold of 10 that would require development of air toxics Health Risk Assessment (HRA) that includes air dispersion modeling (see the discussion below for further detail). Therefore, impacts to sensitive receptors during construction would be negligible and this is a ***less than significant*** impact.

TOXIC AIR CONTAMINANTS

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. Those who are sensitive to air pollution include children, the elderly, and persons with preexisting respiratory or

cardiovascular illness. The SJVAPCD considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools. There are no traditional sensitive receptors such as residences, convalescent facilities, or schools that are proposed as part of the proposed Project.

The proposed Project has the potential to impact nearby sensitive receptors during the proposed Project's operational phase, due to the Project's generation of trips by heavy-duty diesel trucks, which are an emitter of diesel particulate matter (DPM). In particular, DPM is emitted from on-site heavy-duty truck vehicle circulation and idling, and off-site mobile travel. Combined, these sources of DPM have the potential to generate substantial TACs on nearby sensitive receptors, including those located nearest to the Project site. The SJVAPCD has established a screening calculator entitled the "Prioritization Calculator". An estimate of DPM emissions generated by the heavy-duty trucks and delivery vans associated with the proposed project was calculated for on-site mobile and idling emissions, and off-site mobile emissions 0.25 miles from the Project site, in accordance with the California Office of Environmental Health Hazard Assessment (OEHHA) guidance, as recommended by the SJVAPCD. The estimate of DPM emissions were based on the data provided in the Traffic Analysis for the proposed project, and with diesel particulate matter mobile emission rates from CARB's EMFAC2021 database (for year 2022, San Joaquin County; emission rates for DPM; 10 MPH for on-site truck travel and 55 MPH for off-site truck travel), and from standard heavy-duty truck idling emission rates from CARB.

The results of the screening analysis show that the cancer and non-cancer risks associated with the proposed project are below the SJVAPCD screening thresholds contained within their Prioritization Calculator. Specifically, the Prioritization Calculator estimates that the prioritization score associated with total cancer risk from proposed project operational and construction-related DPM (combined) would be approximately 0.122, well below the SJVAPCD threshold of 10 that would require development of air toxics Health Risk Assessment (HRA) that includes air dispersion modeling.[25]Additionally, non-cancer (i.e. chronic and acute risks) associated with project DPM would also be well below the applicable thresholds for the Maximally Exposed Individual (i.e. greater than or equal to the Hazard Index level of 1). Therefore, the complex air dispersion modeling using software such as AERMOD is not required. See Appendix B of this Recirculated Draft EIR for further detail.

No residual TAC emissions and corresponding cancer risk are anticipated after Project construction. The proposed Project is not anticipated to generate long-term, operational sources of TAC emissions because the proposed Project would only include a warehouse. The Project would not include heavy industrial uses or other land uses typically associated with stationary sources of TACs. As such, the Project would not result in substantial TAC emissions that may affect nearby receptors, nor would the Project be exposed to nearby sources of TACs. Impacts would be less than significant.

[25] It should be noted that the distance between the project site and the nearest sensitive receptors (approximately 2,635 feet, or 803 meters) is the primary reason the proposed project's prioritization score is so low. See Appendix B for further detail.

Furthermore, it should be noted that the mobile vehicles generated by the Project during operation would generate UFPs through vehicle emissions, braking, and tire wear. Like PM in general (though generating even higher risk per unit than larger particle sizes) UFPs are notable for their potential to generate chronic risks associated with cardiovascular disease, potential long-term loss of long-function, and cancer. According to a recent study prepared for the European Geosciences Union, UFPs vary widely as a proportion of PM overall, depending on location; specifically, the $PM_{0.1}$ to $PM_{2.5}$ ratio analyzed in approximately 39 cities in the United States varied from approximately 1% to 16%.[26] These factors vary so widely because the sources of $PM_{0.1}$ vary substantially from city to city. For example, cities that are located close to substantial sources of natural gas combustion have higher $PM_{0.1}$ to $PM_{2.5}$ ratios, since almost all the PM emitted by natural gas combustion is in the $PM_{0.1}$ size fraction, whereas this is only true for less than half of the PM emitted by gasoline and diesel fuel combustion. Taken together, these facts support the potential importance of natural gas combustion for ambient $PM_{0.1}$ concentrations. The city analyzed in the study with the greatest similarity to the City of Tracy (i.e. where the Project is located) was the City of Bakersfield, given its similarity in location within the Central Valley region. The ratio of $PM_{0.1}$ to $PM_{2.5}$ for Bakersfield was found to be approximately 11%. Absent data specific to the City of Tracy, this data is presumed to be the best available data and reasonable for use in estimating $PM_{0.1}$ levels in this case. Therefore, given the operational Project's estimated 0.07 tons per year of $PM_{2.5}$ (see Table 3.3-13), the total operational $PM_{0.1}$ generated by the Project is estimated to be approximately 0.01 tons per year (approximately 15 lbs/year). This is equivalent to 0.04 lbs/day of $PM_{0.1}$. While there is not specifically a quantitative threshold of significance established by the SJVAPCD for $PM_{0.1}$, the quantity estimated is considered small relative to thresholds established for other particulate matter. From an incremental health perspective, this level of UFPs generated by the Project would not be substantial. As such, the Project would not result in substantial UFP emissions that may affect nearby receptors.

Separately, the CARB's Statewide Truck and Bus Regulation requires truck fleets operating in California to meet the 2010 standard of 0.2 g-NOx/bhp-hr, as of 2023. Moreover, electric heavy-duty trucks are likely to increase in market share over time, which would reduce localized DPM. In the near term, the market does offer several short haul electric vehicles that can be used for project operations. There is, however, an absence of zero and near-zero technology for every truck type used in industrial operations. It is noted that there are a variety of companies (i.e., Tesla) that have been working on the design and development of a zero and near-zero technology truck for long haul operations, however, there are no long-haul heavy-duty electric vehicles available in the market today. Nevertheless, over time, the adoption of heavy-duty electric vehicles into the short- and long-haul vehicle market would further reduce DPM, as well as PM_{10}, $PM_{2.5}$, and $PM_{0.1}$ that would be associated with the Project, even further below the previously identified estimates.

Moreover, the California Air Resources Board (CARB) published the *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB, 2005) to provide information to local planners and decision-makers about land use compatibility issues associated with emissions from industrial,

[26] Venecek, M. A., Yu, X., and Kleeman, M. J.: Predicted ultrafine particulate matter source contribution across the continental United States during summertime air pollution events, Atmos. Chem. Phys., 19, 9399–9412, https://doi.org/10.5194/acp-19-9399-2019, 2019.

commercial, and mobile sources of air pollution. The CARB Handbook indicates that mobile sources continue to be the largest overall contributors to the State's air pollution problems, representing the greatest air pollution health risk to most Californians. The most serious pollutants on a statewide basis include diesel exhaust particulate matter (diesel PM), benzene, and 1,3-butadiene, all of which are emitted by motor vehicles. These mobile source air toxics are largely associated with freeways and high traffic roads. Non-mobile source air toxics are largely associated with industrial and commercial uses. Table 3.3-14 provides the California Air Resources Board minimum separation recommendations on siting sensitive land uses.

There are no traditional sensitive receptors such as residences, hospitals, or schools that are proposed as part of the Project. Moreover, the nearest sensitive receptors are those that are located approximately 0.50 miles (2,635 feet) to the south of the Project site.

TABLE 3.3-14: CARB MINIMUM SEPARATION RECOMMENDATIONS ON SITING SENSITIVE LAND USES

SOURCE CATEGORY	*ADVISORY RECOMMENDATIONS*
Freeways and High-Traffic Roads	• Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.[1]
Distribution Centers	• Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). • Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	• Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. • Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	• Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the CARB on the status of pending analyses of health risks.
Refineries	• Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	• Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloro-ethylene	• Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. • Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	• Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

SOURCES: AIR QUALITY AND LAND USE HANDBOOK: A COMMUNITY HEALTH PERSPECTIVE" (CARB 2005)

Overall, as described, the proposed project would not exceed the maximum risk values established by the SJVAPCD for TACs, as described above. All receptor types would be below the applicable SJVAPCD significance thresholds. In addition, criteria pollutant emission would be below the applicable SJVAPCD significance thresholds for criteria pollutants, as described under Impacts a) and

b). Impacts to sensitive receptors from substantial pollutant concentrations from TACs would be ***less than significant***.

CO HOTSPOTS

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds.

Although the SJVAPCD has not established a specific numerical screening threshold for CO impacts, the Bay Area Air Quality Management District (BAAQMD) has established that, under existing and future vehicle emissions rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix (i.e., bridges and tunnels)—in order to generate a substantial CO impact. As described in Section 3.10: Transportation and Circulation of this Draft EIR, and as provided within the Traffic Analysis prepared by Kimley Horn for the proposed Project, the proposed Project would generate a maximum of approximately 37 AM peak hour trips and 72 PM peak hour trips, which would be significantly less than the volumes cited above. Thus, the proposed project would not have the potential to substantially increase CO hotspots at intersections in the vicinity of the Project site, and impacts related to CO hotspots would be ***less than significant***.

VALLEY FEVER

Valley Fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, Coccidioides immitis (C. immitis). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities.

The San Joaquin Valley is considered an endemic area for Valley Fever. By geographic region, hospitalizations for Valley Fever in the San Joaquin Valley increased from 230 (6.9 per 100,000 population) in 2000 to 701 (17.7 per 100,000 population) in 2007. Within the region, Kern County reported the highest hospitalization rates, increasing from 121 (18.2 per 100,000 population) in 2000 to 285 (34.9 per 100,000 population) in 2007, and peaking in 2005 at 353 hospitalizations (45.8 per 100,000 population). The Centers for Disease Control and Prevention indicates that 752 of the 8,657 persons (8.7 percent) hospitalized in California between 2000 and 2007 for Valley Fever died.[27]

[27] The Centers for Disease Control and Prevent (CDC). 2009. Increase in Coccidioidomycosis – California, 2000-2007. February 13. Website: https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5805a1.htm. Accessed June 8, 2022.

The distribution of C. immitis within endemic areas is not uniform and growth sites are commonly small (a few tens of meters) and widely scattered. Known sites appear to have some ecological factors in common suggesting that certain physical, chemical, and biological conditions are more favorable for C. immitis growth. Avoidance, when feasible, of sites favorable for the occurrence of C. immitis is a prudent risk management strategy. Listed below are ecologic factors and sites favorable for the occurrence of C. immitis:[28]

1. Rodent burrows (often a favorable site for C. immitis, perhaps because temperatures are more moderate and humidity higher than on the ground surface).
2. Prehistoric Indian campsites near fire pits.
3. Areas with sparse vegetation and alkaline soils.
4. Areas with high salinity soils.
5. Areas adjacent to arroyos (where residual moisture may be available).
6. Packrat middens.
7. Upper 30 centimeters of the soil horizon, especially in virgin undisturbed soils.
8. Sandy well aerated soil with relatively high-water holding capacities.

Sites within endemic areas less favorable for the occurrence of C. immitis include:

1. Cultivated fields
2. Heavily vegetated areas (e.g., grassy lawns)
3. Higher elevations (above 7,000 feet)
4. Areas where commercial fertilizers (e.g., ammonium sulfate) have been applied
5. Areas that are continually wet
6. Paved (asphalt or concrete) or oiled areas
7. Soils containing abundant microorganisms
8. Heavily urbanized areas where there is little undisturbed virgin soil

The Project site is relatively undeveloped and is surround by undeveloped, agricultural, industrial, and residential land uses which are semi-rural to urban in character. Because the majority of the Project site and the immediately surrounding vicinity consists of urbanized development or cultivated fields, the Project site is an area that would lead to a low probability of having C. immitis growth sites and exposure from disturbed soil.

Construction activities would generate fugitive dust that could contain C. immitis spores. The proposed Project would be required to minimize the generation of fugitive dust during construction activities by complying with the SJVAPCD's District Rule 8021. District Rule 8021 requires limitation of fugitive dust emissions from construction, demolition, excavation, extraction, and other earthmoving activities, by implementing control measures such as pre-watering the Project site, phasing construction work to reduce the amount of disturbed surface at any one time, and applying water or other suppressants to unpaved haul/access roads and unpaved vehicle/equipment traffic

[28] United States Geological Survey (USGS). 2000. Operational Guidelines (Version 1.0) for Geological Fieldwork in Areas Endemic for Coccidioidomycosis (Valley Fever). Website: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.486.1526&rep=rep1&type=pdf. Accessed June 8, 2022.

areas. Therefore, this regulation would ensure that Valley Fever impacts during construction are less than significant.

During operations, dust emissions are anticipated to be negligible, because the Project site would be occupied by buildings, pavement, and landscaped areas after construction is complete. Therefore, Project operations would not occur on undeveloped sites and dust emissions typically associated with activity on unpaved surfaces would be negligible. This condition would preclude the possibility of the proposed Project from generating significant fugitive dust that may contribute to Valley Fever exposure. Impacts related to Valley Fever would be ***less than significant***.

ASBESTOS AND LEAD-BASED PAINT EXPOSURE

According to a map of areas where naturally occurring asbestos in California are likely to occur, there are no such areas in the vicinity of the Project site.[29] Therefore, development of the proposed Project is not anticipated to expose receptors to naturally occurring asbestos. It is noted that the potential to release asbestos containing materials and lead-based paint that may occur in the on-site structures are discussed in Section 3.8, Hazards and Hazardous Materials, of this Draft EIR. As discussed, impacts related to these materials would be less-than-significant with mitigation in Section 3.8. Overall, this impact, relating to asbestos and lead-based paint exposure would be ***less than significant***.

CONCLUSION

Implementation of the proposed project would not result in a significant increased exposure of sensitive receptors to localized concentrations of TACs, generate substantial exposure to Valley Fever, asbestos or lead-based paint, or create a CO hotspot. This project would have a ***less than significant*** impact relative to this topic.

Impact 3.3-4: The proposed Project would not cause exposure to other emissions (such as those leading to odors) adversely affecting a substantial number of people. (Less than Significant)

The following text addresses odors. Other emissions (including criteria pollutants and TACs) are addressed in Impacts 3.3-1 through 3.3-3.

While offensive odors rarely cause any physical harm, they can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the SJVAPCD. The general nuisance rule (Health and Safety Code §41700) is the basis for the threshold.

Examples of facilities that are known producers of odors include: Wastewater Treatment Facilities, Chemical Manufacturing, Sanitary Landfill, Fiberglass Manufacturing, Transfer Station,

[29] United States Geological Survey (USGS). 2011. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California. Website: https://pubs.usgs.gov/of/2011/1188/. Accessed June 8, 2022.

Painting/Coating Operations (e.g. auto body shops), Composting Facility, Food Processing Facility, Petroleum Refinery, Feed Lot/Dairy, Asphalt Batch Plant, and Rendering Plant.

If a project proposes to locate receptors and known odor sources in proximity to each other, further analysis may be warranted. However, if a project would not locate receptors and known odor sources in proximity to each other, then further analysis is not warranted. The proposed Project does not include new industrial uses that are not already present in the vicinity of the Project site. Moreover, since the proposed Project would not be a source of offensive odors, sensitive receptors located near to the Project site would not be exposed by the Project to significant odors that would affect a substantial number of people. Air district Rule 402 prohibits any mobile or stationary source generating an objectionable odor, with the exception of odors emanating from certain agricultural operations. The California Health and Safety Code §41700 and Air District Rule 402 prohibit emissions of air contaminants from any source that cause nuisance or annoyance to a considerable number of people or that present a threat to public health or cause property damage. Compliance with these rules would preclude land uses proposed under the proposed Project from emitting objectionable odors.

CONCLUSION

The proposed Project does not propose uses that would create new odors that would adversely affect a substantial number of people. The proposed Project also does not introduce any new sensitive receptors. Therefore, operation of the proposed Project would not result in significant objectionable odors. Impacts associated with exposure to odors would be ***less than significant.***

This section discusses regional greenhouse gas (GHG) emissions, climate change, and energy conservation impacts that could result from Project implementation. The analysis contained in this section is intended to be at a Project level, and covers impacts associated with the conversion of the entire site to urban uses. This section provides a background discussion of greenhouse gases and climate change linkages and effects of global climate change. This section is organized with an existing setting, regulatory setting, approach/methodology, and impact analysis. The analysis and discussion of the GHG, climate change, and energy conservation impacts in this section focuses on the proposed Project's consistency with local, regional, and statewide climate change planning efforts and discusses the context of these planning efforts as they relate to the proposed Project. Disclosure and discussion of the Project's estimated energy usage and greenhouse gas emissions are provided.

Two comments were received during the public review period or scoping meeting for the Notice of Preparation regarding this topic: one from the State of California Department of Justice (December 20, 2023), and the other from the San Joaquin Valley Air Pollution Control District (January 16, 2024). The commenter from the California Department of Justice provided a guidance document *Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act*, for the City's consideration as it evaluates the potential environmental effects of the Project. The commentor from the San Joaquin Air Pollution Control District provided recommended mitigation measures and identified rules, regulations, and best practices for environmental analysis of the Project's air quality and greenhouse gas emissions. These comments are addressed within this section. The full comments are included in Appendix A of the original Draft EIR (August 2024).

3.7.1 ENVIRONMENTAL SETTING

GREENHOUSE GASES AND CLIMATE CHANGE LINKAGES

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 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.

Naturally occurring GHGs include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but they are, for the most part, solely a product of industrial activities. Although the direct GHGs CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2019, concentrations of these three GHGs have increased globally by 47, 156, and 23 percent, respectively (IPCC, 2023).

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), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial and electricity generation sectors (California Energy Commission, 2023).

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced 369 million gross metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2022 (California Air Resources Board, 2023).

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2022, accounting for 38% of total GHG emissions in the State. This category was followed by the industrial sector (23%), the electricity generation sector (including both in-state and out of-state sources) (16%), the agriculture and forestry sector (9%), the residential energy consumption sector (8%), and the commercial energy consumption sector (6%) (California Air Resources Board, 2023).

EFFECTS OF GLOBAL CLIMATE CHANGE

The effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems and disruption to coastal wetlands and habitat.

If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the State. The snowpack portion of the supply could potentially decline by 50% to 75% by the end of the 21st century (National Resources Defense Council, 2014). This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the State; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Sea level has risen approximately seven inches during the last century and it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels (California Environmental Protection Agency, 2010). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands. As the existing climate throughout California changes over time, mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, could also result. Under the emissions scenarios of the Climate Scenarios report (California Environmental Protection Agency, 2010), the impacts of global warming in California are anticipated to include, but are not limited to, the following.

Public Health

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation are projected to increase from 25% to 35% under the lower warming range and to 75% to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major State fresh water supply. Global warming is also projected to seriously affect agricultural areas, with California farmers projected to lose as much as 25% of the water supply they need; decrease the potential for hydropower production within the State (although the effects on hydropower are uncertain); and seriously harm winter tourism. Under the lower warming range, the snow dependent winter recreational season at lower elevations could be reduced by as much as one month. If temperatures reach the higher warming

range and precipitation declines, there might be many years with insufficient snow for skiing, snowboarding, and other snow dependent recreational activities.

If GHG emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snow pack by as much as 70% to 90%. Under the lower warming scenario, snowpack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snowpack will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack would pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

Agriculture

Increased GHG emissions are expected to cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. Although higher carbon dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts, and milk.

Crop growth and development will be affected, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

In addition, continued global warming will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different weed species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Global warming is expected to alter the distribution and character of natural vegetation thereby resulting in a possible increased risk of large wildfires. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout

the State. For example, if precipitation increases as temperatures rise, wildfires in southern California are expected to increase by approximately 30% toward the end of the century. In contrast, precipitation decreases could increase wildfires in northern California by up to 90%.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the State. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60% to 80% by the end of the century as a result of increasing temperatures. The productivity of the State's forests is also expected to decrease as a result of global warming.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the State's coastal regions. Under the higher warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

ENERGY CONSUMPTION

Energy in California is consumed from a wide variety of sources. Fossil fuels (including gasoline and diesel fuel, natural gas, and energy used to generate electricity) are the most widely used form of energy in the State. However, renewable sources of energy (such as solar and wind) are growing in proportion to California's overall energy mix. A large driver of renewable sources of energy in California is the State's current Renewable Portfolio Standard (RPS), which requires the State to derive at least 60 percent of electricity generated by 2030, and to achieve zero-carbon emissions by 2045 (as passed in September 2018, under SB 100). The 2021 SB 100 Joint Agency Report was published in 2021, which found that the long-term goals contained in SB 100 are technically achievable through multiple pathways, although achieving 100 clean electricity would increase the total annual electricity system cost by 6% relative to the cost under the state's Renewables Portfolio Standard requirement of having at least 60 percent clean electricity by the end of 2030. These estimates will change over time as markets change, new technologies are commercialized, and additional factors such as grid reliability are included in future analyses.

Overall, in 2019, California's per capita energy usage was ranked second-lowest in the nation (U.S. EIA, 2020b). California's per capita rate of energy usage has remained relatively constant since the 1970's. Many State regulations since the 1970s, including new building energy efficiency standards, vehicle fleet efficiency measures, as well as growing public awareness, have helped to keep per capita energy usage in the State in check.

The consumption of non-renewable energy (i.e. fossil fuels) associated with the operation of passenger, public transit, and commercial vehicles results in GHG emissions that contribute to global climate change. Alternative fuels such as natural gas, ethanol, and electricity (unless derived from solar, wind, nuclear, or other energy sources that do not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

Electricity Consumption

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. In 2016, more than one-fourth of the electricity supply comes from facilities outside of the State. Much of the power delivered to California from states in the Pacific Northwest was generated by wind. States in the Southwest delivered power generated at coal-fired power plants, at natural gas-fired power plants, and from nuclear generating stations (U.S. EIA, 2023b). In 2022, approximately 42 percent of California's utility-scale net electricity generation was fueled by natural gas. In addition, about 42 percent of the State's utility-scale net electricity generation came from non-hydroelectric renewable technologies, such as solar, wind, geothermal, and biomass. Another 8 percent of the State's utility-scale net electricity generation came from hydroelectric generation, and nuclear energy powered an additional 88 percent. The amount of electricity generated from coal is negligible (U.S. EIA, 2023a). The percentage of renewable resources as a proportion of California's overall energy portfolio is increasing over time, as directed by the State's Renewable Portfolio Standard (RPS).

According to the California Energy Commission (CEC), total statewide electricity consumption increased from 166,979 gigawatt-hours (GWh) in 1980 to 228,038 GWh in 1990, which is an estimated annual growth rate of 3.66 percent. The statewide electricity consumption in 1997 was 246,225 GWh, reflecting an annual growth rate of 1.14 percent between 1990 and 1997 (U.S. EIA, 2020b). Statewide consumption was 274,985 GWh in 2010, an annual growth rate of 0.9 percent between 1997 and 2010.

PG&E is a publicly traded utility company that, under contract with the California Public Utilities Commission (CPUC), generates, purchases, and distributes energy. PG&E's service area covers 70,000 square miles, roughly extending north to south from Eureka to Bakersfield and east to west from the Sierra Nevada to the Pacific Ocean. PG&E's electricity distribution system consists of 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines.

PG&E's, electricity is generated from a combination of traditional sources, such as coal-fired plants, nuclear power plants, and hydroelectric dams, as well as newer sources of energy, such as wind turbines and photovoltaic plants, or "solar farms." "The grid," or bulk electric grid, is a network of high-voltage transmission lines that link power plants to the PG&E system. The distribution system, comprising lower-voltage secondary lines, is at the street and neighborhood level. It consists of overhead or underground distribution lines, transformers, and individual service "drops" that connect to individual customers.

In addition to its base plan, PG&E has three plan options, known as Solar Choice options and Green Saver, which give customers the option of purchasing energy from solar resources. The first Solar Choice option provides up to 50 percent of a customer's energy from solar resources, while the other option provides up to 100 percent of a customer's energy from solar resources, and the Green Saver option provides up to 90 percent of a customer's energy from solar resources.

Table 3.7-1 outlines PG&E's power mix in 2021, compared to the power mix for the state. The table identifies the renewable and non-renewable energy sources for PG&E. It should be noted

that some GHG free sources are not considered renewable (e.g., nuclear is GHG free but not renewable).

TABLE 3.7-1. PG&E AND THE STATE OF CALIFORNIA POWER MIX IN 2021

ENERGY RESOURCES	*PG&E OPTION: BASE*	*PG&E OPTION: 50% SOLAR CHOICE*	*PG&E OPTION: 100% SOLAR*	*PG&E OPTION: GREEN SAVER*	*CALIFORNIA POWER MIX 2021*
Eligible Renewable	47.7%	70.9%	93.9%	89.9%	33.6%
Biomass and waste	4.2%	2.1%	0.0%	0.0%	2.3%
Geothermal	5.2%	2.6%	0.0%	0.0%	4.8%
Small hydroelectric	1.8%	0.9%	0.0%	0.0%	1.0%
Solar	25.7%	59.8%	93.9%	89.9%	14.2%
Wind	10.9%	5.5%	0.0%	0.0%	11.4%
Coal	0.0%	0.0%	0.0%	0.0%	3.0%
Large Hydroelectric	4.0%	2.0%	0.0%	0.0%	9.2%
Natural Gas	8.9%	7.4%	0.0%	0.0%	37.9%
Nuclear	39.3%	19.7%	0.0%	0.0%	9.3%
Other	0.0%	0.0%	0.0%	0.0%	0.2%
Unspecified	0.0%	0.0%	6.1%	10.1%	6.8%

NOTE: [A.] ELECTRICITY FROM TRANSACTIONS THAT ARE NOT TRACEABLE TO SPECIFIC GENERATION SOURCES ARE CLASSIFIED AS UNSPECIFIED SOURCES OF POWER.

SOURCE: PG&E. 2021. BUILDING A CLEANER, SAFER ENERGY FUTURE. AVAILABLE: HTTPS://WWW.PGE.COM/PGE_GLOBAL/COMMON/PDFS/YOUR-ACCOUNT/YOUR-BILL/UNDERSTAND-YOUR-BILL/BILL-INSERTS/2022/1022-POWER-CONTENT-LABEL.PDF. ACCESSED: AUGUST 16, 2023.

In 2021, electricity consumption in San Joaquin County was approximately 5,608 million kWh. Of that, residential consumption accounted for approximately 2,125.4 million kWh (California Energy Commission, 2023).

Oil

The primary energy source for the United States is oil, which is refined to produce fuels like gasoline, diesel, and jet fuel. Oil is a finite, nonrenewable energy source. World consumption of petroleum products has grown steadily in the last several decades. As of 2016, world consumption of oil had reached 96 million barrels per day. The United States, with approximately five percent of the world's population, accounts for approximately 19 percent of world oil consumption, or approximately 18.6 million barrels per day (U.S. EIA, 2023c). The transportation sector relies heavily on oil. In California, petroleum-based fuels currently provide approximately 96 percent of the State's transportation energy needs.

Natural Gas/Propane

The State produces approximately 12 percent of its natural gas, while obtaining 22 percent from Canada and 65 percent from the Rockies and the Southwest (California Energy Commission, 2012).

In 2006, California produced 325.6 billion cubic feet of natural gas (California Energy Commission, 2012).

PG&E provides natural gas for residential, industrial, and agency consumers within the San Joaquin County area. PG&E's natural gas (i.e., methane) delivery system includes 42,000 miles of natural gas distribution pipelines and 6,700 miles of transmission pipelines. PG&E's gas transmission system serves approximately 15 million energy customers in California. The system is operated under an inspection and monitoring program in real time on a 24-hour basis, with leak inspections, surveys, and patrols continuously taking place along the pipelines. Gas delivered by PG&E originates in gas fields in California, the Southwest, the Rocky Mountains, and Canada. Transmission pipelines send natural gas from the fields and storage facilities. The smaller distribution pipelines deliver gas to individual businesses or residences.

In 2021, natural gas consumption in San Joaquin County was approximately 186 million therms (California Energy Commission, 2023). Residential natural gas consumption accounted for approximately 90.18 million therms.

3.7.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: National Ambient Air Quality Standards (NAAQS) for criteria air pollutants, hazardous air pollutant standards, State attainment plans, NAAQS motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

In 2007, in the court case of *Massachusetts et al. vs. the USEPA et al*. (549 U.S. 497), the U.S. Supreme Court found that GHGs are air pollutants covered by the federal Clean Air Act (42 USC Sections 7401-7671q). The Supreme Court held that the Administrator of the United States Environmental Protection Agency must determine whether or not emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the Administrator is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite for implementing GHG emission standards for vehicles. In collaboration with the National Highway Traffic Safety Administration (NHTSA) and CARB, the USEPA developed emission standards for light-duty vehicles (2012-2025 model years), and heavy-duty vehicles (2014-2027 model years).

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Since 1990, the fuel economy standard for new passenger cars has been 27.5 mpg. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Corporate Average Fuel Economy (CAFE) program, which is administered by the EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

Federal Climate Change Policy

According to the U.S. EPA, "the United States government has established a comprehensive policy to address climate change" that includes slowing the growth of emissions; strengthening science, technology, and institutions; and enhancing international cooperation. To implement this policy, "the Federal government is using voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science." The U.S. EPA administers multiple programs that encourage voluntary GHG reductions, including "ENERGY STAR", "Climate Leaders", and Methane Voluntary Programs.

The following are actions taken at the federal level relating to GHG emissions.

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the U.S. EPA and the Department of Transportation's National Highway Safety Administration announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applies to passenger cars, light duty trucks, and medium duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. Together, these standards would cut CO_2 emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). The EPA and the National Highway Safety Administration issued final rules on a second phase joint rulemaking, establishing national standards for light duty vehicles for model years 2017 through 2025 in August 2012.[1] The new standards for model years 2017 through 2025 apply to passenger cars, light duty trucks, and medium duty passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO2 in model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

The U.S. EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, which became effective November 14, 2011. For combination tractors, the agencies adopted engine and vehicle standards that began in the 2014 model year and achieve up to a 20 percent reduction in CO2 emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies adopted separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles, and a 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Finally, for vocational vehicles, the engine and vehicle standards would achieve up to a 10 percent reduction in fuel consumption and CO_2 emissions from the 2014 to 2018 model years.

Mandatory Reporting of Greenhouse Gases. The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the U.S. EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the United States and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or

[1] United States Environmental Protection Agency (EPA). 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. Website: http://www.epa.gov/otaq/climate/documents/420f12051.pdf. Accessed January 21, 2021.

industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the U.S. EPA.

Cap and Trade. Cap and trade refers to a policy tool where emissions are limited to a certain amount and can be traded, or provides flexibility on how the emitter can comply. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap and trade.

The Western Climate Initiative partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15 percent below 2005 levels by 2020. The partners are California, British Columbia, Manitoba, Ontario, and Quebec. Currently only California and Quebec are participating in the cap-and-trade program.

STATE

The California Legislature has enacted a series of statutes in recent years addressing the need to reduce GHG emissions across the State. These statutes can be categorized into four broad categories: (i) statutes setting numerical statewide targets for GHG reductions, and authorizing CARB to enact regulations to achieve such targets; (ii) statutes setting separate targets for increasing the use of renewable energy for the generation of electricity throughout the State; (iii) statutes addressing the carbon intensity of vehicle fuels, which prompted the adoption of regulations by CARB; and (iv) statutes intended to facilitate land use planning consistent with statewide climate objectives. The discussion below will address each of these key sets of statutes, as well as CARB "Scoping Plans" intended to achieve GHG reductions under the first set of statutes and recent building code requirements intended to reduce energy consumption.

Statutes Setting Statewide GHG Reduction Targets

ASSEMBLY BILL 32 (GLOBAL WARMING SOLUTIONS ACT)

In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006 (Health & Safety Code Section 38500 et seq.), also known as Assembly Bill (AB) 32 (Stats. 2006, ch. 488). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction was accomplished through an enforceable statewide cap on GHG emissions that was phased in starting in 2012. To effectively implement the cap, AB 32 directed the California Air Resources Board (CARB) to develop and implement regulations to reduce statewide GHG emissions from stationary sources.

SENATE BILL 32

SB 32 (Stats. 2016, ch. 249) added Section 38566 to the Health and Safety Code. It provides that "[i]n adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by [Division 25.5 of the Health and Safety Code], [CARB] shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030."

In other words, SB 32 requires California, by 2030, to reduce its statewide GHG emissions so that they are 40 percent below those that occurred in 1990.

Statutes Setting Target for the Use of Renewable Energy for the Generation of Electricity

CALIFORNIA RENEWABLES PORTFOLIO STANDARD

Senate Bill X1-2 (Stats. 2011, 1st Ex. Sess., ch. 1) set more aggressive statutory targets for renewable electricity, culminating in the requirement that 33 percent of the State's electricity come from renewables by 2020. This legislation applies to all electricity retailers in the State, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities were required to meet renewable energy goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020. (See Pub. Utility Code, Section 399.11 et seq. [subsequently amended].) SB 350, discussed below, increases the Renewable Portfolio Standard to require 50 percent of electricity generated to be from renewables by 2030. (Pub. Utility Code, Section 399.11, subd (a); see also Section 399.30, subd. (c)(2).) In 2018, Senate Bill 100 (Stats. 2018, ch. 312) revised the above-described deadlines and targets so that the State will have to achieve a 50% renewable resources target by December 31, 2026 (instead of by 2030) and achieve a 60% target by December 31, 2030. The legislation also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all State agencies by December 31, 2045.

Statutes and CARB Regulations Addressing the Carbon Intensity of Petroleum-based Transportation Fuels

ASSEMBLY BILL 1493, PAVLEY CLEAN CARS STANDARDS

In 2002, the Legislature enacted Assembly Bill 1493 ("Pavley Bill") (Stats. 2002, ch. 200), which directed CARB to develop and adopt regulations that achieve the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks beginning with model year 2009. (See Health and Safety Code Section 43018.5.) In September 2004, pursuant to this directive, CARB approved regulations to reduce GHG emissions from new motor vehicles beginning with the 2009 model year. These regulations created what are commonly known as the "Pavley standards." In September 2009, CARB adopted amendments to the Pavley standards to reduce GHG emissions from new motor vehicles through the 2016 model year. These regulations created what are commonly known as the "Pavley II standards." (See California Code of Regulations, Title 13, Sections 1900, 1961, and 1961.1 et seq.)

In 2012, CARB adopted an Advanced Clean Cars (ACC) program aimed at reducing both smog-causing pollutants and GHG emissions for vehicles model years 2017-2025. This historic program, developed in coordination with the USEPA and NHTSA, combined the control of smog-causing (criteria) pollutants and GHG emissions into a single coordinated set of requirements for model years 2015 through 2025. The regulations focus on substantially increasing the number of plug-in

hybrid cars and zero-emission vehicles in the vehicle fleet and on making fuels such as electricity and hydrogen readily available for these vehicle technologies. The components of the ACC program are the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles in the 2018 through 2025 model years. (See California Code of Regulations, Title 13, Sections 1900, 1961, 1961.1, 1961.2, 1961.3, 1965, 1968.2, 1968.5, 1976, 1978, 2037, 2038, 2062, 2112, 2139, 2140, 2145, 2147, 2235, and 2317 et seq.)

It is expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 34 percent below 2016 levels by 2025, all while improving fuel efficiency and reducing motorists' costs.

Statute Intended to Facilitate Land Use Planning Consistent with Statewide Climate Objectives

CALIFORNIA SENATE BILL 375 (SUSTAINABLE COMMUNITIES STRATEGY)

This 2008 legislation built on AB 32 by setting forth a mechanism for coordinating land use and transportation on a regional level for the purpose of reducing GHGs. The focus is to reduce miles traveled by passenger vehicles and light trucks. CARB is required to set GHG reduction targets for each metropolitan region for 2020 and 2035.[2] Each of California's metropolitan planning organizations then prepares a sustainable communities strategy that demonstrates how the region will meet its GHG reduction target through integrated land use, housing, and transportation planning. Once adopted by the metropolitan planning organizations, the sustainable communities strategy is to be incorporated into that region's federally enforceable regional transportation plan. If a metropolitan planning organization is unable to meet the targets through the sustainable communities strategy, then an alternative planning strategy must be developed that demonstrates how targets could be achieved, even if meeting the targets is deemed to be infeasible.

Climate Change Scoping Plans

2017 SB 32 SCOPING PLAN

With the passage of SB 32, the Legislature also passed companion legislation AB 197, which provided additional direction for developing the scoping plan. In response, CARB adopted an updated Scoping Plan in December 2017. The document reflects the 2030 target of reducing statewide GHG emissions by 40 percent below 1990 levels codified by SB 32. The GHG reduction strategies in the plan that CARB will implement to meet the target include:

- SB 350 - achieve 50 percent Renewables Portfolio Standard (RPS) by 2030 and doubling of energy efficiency savings by 2030;

[2] The San Joaquin COG region was assigned reduction targets of 12% by 2020 and 16% by 2035.

- Low Carbon Fuel Standard - increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020);
- Mobile Source Strategy (Cleaner Technology and Fuels Scenario) - maintaining existing GHG standards for light- and heavy-duty vehicles, put 4.2 million zero-emission vehicles on the roads, and increase zero-emission buses, delivery and other trucks.
- Sustainable Freight Action Plan - improve freight system efficiency, maximize use of near-zero emission vehicles and equipment powered by renewable energy, and deploy over 100,000 zero-emission trucks and equipment by 2030;
- Short-Lived Climate Pollutant Reduction Strategy - reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030 and reduce emissions of black carbon 50 percent below 2013 levels by 2030;
- SB 375 Sustainable Communities Strategies - increased stringency of 2035 targets;
- Post-2020 Cap-and-Trade Program - declining caps, continued linkage with Québec, and linkage to Ontario, Canada;
- 20 percent reduction in GHG emissions from the refinery sector; and
- By 2018, develop an Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

2022 SCOPING PLAN UPDATE

The Draft 2022 Scoping Plan Update was released on May 10, 2022, but has yet to be adopted. The 2022 Scoping Plan Update assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan Update 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.

Building Code Requirements Intended to Reduce GHG Emissions

CALIFORNIA ENERGY CODE

The California Energy Code (California Code of Regulations, Title 24, Part 6), which is incorporated into the Building Energy Efficiency Standards, was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Although these standards were not originally intended to reduce GHG emissions, increased energy efficiency results in decreased GHG emissions because energy efficient buildings require less electricity and thus less consumption of fossil fuels, which emit GHGs. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The current 2019 Building Energy Efficiency Standards, commonly referred to as the "Title 24" standards, include changes from the previous standards that were adopted, to do the following:

- Provide California with an adequate, reasonably priced, and environmentally sound supply of energy.

- Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its GHG emissions to 1990 levels by 2020.
- Pursue California energy policy that energy efficiency is the resource of first choice for meeting California's energy needs.
- Act on the California Energy Commission's Integrated Energy Policy Report, which finds that standards are the most cost-effective means to achieve energy efficiency, states an expectation that the Building Energy Efficiency Standards will continue to be upgraded over time to reduce electricity and peak demand, and recognizes the role of the Building Energy Efficiency Standards in reducing energy related to meeting California's water needs and in reducing GHG emissions.
- Meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of State building codes.
- Meet Executive Order S-20-04, the Green Building Initiative, to improve the energy efficiency of non-residential buildings through aggressive standards.

The most recent Title 24 standards are the 2019 Title 24 standards. The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. Buildings permitted on or after January 1, 2020, must comply with the 2019 Standards. The California Energy Commission updates the standards every three years.

Single-family homes built with the 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards. Once rooftop solar electricity generation is factored in, homes built under the 2019 standards will use about 53 percent less energy than those under the 2016 standards. This will reduce greenhouse gas emissions by 700,000 metric tons over three years, equivalent to taking 115,000 fossil fuel cars off the road. Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades.

CALIFORNIA GREEN BUILDING STANDARDS CODE

The purpose of the California Green Building Standards Code (California Code of Regulations Title 24, Part 11) is to improve public health and safety and to promote the general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: 1) planning and design; 2) energy efficiency; 3) water efficiency and conservation; 4) material conservation and resource efficiency; and 5) environmental quality. The California Green Building Standards, which became effective on January 1, 2011, instituted mandatory minimum environmental performance standards for all ground-up new construction of commercial, low-rise residential uses, and State-owned buildings, as well as schools and hospitals. The mandatory standards require the following:

- 20 percent mandatory reduction in indoor water use relative to baseline levels;
- 50 percent construction/demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency; and

- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particle boards.

The voluntary standards require the following:

- **Tier I:** 15 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste, 10 percent recycled content, 20 percent permeable paving, 20 percent cement reduction, and cool/solar reflective roof.
- **Tier II:** 30 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste, 15 percent recycled content, 30 percent permeable paving, 30 percent cement reduction, and cool/solar reflective roof.

SAN JOAQUIN AIR POLLUTION CONTROL DISTRICT

Climate Change Action Plan

On August 21, 2008, the Valley Air District Governing Board approved a proposal called the Climate Change Action Plan (CCAP). The CCAP began with a public process bringing together stakeholders, land use agencies, environmental groups, and business groups to conduct public workshops to develop comprehensive policies for CEQA Guidelines, a carbon exchange bank, and voluntary GHG emissions mitigation agreements for the Governing Board's consideration. The CCAP contains the following goals and actions:

- Develop GHG significance thresholds to address CEQA projects with GHG emission increases.
- Develop the San Joaquin Valley Carbon Exchange for banking and trading GHG reductions.
- Authorize use of the SJVAPCD [Valley Air District's] existing inventory reporting system to allow use for GHG reporting required by AB 32 regulations.
- Develop and administer GHG reduction agreements to mitigate proposed emission increases from new projects.
- Support climate protection measures that reduce greenhouse gas emissions as well as toxic and criteria pollutants. Oppose measures that result in a significant increase in toxic or criteria pollutant emissions in already impacted areas.

On December 17, 2009, the Valley Air District Governing Board adopted "Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA," and the policy "District Policy—Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency." The Valley Air District concluded that the existing science is inadequate to support quantification of the impacts that project-specific GHG emissions have on global climatic change. The Valley Air District found the effects of project-specific emissions to be cumulative, and without mitigation, their incremental contribution to global climatic change could be considered cumulatively considerable. The Valley Air District found that this cumulative impact

is best addressed by requiring all projects to reduce their GHG emissions, whether through project design elements or mitigation.

The Valley Air District's approach is intended to streamline the process of determining whether project-specific GHG emissions would have a significant effect. Projects exempt from the requirements of CEQA, and projects complying with an approved plan or mitigation program would be determined to have a less than significant cumulative impact. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources and must have a certified final CEQA document.

For non-exempt projects, those projects for which there is no applicable approved plan or program, or those projects not complying with an approved plan or program, the lead agency must evaluate the project against performance-based standards and would require the adoption of design elements, known as a Best Performance Standard, to reduce GHG emissions. The Best Performance Standards (BPS) have not yet fully been established, though they must be designed to effect a 29 percent reduction when compared with the BAU projections identified in the ARB's AB 32 Scoping Plan.

BAU represents the emissions that would occur in 2020 if the average baseline emissions during the 2002–2004 period were grown to 2020 levels, without control. These standards thus would carry with them pre-quantified emissions reductions, eliminating the need for project-specific quantification. Therefore, projects incorporating BPS would not require specific quantification of GHG emissions, and automatically would be determined to have a less than significant cumulative impact for GHG emissions.

For stationary source permitting projects, BPS means, "The most stringent of the identified alternatives for control of GHG emissions, including type of equipment, design of equipment and operational and maintenance practices, which are achieved-in-practice for the identified service, operation, or emissions unit class." The Valley Air District has identified BPS for the following sources: boilers; dryers and dehydrators; oil and gas extraction, storage, transportation, and refining operations; cogeneration; gasoline dispensing facilities; volatile organic compound control technology; and steam generators.

For development projects, BPS means, "Any combination of identified GHG emission reduction measures, including project design elements and land use decisions that reduce project-specific GHG emission reductions by at least 29 percent compared with business as usual."

Projects not incorporating BPS would require quantification of GHG emissions and demonstration that BAU GHG emissions have been reduced or mitigated by 29 percent. As stated earlier, the ARB's adjusted inventory reduced the amount required by the State to achieve 1990 emission levels from 29 percent to 21.7 percent to account for slower growth experienced since the 2008 recession. According to Valley Air District guidance, quantification of GHG emissions would be required for all projects for which the lead agency has determined that an EIR is required, regardless of whether the project incorporates BPS.

Nevertheless, it should be noted that, in light of the Newhall Ranch case, the Supreme Court concluded that a BAU analysis requires substantial evidence to demonstrate what the required percentage reduction from BAU would be for an individual project. The court expressed skepticism that a percentage reduction goal applicable to the State as a whole would apply without change to an individual development project, regardless of its size or location. Therefore, the BAU analysis as identified by SJVAPCD is not employed for this EIR.

San Joaquin Valley Carbon Exchange

The Valley Air District initiated work on the San Joaquin Valley Carbon Exchange in November 2008. The purpose of the carbon exchange is to quantify, verify, and track voluntary GHG emissions reductions generated within the San Joaquin Valley. However, the Valley Air District has pursued an alternative strategy that incorporates the GHG emissions into its existing Rule 2301—Emission Reduction Credit Offset Banking that formerly only addressed criteria pollutants. The Valley Air District is also participating with the California Air Pollution Control Officers Association (CAPCOA), of which it is a member, in the CAPCOA Greenhouse Gas Reduction Exchange (GHG Rx). The GHG Rx is operated cooperatively by air districts that have elected to participate. Participating districts have signed a Memorandum of Understanding (MOU) with CAPCOA and agree to post only those credits that meet the Rx standards for quality. The objective is to provide a secure, low-cost, high-quality, GHG exchange for credits created in California. The GHG Rx is intended to help fulfill compliance obligations, or mitigation needs of local projects subject to environmental review, reducing the uncertainty of using credits generated in distant locations.

Rule 2301

While the CCAP indicated that the GHG emission reduction program would be called the San Joaquin Valley Carbon Exchange, the Valley Air District incorporated a method to register voluntary GHG emission reductions into its existing Rule 2301-Emission Reduction Credit Banking through amendments of the rule. Amendments to the rule were adopted on January 19, 2012. The purposes of the amendments to the rule include the following:

- Provide an administrative mechanism for sources to bank voluntary GHG emission reductions for later use.
- Provide an administrative mechanism for sources to transfer banked GHG emission reductions to others for any use.
- Define eligibility standards, quantitative procedures, and administrative practices to ensure that banked GHG emission reductions are real, permanent, quantifiable, surplus, and enforceable.

LOCAL

City of Tracy General Plan

The City of Tracy General Plan includes several policies that are relevant to air quality. General Plan policies applicable to the Project are identified below:

POLICIES: AIR QUALITY ELEMENT

- AQ-1.1-P1. The City shall promote land use patterns that reduce the number and length of motor vehicle trips.
- AQ-1.1-P2. To the extent feasible, the City shall maintain a balance and match between jobs and housing.
- AQ-1.2-P1. The City shall assess air quality impacts using the latest version of the CEQA Guidelines and guidelines prepared by the San Joaquin Valley Air Pollution Control District.
- AQ-1.2-P2. The City shall assess through the CEQA process any air quality impacts of development projects that may be insignificant by themselves, but cumulatively significant.
- AQ-1.2-P3. Developers shall implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects.
- AQ-1.2-P4. New development projects should incorporate energy efficient design features for HVAC, lighting systems and insulation that exceed Title 24.
- AQ-1.2-P5. Use of solar water and pool heaters is encouraged.
- AQ-1.2-P6. Installation of solar voltaic panels on new homes and businesses shall be encouraged.
- AQ-1.2-P7. Trees should be planted on the south- and west-facing sides of new buildings or building undergoing substantial renovation in order to reduce energy usage.
- AQ-1.2-P12. New sources of toxic air pollutants shall prepare a Health Risk Assessment as required under the Air Toxics “Hot Spots” Act and, based on the results of the Assessment, establish appropriate land use buffer zones around those areas posing substantial health risks.
- AQ-1.2-P13. Dust control measures consistent with San Joaquin Valley Air Pollution Control District rules shall be required as a condition of approval for subdivision maps, site plans, and all grading permits.
- AQ-1.2-P14. Developments that significantly impact air quality shall only be approved if all feasible mitigation measures to avoid, minimize or offset the impact are implemented.
- AQ-1.2-P15. Encourage businesses to electrify loading docks or implement idling-reduction systems so that trucks transporting refrigerated goods can continue to power cab cooling elements during loading, layovers, and rest periods.
- AQ-1.3-P3. The City shall encourage employers to establish Transportation Demand Management programs.
- AQ-1.4-P1. The City shall continue to consult with other local, regional and State agencies on air quality planning efforts as well as encourage community participation in air quality planning.
- AQ-1.4-P2. The City shall be proactive in educating the public about the linkages between land use, transportation and air quality.
- AQ-1.4-P3. The City shall be proactive in reducing greenhouse gas emissions from City operations as well as new or renovated development.

City of Tracy Sustainability Action Plan

The City of Tracy Sustainability Action Plan was adopted in 2011 to achieve sustainability in numerous sectors including GHG emissions, energy, and transportation and land use. The Sustainability Action Plan includes specific measures to be implemented that the City estimates will reduce GHG emissions by 378,461 to 482,154 metric tons (MT) of CO_2e. These reductions would come in part from reductions in Vehicle Miles Traveled (VMT) and energy consumption.

The City of Tracy Sustainability Action Plan also includes a community and municipal target for GHG emissions for year 2020, of a 15% reduction in per capita emissions from the 2006 baseline of 11.6 MT CO_2e. However, this threshold is not meant for usage as a CEQA threshold. Moreover, it should be noted that year 2020 has already come and gone. Therefore, this per capita emissions target is no longer relevant. Furthermore, the sustainability measures included with the City of Tracy Sustainability Action Plan do not apply to land use projects; nor is it appropriate to translate this target into requirements for an individual project, since there is no clear mechanism to do so.

Lastly, the *Golden Door Properties, LLC v. County of San Diego* case held that the use of a quantitative threshold (specifically an efficiency metric, like the one used within the City of Tracy Sustainability Action Plan), which has historically been used for EIRs throughout California at the time, must be adopted by the City via a resolution, ordinance or regulation based on a public review process, and supported by substantial evidence. However, such a quantitative threshold as included with the City of Tracy Sustainability Plan has never been specifically adopted as a threshold by the City via a resolution, ordinance, or regulation. Overall, the usage of a per capita efficiency metric, such as the one included within the City of Tracy Sustainability Action Plan, is not relevant or appropriate in a CEQA context.

3.7.3 IMPACTS AND MITIGATION MEASURES

GREENHOUSE GAS EMISSIONS THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, climate change-related impacts are considered significant if implementation of the proposed Project would do any of the following:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

For future projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a Climate

Action Plan). The City of Tracy does not currently have a formal GHG emissions reduction plan or recommended emissions thresholds for determining significance associated with GHG emissions from development projects.

Since no other local or regional Climate Action Plan is in place, the Project is assessed for its consistency with CARB's adopted Scoping Plan policies. This would be achieved with an assessment of the project's compliance with relevant Scoping Plan measures contained in the CARB's 2022 Scoping Plan, as well as the latest Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for the region the Project is located within (i.e. the San Joaquin Council of Governments (SJCOG) 2022 RTP/SCS, or the SJCOG 2022 RTP/SCS, which was adopted on August 22, 2022). Therefore, this analysis provides a qualitative assessment of the Project's compliance with the applicable plans, policies, and regulations for the purposes of reducing greenhouse gas emissions to determine whether the project would have a significant impact on the environment relative to GHGs.

IMPACTS AND MITIGATION MEASURES

Impact 3.7-1: Project implementation would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (Less than Significant)

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. Implementation of the Project would contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to Project development would be primarily associated with increases of CO_2 and other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O), from mobile sources and utility usage.

The Project's short-term construction-related and long-term operational GHG emissions were estimated using the California Emission Estimator Model (CalEEMod)^{TM} (v.2022.1). CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify GHG emissions from land use projects. The model quantifies direct GHG emissions from construction and operation (including vehicle use), as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Emissions are expressed in annual metric tons of CO_2 equivalent units of measure (i.e., MT CO_2e), based on the global warming potential of the individual pollutants.

SHORT-TERM CONSTRUCTION GHG EMISSIONS

Estimated maximum GHG emissions associated with construction of the proposed Project are summarized in Table 3.7-2. These emissions include all worker vehicle, vendor vehicle, hauler vehicle, and off-road construction vehicle GHG emissions. For the purposes of this analysis, based on input from the Project applicant, the proposed Project is assumed to commence construction in 2025 and finish in 2027.

TABLE 3.7-2: PROJECT MITIGATED CONSTRUCTION AND OPERATIONAL GHG EMISSIONS (METRIC TONS/YEAR)

	CO_2E
CONSTRUCTION	
Maximum Annual	498
OPERATION	
Annual	2,814

SOURCE: CALEEMOD, V.2022.1

As presented in the table, short-term emissions of GHGs are estimated to be 2,814 MT CO_2e during Project operation, and a maximum of 498 MT CO_2e annual GHG emissions during Project construction. It should be noted that CalEEMod does not account for Governor Newsom's Zero-Emission by 2035 Executive Order (N-79-20), which requires that all new cars and passenger trucks sold in California be zero-emission vehicles by 2035. This is anticipated to substantially reduce the operational emissions associated with passenger vehicles (i.e. mobile emissions) over time, since zero-emission vehicles (such as electric vehicles) generate much fewer greenhouse gas emissions compared with internal combustion engine-based vehicles (such as those that run on gasoline or diesel). Therefore, the operational emissions results provided in Table 3.7-2 are likely an overestimate for mobile emissions, given the state's ongoing effort to increase electric vehicles and trucks as a proportion of the overall California vehicle fleet (as provided for by Executive Order N-79-20), and given that CalEEMod does not yet account for this EO.

2022 SCOPING PLAN CONSISTENCY

The goal to reduce GHG emissions to 1990 levels by 2020 (Executive Order S-3-05) was codified by the California Legislature as AB 32. In 2008, CARB approved a Scoping Plan as required by AB 32. The Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program. The 2022 Scoping Plan identifies additional GHG reduction measures necessary to achieve the 2030 target, as well as to achieve the State's target of carbon neutrality by year 2045. These measures build upon those identified in the previous Scoping Plan updates. Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted subsequently as required to achieve Statewide GHG emissions targets.

Table 3.7-3 summarizes the Project's consistency with applicable policies and measures of the 2022 Scoping Plan. As indicated in Table 3.7-3, the Project would not conflict with any of the provisions of the 2022 Scoping Plan and would support four of the action categories through energy efficiency, water conservation, recycling, and landscaping.

TABLE 3.7-3: PROJECT CONSISTENCY WITH CARB 2022 SCOPING PLAN

SECTOR/SOURCE	*CATEGORY/DESCRIPTION*	*CONSISTENCY ANALYSIS*
AREA		
SCAQMD Rule 445 (Wood Burning Devices)	Restricts the installation of wood-burning devices in new development.	Mandatory Compliance. Approximately 15 percent of California's major anthropogenic sources of black carbon include fireplaces and woodstoves.[1] The Project would not include hearths (woodstove and fireplaces) as mandated by this rule.
ENERGY		
California Renewables Portfolio Standard, Senate Bill 350 (SB 350) and Senate Bill 100 (SB 100)	Increases the proportion of electricity from renewable sources to 33 percent renewable power by 2020. SB 350 requires PG&E to utilize 50 percent of its electricity resources by 2030. SB 100 requires 44 percent by 2024, 52 percent by 2027, and 60 percent by 2030. It also requires the State Energy Resources Conservation and Development Commission to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.	Consistent. As described in Section 2.0: Project Description, the proposed Project incorporates sustainability features that would ensure consistency with this policy. Specifically, as also described in Section 2.0: Project Description, during Project operation, the Project applicant and/or developer would install the maximum amount of on-site rooftop solar generation permitted under applicable law. Moreover, during Project operation, the Project applicant and/or developer would ensure that building operations, including HVAC, water heating, and refrigeration would be powered by electricity for the lifetime of the Project. Neither natural gas nor propane would be used for the purposes listed for those specific operational purposes. Additionally, the Project applicant and/or developer would plan for sufficient pre-wiring of the overall site to support the potential future usage of all-electric vehicles and equipment. This ensures that the proposed Project would more than meet the California Renewable Energy Standard, SB 350, and SB 100.
All Electric Appliances for New Residential and Commercial Buildings (AB 197)	All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030.	Consistent. As described in Section 2.0: Project Description, during Project operation, the Project applicant and/or developer would ensure that building operations, including HVAC, water heating, and refrigeration would be powered by electricity for the lifetime of the Project. Neither natural gas nor propane would be used for the purposes listed for those specific operational purposes. Additionally, the Project applicant and/or developer would plan for sufficient pre-wiring of the overall site to support the potential

SECTOR/SOURCE	*CATEGORY/DESCRIPTION*	*CONSISTENCY ANALYSIS*
		future usage of all-electric vehicles and equipment. Overall, the proposed Project would utilize electricity for all appliances.
California Code of Regulations, Title 24, Building Standards Code	Requires compliance with energy efficiency standards for residential and nonresidential buildings.	Mandatory Compliance. Future development associated with Project implementation would be required to meet the applicable requirements of the 2022 Title 24 Building Energy Efficiency Standards, including installation of rooftop solar panels and additional CALGreen requirements (see discussion under CALGreen Code requirements below). Moreover, As described in Section 2.0: Project Description, the proposed Project incorporates sustainability features that would ensure consistency with this policy. Specifically, during Project operation, the Project applicant and/or developer would ensure that building operations, including HVAC, water heating, and refrigeration would be powered by electricity for the lifetime of the Project. Additionally, the Project applicant and/or developer would plan for sufficient pre-wiring of the overall site to support the potential future usage of all-electric vehicles and equipment. Overall, the proposed Project would comply with the applicable energy efficiency standards.
California Green Building Standards (CALGreen) Code Requirements	All bathroom exhaust fans are required to be ENERGY STAR compliant.	Mandatory Compliance. Project-specific construction plans would be required to demonstrate that energy efficiency appliances, including bathroom exhaust fans, and equipment are ENERGY STAR compliant.
	HVAC system designs are required to meet American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards.	Mandatory Compliance. Project-specific construction plans would be required to demonstrate that the HVAC system meets the ASHRAE standards. Moreover, As described in Section 2.0: Project Description, during Project operation, the Project applicant and/or developer would ensure that building operations, including HVAC, water heating, and refrigeration would be powered by electricity for the lifetime of the Project.
	Air filtration systems are required to meet a minimum efficiency reporting value (MERV) 8 or higher.	Mandatory Compliance. Specific development projects would be required to install air filtration systems (MERV 8 or higher) as part of its compliance with the 2022 Title 24 Building Energy Efficiency Standards.
	Refrigerants used in newly installed HVAC systems shall not contain any chlorofluorocarbons.	Mandatory Compliance. Specific development projects would be required to meet this requirement as part of its compliance with the CALGreen Code.

SECTOR/SOURCE	*CATEGORY/DESCRIPTION*	*CONSISTENCY ANALYSIS*
	Parking spaces shall be designed for carpool or alternative fueled vehicles. Up to eight percent of total parking spaces is required for such vehicles.	Mandatory Compliance. Specific development projects would be required to meet this requirement as part of its compliance the CALGreen Code.
MOBILE SOURCES		
Mobile Source Strategy (Cleaner Technology and Fuels)	Reduce GHGs and other pollutants from the transportation sector through transition to zero-emission and low-emission vehicles, cleaner transit systems, and reduction of vehicle miles traveled.	Consistent. The Project would be consistent with this strategy by promoting the use of zero-emission and low-emission vehicles; refer to CALGreen Code discussion above. Additionally, as described in Section 2.0: Project Description, the Project applicant and/or developer would plan for sufficient pre-wiring of the overall site to support the potential future usage of all-electric vehicles and equipment; the proposed Project would be developed to meet or exceed the California Green Building Standards Code (also known as CALGreen) standards for equipping passenger vehicle parking spaces with electric vehicles charging stations; all installed stations would maintained or replaced with equivalent or better-performing stations for the life of the Project; lastly, the Project developer and/or applicant would design EV infrastructure to facilitate future expansion. At least one electric heavy-duty (Class 7 and 8) truck charger would be installed by or before two years from the first final certificate of occupancy issued for the project.
Senate Bill (SB) 375	SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the State's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035.	Consistent. As demonstrated in Table GHG-2, the Project would comply with the San Joaquin Council of Governments (SJCOG) 2022 Regional Transportation Plan/Sustainable Communities Strategy (2022 RTP/SCS), and therefore, the Project would be consistent with SB 375. Moreover, as described in Section 2.0: Project Description, the Project applicant and/or developer would plan for sufficient pre-wiring of the overall site to support the potential future usage of all-electric vehicles and equipment; the proposed Project would be developed to meet or exceed the California Green Building Standards Code (also known as CALGreen) standards for equipping passenger vehicle parking spaces with electric vehicles charging stations; all installed stations would maintained or replaced with equivalent or better-performing stations for the life of the Project; lastly, the Project developer and/or applicant would design EV infrastructure to facilitate future expansion. At least one

SECTOR/SOURCE	*CATEGORY/DESCRIPTION*	*CONSISTENCY ANALYSIS*
		electric heavy-duty (Class 7 and 8) truck charger would be installed by or before two years from the first final certificate of occupancy issued for the project.
WATER		
CCR, Title 24, Building Standards Code	Title 24 includes water efficiency requirements for new residential and non- residential uses.	Mandatory Compliance. Refer to the discussion under 2022 Title 24 Building Standards Code and CALGreen Code, above.
Water Conservation Act of 2009 (Senate Bill X7-7)	The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. Each urban retail water supplier shall develop water use targets to meet this goal. This is an implementing measure of the Water Sector of the AB 32 Scoping Plan. Reduction in water consumption directly reduces the energy necessary and the associated emissions to convene, treat, and distribute the water; it also reduces emissions from wastewater treatment.	Consistent. Refer to the discussion under 2022 Title 24 Building Standards Code and CALGreen Code, above.
SOLID WASTE		
California Integrated Waste Management Act (IWMA) of 1989 and Assembly Bill (AB) 341	The IWMA mandates that State agencies develop and implement an integrated waste management plan which outlines the steps to divert at least 50 percent of solid waste from disposal facilities. AB 341 directs the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling and sets a Statewide goal for 75 percent disposal reduction by the year 2020.	Mandatory Compliance. The Project would be required to comply with AB 341 which requires multifamily residential dwelling of five units or more to arrange for recycling services. This would reduce the overall amount of solid waste disposed of at landfills. The decrease in solid waste would in return decrease the amount of methane released from decomposing solid waste.

SOURCE: CALIFORNIA AIR RESOURCE BOARD, 2022 SCOPING PLAN. AVAILABLE: HTTPS://WW2.ARB.CA.GOV/RESOURCES/DOCUMENTS/2022-SCOPING-PLAN-DOCUMENTS

CONSISTENCY WITH SJCOG'S 2022 RTP/SCS

The proposed Project is analyzed for consistency with the strategies contained in the latest adopted SJCOG RTP/SCS (i.e. SJCOG's 2022 RTP/SCS). With the passage of SB 375 in 2008, metropolitan planning organizations were required to develop an SCS, which must demonstrate an ambitious, yet achievable, approach to how land use development and transportation can work together to meet greenhouse gas emission reduction targets for cars and light trucks. These

targets, set by the California Air Resources Board, call for the region to reduce per capita emissions. Table 3.7-4 below provides this consistency analysis.

TABLE 3.7-4: PROJECT CONSISTENCY WITH SJCOG'S 2022 RTP/SCS

RTP/SCS POLICY	*PROJECT CONSISTENCY*
Policy 1: Enhance the Environment for Existing and Future Generations and Conserve Energy	**Consistent**. The proposed Project would meet the requirements of Title 24 for energy efficient design. Additionally, the proposed Project would implement several sustainability features, as described within Chapter 2.0: Project Description. For example, the Project would install the maximum amount of on-site rooftop solar generation permitted under applicable law; projects will meet or exceed CalGreen standards for equipping passenger vehicle parking spaces with electric vehicles charging stations; additionally, the Project developer and/or applicant would design EV infrastructure to facilitate future expansion. The Project would also include sufficient pre-wiring of the overall site to support the potential future usage of all-electric vehicles and equipment.
Strategy No. 1: Encourage efficient development patterns that maintain agricultural viability and natural resources.	**No Conflict.** While the Project is located on land that was formerly used for agricultural activities, the Project represents an efficient use of land, and is located an in area that has been planned for industrial and commercial development. Therefore, the Project provides for an efficient development pattern that does not notably disrupt agricultural viability and natural resources. To offset any potential long-term impacts to the agricultural vitality of the region, the Tracy Municipal Code (Chapter 13.28) establishes the City's Agricultural Mitigation Fee Program, which authorizes the collection of development fees to offset costs associated with the loss of productive agricultural lands converted to urban uses (including residential, commercial, industrial, or other urban uses) within the City by permanently protecting agricultural lands planned for agricultural use and by working with farmers who voluntarily wish to sell or restrict their land in exchange for fair compensation. Agricultural mitigation fees are collected by the City at the time that building permits are issued and may be used to conserve existing agricultural land by securing farmland conservation easements, farmland deed restrictions, or other agreements. Moreover, the proposed Project is located on a site that is within an industrial area, with the nearest nearby receptor being 0.5 miles away.
Strategy No. 2: Encourage preservation of natural resources.	**No Conflict.** The Project would not notably reduce or eliminate access to natural resources. Therefore, the Project would encourage preservation of natural resources.
Strategy No. 3: Enhance the connection between land use and transportation choices	**No Conflict.** The Project includes a wide array of sustainability features, including consistency with the

RTP/SCS POLICY	*PROJECT CONSISTENCY*
through projects supporting energy and water efficiency.	latest version of Title 24 for energy efficient design. The Project's sustainability features would enhance the connection between land use and transportation choices by supporting energy and water efficiency. See the Project consistency discussion under Strategy No. 1, above, for further detail.
Strategy No. 4: Improve air quality by reducing transportation-related emissions.	**No Conflict.** The Project includes a wide array of sustainability features, including those as described within Chapter 2.0: Project Description. For example, electric vehicle chargers would be provided within the Project site, as required under the latest version of CalGreen. Additionally, the Project developer and/or applicant would design EV infrastructure to facilitate future expansion. At least one electric heavy-duty (Class 7 and 8) truck charger would be installed by or before two years from the first final certificate of occupancy issued for the project. Additionally, see the Project consistency discussion under Strategy No. 1, above, for further detail.
Policy 2: Maximize Mobility and Accessibility	**Consistent**. The proposed Project is compatible with the surrounding area. The proposed Project's location will provide strategic access for goods in an area that is surrounded by other similar types of industrial development.
Strategy No. 5: Optimize the public transportation system to provide efficient and convenient access for users of all income levels.	**Consistent.** The proposed Project would not disrupt or hinder the public transportation system. The Project is located in an area adjacent to similar types of industrial development, which would ensure that public transportation systems would be minimally disrupted by the increased in vehicle traffic associated with the proposed Project
Strategy No. 6: Encourage infill developments and development near transit, including transit-oriented development to maximize existing transit investments.	**Consistent.** The proposed Project would be a warehouse project located in an area that is not currently in use. Such projects do not lend themselves well to transit. Nevertheless, the proposed Project would be consistent with this strategy by encouraging development within vacant land parcels within the City of Tracy.
Strategy No. 7: Provide transportation improvements to facilitate nonmotorized travel, including incorporation of complete streets elements as appropriate.	**Consistent.** The proposed Project is a warehouse project that would include development of additional features that would facilitate nonmotorized travel, such as sidewalks, where appropriate. Additionally, the fees associated with development of the proposed Project would fund additional localized improvements to adjacent roadways, over time.
Strategy No. 8: Improve freight access to key economic centers.	**Consistent.** The Project will provide a warehouse that would allow for more efficient supply of goods to the region, in an area located near to other existing industrial uses.
Strategy No. 9: Promote safe and efficient strategies to improve the movement of goods by water, rail, and truck.	**Consistent**. Although the Project is not a transportation project, it would advance this strategy by developing a warehouse that would facilitate the efficient movement of goods, in an area located near to other existing industrial

RTP/SCS POLICY	*PROJECT CONSISTENCY*
	uses.
Policy 3: Increase Safety and Security	**Consistent.** The proposed Project is located in an Industrial area, away from sensitive land uses that are more vulnerable to vehicle safety risks.
Strategy No. 10: Facilitate projects that reduce the number and severity of traffic incidents.	**Consistent.** The Project would be developed according to applicable City and State traffic standards. Moreover, the Project is located in an area of the City that is designed for industrial and commercial projects. Furthermore, the proposed Project would provide funds for relevant transportation improvements from applicable transportation fees over time. Therefore, the Project is anticipated to be consistent with this strategy.
Strategy No. 11: Support local and state efforts for transportation network resiliency, reliability and climate adaptation.	**Consistent.** The Project includes various sustainability features, which would help to minimize the Project's impact on the transportation network and increase resiliency and sustainability.
Policy 4: Preserve the Efficiency of the Existing Transportation System	**Consistent.** The proposed Project will facilitate goods movement in the Tracy area and thereby increasing the efficiency of the existing transportation system. The Project site is located in an area previously designed for industrial uses such as the those proposed by the proposed Project.
Strategy No. 12: Prioritize projects that make more efficient use of the existing road network.	**Consistent.** The Project would make highly efficient use of the nearby road network, as the Project is located near the existing freeways, which would minimize the amount of local roads utilized to transport good to and from the Project site.
Strategy No. 13: Support the continued maintenance and preservation of the existing transportation system.	**Consistent.** The Project is required to implement road improvements and to pay applicable transportation impact fees and therefore would help to maintain and preserve the existing transportation system.
Strategy No. 14: Promote electric power, alternative fuels and autonomous technologies for freight and agriculture.	**Consistent.** The Project would install infrastructure for electric vehicle charging stations onsite, as required under Title 24 for energy efficient design, as applicable. Moreover, as described within Chapter 2.0: Project Description, the proposed Project would ensure that building operations, including HVAC, water heating, and refrigeration, would be powered by electricity for the lifetime of the Project. Neither natural gas nor propane would be used for the purposes listed for those specific operational purposes. Additionally, the Project developer and/or applicant would design EV infrastructure to facilitate future expansion. At least one electric heavy-duty (Class 7 and 8) truck charger would be installed by or before two years from the first final certificate of occupancy issued for the project. Additionally, see the Project consistency discussion under Strategy No. 1, above, for further detail. See the Project consistency discussion under Strategy No. 1, above, for further detail.
Strategy No. 15: Manage the adoption of	**Consistent.** The proposed Project is not a transportation

RTP/SCS POLICY	*PROJECT CONSISTENCY*
electric vehicles and private connected and autonomous vehicles.	project. Nevertheless, as described in Chapter 2.0: Project Description, the proposed Project implement a wide variety of robust and tangible measures to encourage and support the adoption of electric vehicles and autonomous vehicles. See the Project consistency discussion under Strategy No. 1, above, for further detail.
Strategy No. 16: Promote electric power, alternative fuels and autonomous technologies for public transit.	**Not Applicable.** The proposed Project is not a public transportation project.
Policy 5: Support Economic Vitality	**Consistent**. The proposed Project improves freight access to a key strategic economic center, promotes the safe and efficient movement of goods by truck, and supports the implementation of transportation improvements adjacent to the Project site (since the Project would pay its fair share of traffic improvements).
Strategy No. 17: Support transportation improvements that improve economic competitiveness, revitalize commercial corridors and strategic economic centers, and enhance travel and tourism opportunities.	**Consistent.** The Project would provide economic development within the City of Tracy, help promote economic competitiveness in the region, and would install road improvement and pay its fair share for traffic improvements.
Strategy No. 18: Support workforce training across industries, particularly transportation-related industries.	**Consistent.** Project employees would naturally gain skills within the freight movement industry.
Strategy No. 19: Encourage and/or strengthen small business, while supporting large employer recruitment.	**Consistent.** The Project would support this strategy, by development business activity and employment within the City of Tracy.
Strategy No. 20: Invest in high-speed internet infrastructure to support e-business and reduce commuting.	**Consistent.** The Project is not an infrastructure project. Nevertheless, the Project would not conflict with this strategy and anticipated having high-speed internet located on-site.
Policy 6: Promote Interagency Coordination and Public Participation for Transportation Decision-Making and Planning Efforts	**Not Applicable**. The proposed Project is not a transportation project.
Strategy No. 21: Provide equitable access to transportation planning.	**Not applicable.** The Project is not a transportation project. Nevertheless, the Project would not conflict with this strategy.
Strategy No. 22: Engage the public early, clearly, and continuously.	**Consistent.** The Project is subject to CEQA, including the preparation of an Environmental Impact Report. Early, clear, and continuous public engagement has been part of the entire CEQA process. Therefore, the Project would be consistent with this strategy.
Strategy No. 23: Use a variety of methods to engage the public, encouraging representation from diverse income and ethnic background.	**Consistent.** The Project is subject to CEQA, including the preparation of an Environmental Impact Report. A variety of methods to engage the public have been utilized throughout the entire CEQA process, including public scoping meetings and commission hearings. Therefore, the Project would be consistent with this strategy.
Policy 7: Maximize Cost-Effectiveness	**Consistent**. The proposed Project is located in an area that has been planned for in the City's General Plan for industrial uses such as the proposed Project. Moreover, the proposed Project utilizes existing transportation

RTP/SCS POLICY	*PROJECT CONSISTENCY*
	corridors. Lastly, the proposed Project applicant would be heavily driven by market incentives. Therefore, the proposed Project is consistent with a policy of maximizing cost-effectiveness.
Strategy No. 24: Support efforts to streamline the development process.	**Consistent.** The proposed Project would be consistent with this strategy, since it would support efforts to streamline the development process.
Strategy No. 25: Support the use of state and federal grants to supplemental local funding and pursue discretionary grant funding opportunities from outside the region.	**Consistent.** The proposed Project is a private warehouse development that would not use grant funding. Nevertheless, the proposed Project would be consistent with this strategy.
Strategy No. 26: Support projects that maximize cost effectiveness.	**Consistent.** The proposed Project is a warehouse development that would support economic competitiveness in the region. The proposed Project would be consistent with this strategy.
Strategy. No 27: Maximize funding of existing transportation options.	**Consistent.** The proposed Project is a warehouse development that would pay its fair share of transportation impact fees and provide roadway improvements. The proposed Project would not conflict with this strategy.
Policy 8: Improve the Quality of Life for Residents	**Consistent**. The proposed Project implements an industrial Project in an area that has been planned for in the General Plan for industrial land uses, located away from sensitive land uses such as large residential communities. Therefore, the proposed Project avoids being sited in an area that would be highly sensitive to the physical environmental impacts associated with the proposed Project, thereby maintaining quality of life for residents in the City of Tracy and the region.
Strategy No. 28: Promote a broader range of housing types.	**Not applicable.** The Project is not a residential project and therefore this strategy is not applicable.
Strategy No. 29: Support the development of a regional trust fund dedicated to addressing housing issues.	**Not applicable.** The Project is not a residential project, nor does it result in housing need effects and therefore this strategy is not applicable.
Strategy No. 30: Enhance public health through active transportation projects.	**Not applicable.** The Project is not a transportation project and therefore this strategy is not applicable.

SOURCE: SAN JOAQUIN COUNCIL OF GOVERNMENTS (SJCOG). 2022. THE 2022 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY (RTP/SCS). ADOPTED AUGUST 2022. WEBSITE: HTTPS://SJCOG.ORG/608/ADOPTED-2022-RTPSCS-PLAN

EXECUTIVE ORDER S-3-05

The Executive Order S-3-05 2050 target has not been codified by legislation. However, studies have shown that, in order to meet the 2050 target, aggressive pursuit of technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. Because of the technological shifts required and the unknown parameters of the regulatory framework in 2050, quantitatively analyzing the project's impacts further relative to the 2050 goal is speculative for purposes of CEQA.

The CARB recognizes that AB 32 establishes an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: "These [greenhouse gas emission reduction] measures also put the State on a path to meet the long-term 2050 goal of reducing California's GHG emissions to 80 percent below 1990 levels. This trajectory is consistent with the reductions that are needed globally to stabilize the climate." In addition, the CARB's First Update to the Scoping Plan "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," and many of the emission reduction strategies recommended by the CARB would serve to reduce the proposed project's post-2020 emissions level to the extent applicable by law:

- Energy Sector: Continued improvements in California's appliance and building energy efficiency programs and initiatives, such as the State's zero net energy building goals, would serve to reduce the proposed project's emissions level. Additionally, further additions to California's renewable resource portfolio would favorably influence the project's emissions level.
- Transportation Sector: Anticipated deployment of improved vehicle efficiency, zero-emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the project's emissions level.
- Water Sector: The project's emissions level will be reduced as a result of further utilization to water conservation technologies.
- Waste Management Sector: Plans to further improve recycling, reuse and reduction of solid waste will beneficially reduce the project's emissions level.

In his January 2015 inaugural address, Governor Brown expressed a commitment to achieve "three ambitious goals" that he wanted to see accomplished by 2030 to reduce the State's GHG emissions:

- Increasing the State's Renewable Portfolio Standard from 33 percent in 2020 to 50 percent in 2030;
- Cutting the petroleum use in cars and trucks in half; and
- Doubling the efficiency of existing buildings and making heating fuels cleaner.

These expressions of executive branch policy may be manifested in adopted legislative or regulatory action through the State agencies and departments responsible for achieving the State's environmental policy objectives, particularly those relating to global climate change.[3]

Further, studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the Statewide emissions level to remain very low through

[3] Brown, Edmund G. Jr. 2015. Press Release: California Establishes Most Ambitious Greenhouse Gas Goal in North America. April 29.
Website: https://www.gov.ca.gov/news.php?id=18938. Accessed February 2, 2021.

2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the State to meet the 2050 target.[4]

Given the proportional contribution of mobile source-related GHG emissions to the State's inventory, recent studies also show that relatively new trends—such as the increasing importance of web-based shopping, the emergence of different driving patterns, and the increasing effect of web-based applications on transportation choices—are beginning to substantially influence transportation choices and the energy used by transportation modes. These factors have changed the direction of transportation trends in recent years and will require the creation of new models to effectively analyze future transportation patterns and the corresponding effect on GHG emissions. For the reasons described above, the proposed project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets.

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the Project would be required to comply with whatever measures are enacted that State lawmakers decide would lead to an 80 percent reduction below 1990 levels by 2050. In its 2008 Scoping Plan, the CARB acknowledged that the "measures needed to meet the 2050 are too far in the future to define in detail." In the 2017 Scoping Plan Update, however, the ARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately." The 2022 Scoping Plan Update provides an intermediate target that is intended to achieve reasonable progress toward the 2050 target.

CONCLUSION

The proposed Project would generate greenhouse gas emissions that would be released into the environment. However, the proposed Project would be consistent with relevant plans, policies, and regulations associated with GHGs, notably the 2022 Scoping Plan, and the SJCOG's 2022 RTP/SCS, as well as all other relevant plans, policies, and regulations, as described in detail above. Taking into account the proposed Project's emissions, and the progress being made by the State toward reducing emissions in key sectors such as transportation, industry, and electricity, the Project would be consistent with State GHG Plans and would not impede the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050. Therefore, the proposed Project's GHG emissions would be considered to have a ***less than significant*** impact.

[4] Energy and Environmental Economics, 2015. Pathways to Deep Carbonization in the United States. Website: http://deepdecarbonization.org/wp-content/uploads/2015/11/US_Deep_Decarbonization_Technical_Report_Exec_Summary.pdf. Accessed June 8, 2022.

ENERGY CONSERVATION THRESHOLDS OF SIGNIFICANCE

Consistent with Appendices F and G of the CEQA Guidelines, energy-related impacts are considered significant if implementation of the proposed Project would do the following:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation;
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency;

In order to determine whether or not the proposed Project would result in a significant impact on energy use, this EIR includes an analysis of proposed Project energy use, as provided under *Impacts and Mitigation Measures* below.

IMPACTS AND MITIGATION MEASURES

Impact 3.7-2: Project implementation would not result in the inefficient, wasteful, or unnecessary use of energy resources, and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency (Less than Significant)

According to the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed Project would be considered "wasteful, inefficient, and unnecessary" if it were to violate State and federal energy standards and/or result in significant adverse impacts related to Project energy requirements, energy inefficiencies, energy intensiveness of materials, effects on local and regional energy supplies or on requirements for additional capacity, compliance with existing energy standards, effects on energy resources, or transportation energy use requirements. In addition, the Project could have a significant energy impact if it would conflict or create an inconsistency with an applicable plan, policy, or regulation for renewable energy or energy efficiency.

The proposed Project includes various characteristics that reduce the inefficient, wasteful, or unnecessary use of energy. For example, beyond simply complying with State requirements such as the energy efficiency requirements of the latest version of the California Title 24 Energy Efficiency Standards, the Project would reduce energy consumption.

Moreover, it should be noted that, over time, electrification of the vehicles will increase due to state requirements, and state and national trends. Furthermore, the proposed Project includes a Transportation Demand Management (TDM) strategies, as described under Mitigation Measure 3.10-1 (see Section 3.10: Transportation and Circulation of the Draft EIR, for further detail). Additionally, importantly, the proposed Project incorporates a wide variety of sustainability features relating to energy efficiency, renewable energy, electric vehicles, and other features. See Chapter 2.0: Project Description for further detail.

The amount of energy used by the proposed Project during operation would include the amount of energy used by Project buildings and outdoor lighting, and the fuel used by vehicle trips generated

during Project construction and operation, fuel used by off-road construction vehicles during construction activities, and fuel used by Project maintenance activities during Project operation. The following discussion provides a detailed calculation of energy usage expected for the proposed Project, as provided by applicable modelling software (i.e. CalEEMod v2022.1) and the CARB EMFAC2021). Additional assumptions and calculations are provided within Appendix B of this EIR.

ELECTRICITY AND NATURAL GAS

Electricity and natural gas used by the proposed Project would be used primarily to generate energy for Project buildings, as well as for outdoor parking lot lighting. As shown in further detail in the CalEEMod modeling outputs provided in Appendix B, "Energy" is one of the categories that was modeled for GHG emissions. As also shown in the CalEEMod modeling outputs as provided in Appendix B, the proposed Project is anticipated to consume approximately 2,383,297 kWh of electricity per year and approximately 1,461,483 kBTU per of natural gas per year. Moreover, this is likely a conservative estimate, given that the CalEEMod model does not account for the latest version of Title 24. Furthermore, this also does not account for the vast majority of the Project's energy efficiency commitments, which would likely drive down the energy usage much further than identified herein.

ON-ROAD VEHICLES (OPERATION)

The proposed Project would generate vehicle trips (i.e., passenger vehicles for employees and heavy-duty trucks for hauling) during its operational phase. Compliance with applicable State laws and regulations would limit idling and a part of a comprehensive regulatory framework that is implemented by the CARB. A description of Project operational on-road mobile energy usage is provided below.

According to the Traffic Study prepared for the proposed Project (Kimley Horn, 2024), and as described in more detail in Section 3.10 of this EIR, the proposed Project would increase total vehicle trips by approximately 382 new daily trips. In order to calculate operational on-road vehicle energy usage, De Novo Planning Group used fleet mix data from the CalEEMod (v.2022.1) output for the proposed Project, and Year 2025 gasoline and diesel MPG (miles per gallon) factors for individual vehicle classes as provided by EMFAC2021, to derive weighted average gasoline and diesel MPG factors for the vehicle fleet as a whole. Based on these calculations, as provided in Appendix B, upon full buildout, the proposed Project would generate operational vehicle trips that would use a total of approximately 119 gallons of gasoline and 334 gallons of diesel per day, or 43,505 gallons of gasoline and 122,076 gallons of diesel per year.

The proposed Project's buildings would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the State's Title 24 Energy Efficiency Standards for Nonresidential Buildings and Green Building Code Standards. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), and indoor and outdoor lighting, are widely regarded as the some of the most advanced and stringent building energy efficiency standards in the country. In addition, as specified in

Subchapter 6, Part 6 of the Title 24 standards, the proposed Project would be required to design the proposed buildings to structurally accommodate future installation of a rooftop solar PV system, as applicable. As such, the design of the proposed project would facilitate the future commitment to renewable energy resources. Therefore, building energy consumption would not be considered wasteful, inefficient, or unnecessary.

Moreover, as discussed in Section 3.10: Transportation and Circulation, the proposed project would be required to implement various Transportation Demand Management (TDM) strategies that would contribute to fuel savings through incentives for project staff to utilize non-motorized transportation modes. Thus, transportation fuel consumption would not be wasteful, inefficient, or unnecessary.

ON-ROAD VEHICLES (CONSTRUCTION)

The proposed Project would also generate on-road vehicle trips during Project construction (from construction workers and vendors travelling to and from the Project site). De Novo Planning Group estimated the vehicle fuel consumed during these trips based on the assumed construction schedule, vehicle trip lengths and number of workers per construction phase as provided by CalEEMod, and Year 2023 gasoline and diesel MPG factors provided by EMFAC2021 (year 2023 factors were used to represent a conservative analysis, as the energy efficiency of construction activities is anticipated to improve over time). For the sake of simplicity and to be conservative, it was assumed that all construction worker light duty passenger cars and truck trips use gasoline as a fuel source, and all medium and heavy-duty vendor trucks use diesel fuel. Table 3.7-5, below, describes gasoline and diesel fuel consumed during each construction phase (in aggregate). As shown, the vast majority of on-road mobile vehicle fuel used during the construction of the proposed Project would occur during the building construction phase. See Appendix B of this EIR for a detailed accounting of construction on-road vehicle fuel usage estimates.

TABLE 3.7-5: ON-ROAD MOBILE FUEL USAGE BY PROJECT CONSTRUCTION ACTIVITIES – BY PHASE

CONSTRUCTION PHASE	*TOTAL GALLONS OF GASOLINE FUEL(B)*	*TOTAL GALLONS OF DIESEL FUEL(B)*
Demolition	137	41
Site Preparation	80	-
Grading	321	-
Building Construction	15,306	13,972
Paving	137	-
Architectural Coating	166	-
Total	**16,147**	**14,013**

NOTE: (A) PROVIDED BY CALEEMOD OUTPUT. (B) SEE APPENDIX B.3 OF THIS EIR FOR FURTHER DETAIL

SOURCE: CALEEMOD (V.2022.1); EMFAC2021.

OFF-ROAD EQUIPMENT (CONSTRUCTION)

Off-road construction equipment would use diesel fuel during the construction phase of the proposed Project. A non-exhaustive list of off-road constructive equipment expected to be used during the construction phase of the proposed Project includes: forklifts, generator sets, tractors,

excavators, and dozers. Based on the total amount of CO_2 emissions expected to be generated by the proposed Project (as provided by the CalEEMod output), and standard conversion factors (as provided by the U.S. Energy Information Administration), the proposed Project would use a total of approximately 57,068 gallons of diesel fuel for off-road construction equipment. Detailed calculations are provided in Appendix B of this EIR.

State laws and regulations would limit idling from both on-road and off-road diesel-powered equipment and are part of a comprehensive regulatory framework that is implemented by the CARB. Additionally, as a practical matter, it is reasonable to assume that the overall construction schedule and process would be designed to be as efficient as feasible in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for further future efficiency gains during construction are limited. For the foregoing reasons, it is anticipated that the construction phase of the project would not result in wasteful, inefficient, and unnecessary consumption of energy.

COMPLIANCE WITH THE CITY'S GENERAL PLAN

The City's General Plan contain goals, objectives and policies related to energy conservation that are relevant to this analysis While several of these goals, objectives and policies are voluntary or cannot be implemented by an individual development project, compliance with applicable Title 24 standards would ensure that the proposed Project would not conflict with any of the General Plan energy conservation policies related to the proposed project's building envelope, mechanical systems, and indoor and outdoor lighting.

CONCLUSION

The proposed Project would use energy resources for the operation of Project buildings (natural gas and electricity), outdoor lighting (electricity), on-road vehicle trips (e.g. gasoline and diesel fuel) generated by the proposed Project, and off-road and on-road construction activities associated with the proposed Project (e.g. diesel fuel). Each of these activities would require the use of energy resources. The proposed Project would be responsible for conserving energy, including through Project sustainability features, the mitigation measures provided throughout this EIR, as well as through the implementation of statewide and local measures.

The proposed Project would comply with all applicable federal, State, and local regulations regulating energy usage. Other statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time. Moreover, the proposed Project would comply with the City's Sustainability Action Plan and General Plan goals, objectives and policies related to energy conservation that are relevant to this analysis.

The proposed Project would comply with all existing energy standards and would not be expected to result in significant adverse impacts on energy resources. For these reasons, the proposed

Project would not cause an inefficient, wasteful, or unnecessary use of energy resources nor cause a significant impact on any of the energy-related thresholds as described by the *CEQA Guidelines*. This is a ***less than significant*** impact.

The California Environmental Quality Act (CEQA) requires an Environmental Impact Report (EIR) to evaluate a project's effects in relationship to broader changes occurring, or that are foreseeable to occur, in the surrounding environment. Accordingly, this chapter presents a discussion of CEQA-mandated analysis for cumulative impacts, significant irreversible effects, significant and unavoidable impacts, and growth-inducing impacts associated with the proposed Project.

4.1 CUMULATIVE CONTEXT IMPACT ANALYSIS

INTRODUCTION

CEQA requires that an EIR contain an assessment of the cumulative impacts that could be associated with the proposed Project. According to CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (as defined by Section 15130). As defined in CEQA Guidelines Section 15355, a cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. A cumulative impact occurs from:

> *…the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

In addition, Section 15130(b) identifies that the following three elements are necessary for an adequate cumulative analysis:

1) Either:

(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or,

(B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

2) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and

3) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

The cumulative context uses growth projections listed in various planning documents and Department of Finance statistics. Table 4.0-1 shows growth projections.

TABLE 4.0-1: GROWTH PROJECTIONS

CALENDAR YEAR	*ESTIMATED POPULATION (TRACY)*	*ESTIMATED POPULATION (SAN JOAQUIN COUNTY)*	*ESTIMATED POPULATION (CALIFORNIA)*
2025	102,236	829,426	42,373,301
2030	109,492	883,484	44,085,600
2035	118,130	947,835	45,747,645
2040	127,933	1,020,862	47,233,240

SOURCES: CALIFORNIA DEPARTMENT OF FINANCE (2020), SJCOG 2018 RTP/SCS (2018).

CUMULATIVE EFFECTS OF THE PROJECT

The geographic context is identified under each cumulative impact analysis. The geographic context varies among topical impact areas because the geographic area that the impact may affect is different. For example, noise impacts generally only impact the local surrounding area because noise travels a relatively short distance while air quality impacts affect the whole air basin as wind currents control air flow and are not generally affected by natural or manmade barriers which would affect noise. Cumulative Project impacts are addressed and summarized below.

Method of Analysis

Although the environmental effects of an individual project may not be significant when that project is considered separately, the combined effects of several projects may be significant when considered collectively. CEQA Guidelines Section 15130 requires a reasonable analysis of a project's cumulative impacts, which are defined as "two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts." The cumulative impact that results from several closely related projects is: the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (CEQA Guidelines 15355[b]). Cumulative impact analysis may be less detailed than the analysis of the project's individual effects (CEQA Guidelines 15130[b]).

There are two approaches to identifying cumulative projects and the associated impacts. The list approach identifies individual projects known to be occurring or proposed in the surrounding area in order to identify potential cumulative impacts. The projection approach uses a summary of projections in adopted General Plans or related planning documents to identify potential cumulative

impacts. This EIR uses the projection approach, and the cumulative analysis is based off of buildout of the City of Tracy General Plan, as identified and analyzed in the General Plan EIR.

Project Assumptions

The proposed Project's contribution to environmental impacts under cumulative conditions is based on development of the Project site consistent with the development assumptions identified in Chapter 2.0, Project Description. See Chapter 2.0, Project Description, for a complete description of the proposed Project.

Cumulative Impacts

Some cumulative impacts for issue areas are not quantifiable and are therefore discussed in general, qualitative terms as they pertain to development patterns in the surrounding region. Exceptions to this are traffic, utilities, noise and air quality (the latter two of which are associated with traffic volumes and operations associated with the proposed land uses), which may be quantified by estimating future traffic patterns, pollutant emitters, etc. and determining the combined effects that may result. In consideration of the cumulative scenario described above, the proposed Project may result in the following cumulative impacts.

AESTHETICS AND VISUAL RESOURCES

The geographic context for aesthetics is the City of Tracy and surrounding areas of San Joaquin County.

Impact 4.1: Cumulative Damage to Scenic Resources within a State Scenic Highway (Less than Significant)

As described in Section 3.1, Aesthetics and Visual Resources, of the original Draft EIR (August 2024), only one highway section in San Joaquin County is listed as a Designated Scenic Highway by the Caltrans Scenic Highway Mapping System; the segment of I-580 from Interstate 5 to Interstate 205. This Designated Scenic Highway is located approximately 0.75 miles southwest of the Project site. The views from I-580 to the Project site are limited because of small hills, commercial buildings along I-580, and high speeds of travel. However, new development proposed by the Project in the viewsheds would have the potential to adversely affect a State-designated route.

Cumulative development in the city would not impact a State Scenic Highway. As such, impacts relative to scenic resources would be ***less than significant***.

Impact 4.2: Cumulative Degradation of the Existing Visual Character of the Region (Significant and Unavoidable and Cumulatively Considerable)

Project implementation would introduce an industrial warehouse use, as well as supporting infrastructure, into an area that is currently developed with one residence and associated support structures. The proposed Project would include visual components that would assist in enhancing the appearance of the site following site development. Landscaping improvements, such as new street trees and other vegetation landscaping, would be provided throughout the Project site, including along the site boundary. The landscape design and plant palette would complement the

existing street and building/development landscape character. A variety of types and sizes of trees and shrubs will be provided on site to the north, west, and south of the proposed warehouse building and parking lot. Additionally, the proposed Project would include landscaping buffer zones, pursuant to General Plan Policy OSC-2.2-P1, at the interface of urban development and farmland in order to minimize conflicts between the uses and provide a visual shield. Nevertheless, impacts related to degradation of the visual character of the site would be significant and unavoidable.

There would be two significant unavoidable visual quality impacts under the proposed General Plan for the Tracy Planning Area and under cumulative conditions in the region as a whole. Despite policies in the General Plan to preserve open space and agricultural lands and community character, policies in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) and the City's Agricultural Mitigation Fee Ordinance, development occurring within the City and its Sphere of Influence would result in a change in visual character from an agricultural appearance to a more urban appearance.

Under cumulative conditions, buildout of the General Plans for Tracy and the surrounding jurisdictions could result in changes to the visual character and quality of the City of Tracy through development of undeveloped areas and/or changes to the character of existing communities. Development of the proposed Project, in addition to other future projects in the area, would change the existing visual and scenic qualities of the City. It is noted that although the Project site is undeveloped and was previously used for agricultural uses, the General Plan designates the site for Industrial uses. Additionally, the surrounding areas to the north, east, south, and west are designated for urban uses (including mainly Industrial uses) by the General Plan. As such, the General Plan and associated EIR anticipated development of the Project area for similar uses as proposed by the Project.

Development within the City would be required to be consistent with the General Plan policies and City Municipal Code, both of which cover aesthetics and visual characteristics. Further, the Municipal Code contains development standards that address the visual character of a development project, such as building height, massing, setbacks, lighting, and landscaping. Although implementation of these requirements would reduce the impacts associated with development, the impacts would remain significant and unavoidable. As such, this is a ***significant and unavoidable*** impact, and the Project's contribution to this impact would be ***cumulatively considerable***.

Impact 4.3: Cumulative Impact on Light and Glare (Less than Significant)

Implementation of the proposed Project would introduce new sources of light and glare into the vacant Project site. Proposed Project lighting includes internal street lighting and exterior lighting around the eastern and southern walls of the warehouse throughout the Project site. Employee vehicle parking lot and truck and trailer parking areas would be illuminated with standard downward pointing lights affixed to a 25-foot light pole. Further, the site fixtures would be controlled by a lighting control panel with an astronomical time clock. The lighting fixtures would be designed to provide even light distribution and to reduce any light spillover onto neighboring rural properties. However, the LED lamps provide a higher level of perceived brightness with less energy than other lamps.

The City of Tracy Standard Plan #146 establishes street light standards, and requirements for light illumination to assist in reducing light impacts. Additionally, City of Tracy Standard Plan #141 establishes standards for lighting parking areas, requiring that illuminated parking facilities provide a minimum 1-foot candle. Further, Section 10.08.400 of the Municipal Code specifies that the site plan and architectural review package includes an exterior lighting standards and devices review Adherence to City of Tracy Standard Plan #140 and Section 10.08.400 of the Municipal Code of the City Municipal Code would ensure that excessively reflective building materials are not used, and that the proposed Project would not result in significant impacts related to daytime glare.

Future projects within Tracy, Lathrop, and San Joaquin County would be subject to the light and glare standards established by the individual jurisdictions. These regulations are designed to minimize potential light and glare impacts of new development. Implementation of these regulations would ensure that future projects minimize their potential light and glare impacts resulting in a ***less than significant*** cumulative impact relative to this environmental topic.

AGRICULTURAL RESOURCES

The geographic context for agriculture and forest resources is all of San Joaquin County. According to the Department of Conservation, the County had 784,800 acres of crop land in 2018, the majority of which is identified as Prime Farmland. The remaining agricultural land is comprised of Farmland of Statewide Importance (11 percent), Unique Farmland (11 percent), Farmland of Local Importance (9 percent), and Grazing Land (18 percent).

Impact 4.4: Cumulative Impact on Agricultural Resources (Less than Significant)

As described in Section 3.2, Agricultural Resources, of the original Draft EIR (August 2024), development of the proposed Project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Additionally, the proposed conversion of the Project site from agricultural to industrial uses is consistent with the City's overall planning vision, as the Tracy General Plan designates the Project site as Industrial, and therefore assumes the site would be developed with Industrial uses.

Further, the Project site is not under a Williamson Act contract. The Project site is zoned General Agriculture (AG-40) by San Joaquin County. The AG-40 zoning designation is established to preserve agricultural lands for the continuation of commercial agriculture enterprises. The San Joaquin County LAFCo would require the Project site to be pre-zoned by the City of Tracy in conjunction with the proposed annexation. The City's pre-zoning would include the following zoning designation: Light Industrial (M-1). The pre-zoning would go into effect upon annexation into the City of Tracy.

Tracy Municipal Code Chapter 13.28 establishes the City's Agricultural Mitigation Fee Program, which authorizes the collection of development impact fees to offset costs associated with the loss of productive agricultural lands converted for private urban uses. In addition to the City's agricultural mitigation fee program, the SJMSCP requires development to pay fees on a per-acre basis for impacts to agricultural lands that function as habitat for biological resources. SJCOG will then use these funds to purchase the conservation easements on agricultural and habitat lands in the Project vicinity. The compensation results in the purchase of conservation easements that are placed over

agricultural land. As such, the Project fees paid to SJCOG as administrator of the SJMSCP will result in the preservation of agricultural lands in perpetuity.

Future projects within Tracy, Lathrop, and San Joaquin County would be subject to the right to farm ordinances and agriculture-related procedures established by the individual jurisdictions. These regulations are designed to minimize impacts of new development on agricultural resources. Implementation of the Project would result in a ***less than significant*** cumulative impact relative to this environmental topic.

AIR QUALITY

The geographic context for air quality impacts is the San Joaquin Valley Air Basin (SJVAB), which consists of eight counties, stretching from Kern County in the south to San Joaquin County in the north. The SJVAB is bounded by the Sierra Nevada in the east, the Coast Ranges in the west, and the Tehachapi mountains in the south.

Impact 4.5: Cumulative Impact on the Region's Air Quality (Significant and Unavoidable)

Under buildout conditions in the San Joaquin County, the SJVAB would continue to experience increases in criteria pollutants and efforts to improve air quality throughout the basin would be hindered. As described in Section 3.3, San Joaquin County has a state designation of Nonattainment for ozone, PM_{10} and $PM_{2.5}$. Table 3.3-2 in Section 3.3 presents the State and Federal attainment status for San Joaquin County.

As discussed under Impact 3.3-1 in Section 3.3, the proposed Project is in conformance with the AQAP, based on these criteria, as follows:

- *Determination that an AQAP is being implemented in the area where the project is being proposed.*

The SJVAPCD has implemented the current, modified 2016 8-hour AQAP as approved by CARB and approved by USEPA for the 2008 8-hour O_3 standard.

- *The proposed project must be consistent with the growth assumptions of the applicable AQAP.*

The SJCOG RTP/SCS growth projections provide for future employment/population factors. The development of the SJVAPCD AQAP is based in part on the land use general plan projections of the various cities and counties that constitute the Air Basin. The City of Tracy General Plan Land Use Element designates the Project site as Industrial, which is intended to accommodate flex/office space, manufacturing, warehousing and distribution, and ancillary uses for workers' needs. Therefore, the proposed Project, which involves the development of light industrial, warehouse and distribution and related uses, is considered consistent with the site's General Plan land use designation and its traffic would be included in volumes projected for analysis of the General Plan. The SJVAPCD AQP is based on the growth assumptions of the City of Tracy General Plan and SJCOG

RTP/SCS. Since the Project is consistent with the SJCOG RTP/SCS, and SJCOG RTP/SCS projections are incorporated into the SIP, the Project is also consistent with the SIP.

- *The project must contain in its design all reasonably available and feasible air quality control measures.*

The Project incorporates various policy and rule-required implementation measures that would reduce related emissions, including all of the current Air District rules and regulations.[1] For example, the proposed Project would be required to implement Air District Rule 9510, which ensures that the Project would fulfill the Air District's emissions reduction commitments in the relevant PM_{10} and Ozone Attainment plans. In addition, the Project would comply with all applicable stationary source permitting rules implemented by SJVAPCD, which further confirms the Project would not cause or contribute to any ambient air quality standard exceedances.

As discussed in Impact 3.3-2, the proposed Project would not exceed the SJVAPCD thresholds of significance for construction or operational criteria pollutants. Additionally, as shown in Table 3.3-9, the proposed Project would not exceed the daily mass screening criteria thresholds during Project construction. Therefore, this impact would be less than significant.

Additionally, as discussed in Impact 3.3-3 of Section 3.3, implementation of the proposed project would not result in a significant increased exposure of sensitive receptors to localized concentrations of TACs, generate substantial exposure to Valley Fever, asbestos or lead-based paint, or create a CO hotspot. Further, the proposed Project does not propose uses that would create new odors that would adversely affect a substantial number of people. The proposed Project also does not introduce any new sensitive receptors. Therefore, operation of the proposed Project would not result in significant objectionable odors.

The increase in industrial square footage anticipated with buildout of the Project is generally consistent with growth projections assumed in the Tracy General Plan for the same time horizon. It is also noted that the proposed Project, as well as future projects in the City and County, will be subject to the requirements of the SJVAPCD. Nevertheless, based on the level of development assumed under the City's General Plan and General Plan EIR, cumulative impacts related to air quality, when considered alongside development projected for General Plan buildout, are anticipated to be ***significant and unavoidable***.

BIOLOGICAL RESOURCES

The geographic context for biological resources includes the Project site and the greater San Joaquin County region. Development associated with implementation of the local General Plan(s) would contribute to the ongoing loss of natural and agricultural lands in San Joaquin County, including the Project site. Cumulative development would result in the conversion of existing habitat to urban uses. The local General Plan(s), in addition to regional, State and federal regulations, includes

[1] See here for further detail: https://www.valleyair.org/rules/1ruleslist.htm

policies and measures that mitigate impacts to biological resources associated with General Plan buildout. Additionally, local land use authorities in San Joaquin County require development to participate in the SJMSCP, which is a habitat conservation plan and natural community conservation plan for San Joaquin County that provides a mechanism for compensatory mitigation for habitat and species loss in accordance with federal and State laws.

Impact 4.6: Cumulative Loss of Biological Resources Including Habitats and Special Status Species (Less than Significant)

Under cumulative conditions, buildout of the General Plan(s) within San Joaquin County will result in impacts to biological resources associated with new development. The General Plan(s) includes policies that are designed to minimize impacts to the extent feasible and the SJMSCP has been established to provide a mechanism for compensatory mitigation and standardized avoidance and minimization measures as needed.

As described in Section 3.4 Biological Resources, of the original Draft EIR (August 2024), construction in the Project site has the potential to result in impacts to special-status species in the region. The California Natural Diversity Database (CNDDB) currently contains records for San Joaquin kit fox, big tarplant, caper-fruited tropidocarpum, burrowing owl, and tricolored blackbird in the vicinity of the Project site. The Project site provides potential habitat for several species, including those discussed in Section 3.4 of the original Draft EIR (August 2024).

Mitigation Measure 3.4-1 requires participation with the SJMSCP, which includes the payment of fees that will be used to purchase conservation lands for a variety of special status species. The SJMSCP was created and adopted and addresses both the Project and cumulative impacts to biological resources, including special status species. The proposed Project will participate in the SJMSCP, including payment of fees and implementation of all Incidental Take Minimization Measures required by the SJCOG through the authorization of SJMSCP coverage.

The ongoing operational phase of the proposed Project requires discharge of stormwater into the City storm drainage system, which ultimately discharges into the Delta. The discharge of stormwater could result in indirect impacts to special status fish and wildlife if stormwater was not appropriately treated through BMPs prior to its discharge to the Delta. The Project is subject to the requirements of Chapter 11.34 of the Tracy Municipal Code – Stormwater Management and Discharge Control. This chapter is intended to assist in the protection and enhancement of the water quality of watercourses, water bodies, and wetlands in a manner pursuant to and consistent with the Federal Water Pollution Control Act (Clean Water Act, 33 USC Section 1251 et seq.), Porter- Cologne Water Quality Control Act (California Water Code Section 13000 et seq.) and National Pollutant Discharge Elimination System (“NPDES”) Permit No. CAS000004, as such permit is amended and/or renewed. The management of water quality through BMPs is intended to ensure that water quality does not degrade to levels that would interfere or impede fish or wildlife.

The Project would result in impacts to biological resources including habitats and special status species. The City has evaluated urban development in the Project area through the General Plan process, and subsequently determined that urban development in this location is appropriate. The proposed project, when considered alongside all past, present, and probable future projects

(inclusive of buildout of the various General Plans within San Joaquin County), would not be expected to cause any significant cumulative impacts. Implementation of the regulations contained in the SJMSCP and the various General Plans within San Joaquin County would ensure that future projects minimize their potential biological resources. For these reasons, cumulative impacts on the loss of biological resources are ***less than significant***.

CULTURAL AND TRIBAL RESOURCES

The geography of cultural resources impacts can be defined by region, by political subdivision or by the geography of the cultural resources present in an area, where sufficient inventory data is available to define it. The geographic context for cultural resources includes all of the San Joaquin County. There are extensive cultural sites located in the region.

Impact 4.7: Cumulative Impacts on Known and Undiscovered Cultural and Tribal Resources (Less than Significant)

Cumulative development anticipated in the City of Tracy, including growth projected by adopted future projects, may result in the discovery and removal of cultural resources, including archaeological, paleontological, historical, and Native American resources and human remains. As discussed in Section 3.5, Cultural and Tribal Resources, of the original Draft EIR (August 2024), four residences and six buildings used for livestock, processing, and storage are present in the southern half of the Project site, in addition to several small sheds and small animal shelters. Two connected dry ponds are present along the central eastern edge of the property. Aerial photograph summaries indicate that several residences and farm structures potentially date back as early as prior to 1940. As noted previously, one of the residences is abandoned and in need of ample maintenance, both structurally and aesthetically. One of the residences is currently occupied. All of the residences have been renovated and or remodeled multiple times over the decades. The architectural style of the residences are prevalent throughout the city and rural areas in the Central Valley.

Additionally, a California Historic Resources Information System (CHRIS) search was requested from the Central California Information Center (CCIC), which included the Project area and a one-half mile radius (CCIC File #12470L). The results of the CCIC records search indicated that the Project site does not contain any recorded buildings or structures listed on the State Office of Historic Preservation Historic Property Directory (which includes listings of the CRHR, California State Historical Landmarks, California State Points of Historical Interest, and the NRHP). The records search also noted that the General Land Office Survey Plat does not reference any historic features in the Project site.

Any previously unknown cultural resources which may be discovered during development of the proposed Project would be required to be preserved, either through preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. With implementation of the mitigation measures provided in Section 3.5 of the original Draft EIR (August 2024), the proposed Project is not anticipated to considerably contribute to a significant reduction in cultural resources in the region.

All future projects in the regional vicinity would be subject to their respective General Plans (i.e., City of Tracy, City of Lathrop, and San Joaquin County), each of which have policies and measures that are designed to ensure protection of undiscovered cultural resources. In addition, all discretionary projects in these jurisdictions would require environmental review per regulations established in CEQA. As such, impacts related to cultural resources would result in a ***less than significant***.

GEOLOGY AND SOILS

Impacts related to geology and soils are not inherently cumulative. Geology and soils concerns are related to risks, hazards or development constraints that are largely site-specific. However, seismic hazards are regional, and management of seismic hazards is vested with the local planning and building authority. For these reasons, the potential for cumulative geology and soils impacts are considered in the context of the City of Tracy and vicinity.

Impact 4.8: Cumulative Impact on Geologic and Soils Resources (Less than Significant)

As discussed in Section 3.6, Geology and Soils, of the original Draft EIR (August 2024), Geotechnical Review was prepared to review readily-available geotechnical and geologic information in order to identify potential geotechnical-related risks associated with the Project site. According to the Geotechnical Review, the proposed Project is geotechnically feasible and concerns related to ground rupture, ground shaking, liquefication, or landslides were not identified. The Project would be required to be constructed using standard engineering and seismic safety design techniques of the California Building Code, which would reduce any potential impact to a less than significant level. Additionally, the Geotechnical Review includes preliminary recommendations regarding clearing of existing buildings, building support and foundations, excavation, expansive soils, engineered fill, seasonal moisture, site drainage, and pavement design. However, mitigation measures provided in Section 3.6 of the original Draft EIR (August 2024) ensure impacts related to soil hazards will be less than significant.

Additionally, the nearest earthquake fault zoned as active by the CGS is the Black Butte Fault, located approximately 1.1 miles to the south of the Project site. However, this fault is not considered an active fault that would trigger evaluation under the Alquist-Priolo Earthquake Fault Zoning Act. While the City is not within an area known for its seismic activity, there will always be a potential for groundshaking caused by seismic activity anywhere in California, including the Project site. In order to minimize potential damage to the buildings and site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Code. Additionally, the Project would be required to comply with Mitigation Measure 3.6-1, which requires a final geotechnical evaluation be prepared and design recommendations identified to address any soil conditions within the Project site. Design in accordance with the Building Code and final geotechnical evaluation would reduce any potential impact to a less than significant level.

Geologic and soils impacts tend to be site-specific and Project-specific. With the mitigation measure presented in Section 3.6 of the original Draft EIR (August 2024), implementation of the proposed

Project would not result in increased risks or hazards related to geologic conditions in the cumulative area, nor would it result in any off-site or indirect impacts. Overall, impacts related to geologic and soil resources would result in a ***less than significant***.

GREENHOUSE GASES, CLIMATE CHANGE AND ENERGY

As the California Supreme Court has reasoned, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself. The challenge for CEQA purposes is to determine whether the impact of the project's emissions of greenhouse gases is cumulatively considerable, in the sense that 'the incremental effects of [the] individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.'" (*Center for Biological Diversity v. California Department of Fish and Wildlife* (2015) 62 Cal.4th 204, 219.) "'With respect to climate change, an individual project's emissions will most likely not have any appreciable impact on the global problem by themselves, but they will contribute to the significant cumulative impact caused by greenhouse gas emissions from other sources around the globe. The question therefore becomes whether the project's incremental addition of greenhouse gases is "cumulatively considerable" in light of the global problem, and thus significant.'" (*Ibid*.)

The geographic context for greenhouse gas (GHG) emissions and climate change impacts for this analysis is San Joaquin County, which is the boundary for the California Air Resources Board's (CARB) regional greenhouse gas emissions reduction targets.

Impact 4.9: Cumulative Impact on Climate Change from Increased Project-Related Greenhouse Gas Emissions and Energy (Less than Significant)

GHG emissions from a single Project will not cause global climate change; however, GHG emission from multiple projects throughout a region or state could result in a cumulative impact with respect to global climate change.

The California Legislature has enacted a series of statutes in recent years addressing the need to reduce GHG emissions across the State. These statutes can be categorized into four broad categories: (i) statutes setting numerical statewide targets for GHG reductions, and authorizing CARB to enact regulations to achieve such targets; (ii) statutes setting separate targets for increasing the use of renewable energy for the generation of electricity throughout the State; (iii) statutes addressing the carbon intensity of vehicle fuels, which prompted the adoption of regulations by CARB; and (iv) statutes intended to facilitate land use planning consistent with statewide climate objectives.

Between AB 32 (2006) and SB 32 (2016), the Legislature has codified some of the ambitious GHG reduction targets included within certain high-profile State Executive Orders issued by the last two Governors. The 2020 statewide GHG reduction target in AB 32 was consistent with the second of three statewide emissions reduction targets set forth in former Governor Arnold Schwarzenegger's 2005 Executive Order known as S-3-05, which is expressly mentioned in AB 32. (See Health & Safety Code Section 38501, subd. (i).) That Executive Branch document included the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG

emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. To meet the targets, the Governor directed several State agencies to cooperate in the development of a climate action plan. The Secretary of Cal-EPA leads the Climate Action Team, whose goal is to implement global warming emission reduction programs identified in the Climate Action Plan and to report on the progress made toward meeting the emission reduction targets established in the executive order.

In 2015, Governor Jerry Brown issued Executive Order, B-30-15, which created a "new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 is established in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050." SB 32 codified this target.

In 2018, the Governor issued Executive Order B-55-18, which established a statewide goal to "achieve carbon neutrality as soon as possible, and no later than 2045, and maintain and achieve negative emissions thereafter." The order directs CARB to work with other State agencies to identify and recommend measures to achieve those goals.

Notably, the Legislature has not yet set a 2045 or 2050 target in the manner done for 2020 and 2030 through AB 32 and SB 32, though references to a 2050 target can be found in statutes outside the Health and Safety Code. Senate Bill 350 (Stats. 2015, ch. 547) added to the Public Utilities Code language that essentially puts into statute the 2050 GHG reduction target already identified in Executive Order S-3-05, albeit in the limited context of new state policies (i) increasing the overall share of electricity that must be produced through renewable energy sources and (ii) directing certain State agencies to begin planning for the widespread electrification of the California vehicle fleet. Section 740.12(a)(1)(D) of the Public Utilities Code now states that "[t]he Legislature finds and declares [that] … [r]educing emissions of [GHGs] to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050 will require widespread transportation electrification." Furthermore, Section 740.12(b) now states that the California Public Utilities Commission (PUC), in consultation with CARB and the California Energy Commission (CEC), must "direct electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to reduce dependence on petroleum, meet air quality standards, and reduce emissions of greenhouse gases to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050."

As presented in Table 3.7-2 in Section 3.7, short-term construction emissions of GHGs are estimated to be 2,814 MT CO_2e during Project operation, and a maximum of 498 MT CO_2e annual GHG emissions during Project construction. It should be noted that CalEEMod does not account for Governor Newsom's Zero-Emission by 2035 Executive Order (N-79-20), which requires that all new cars and passenger trucks sold in California be zero-emission vehicles by 2035. This is anticipated to substantially reduce the operational emissions associated with passenger vehicles (i.e. mobile emissions) over time. The operational emissions results provided in Table 3.7-2 are likely an overestimate for mobile emissions, given the state's ongoing effort to increase electric vehicles and trucks.

The proposed Project would be consistent with all relevant plans, policies, and regulations associated with GHGs, including the 2022 Scoping Plan, and the SJCOG's 2022 RTP/SCS. Taking into account the proposed Project's emissions, and the progress being made by the State toward reducing emissions in key sectors such as transportation, industry, and electricity, the Project would be consistent with State GHG Plans and would further the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050, and does not obstruct their attainment. Moreover, the proposed Project would comply with all existing energy standards and would not be expected to result in significant adverse impacts on energy resources. Therefore, a ***less than significant*** cumulative impact relative to this environmental topic would result.

HAZARDS AND HAZARDOUS MATERIALS

The geographic context for the analysis of cumulative hazards and human health impacts is San Joaquin County, including all cumulative growth therein, as represented by full implementation of each respective General Plan (i.e., Stockton, Lathrop, and San Joaquin County). As discussed in Section 3.8, Hazards and Hazardous Materials, of the original Draft EIR (August 2024), implementation of the proposed Project would not result in any significant impacts related to this environmental topic with the implementation of the mitigation measures provided in Section 3.8 of the original Draft EIR (August 2024).

Impact 4.10: Cumulative Impact Related to Hazards and Hazardous Materials (Less than Significant)

The Project is not proposing the use of any hazardous materials. In the event that hazardous materials are discovered during construction, a Soils Management Plan (SMP) will need to be submitted and approved by the San Joaquin County Department of Environmental Health, as required by Mitigation Measure 3.8-1. Any operations that involve the use of hazardous materials would be required to have the hazardous material transported, stored, used, and disposed of in compliance with local, state, and federal regulations. To further ensure the safety of employees, and reduce the potential for accidental release of hazardous materials into the environment, the applicant must submit a HMBP to San Joaquin County Department of Environmental Health (CUPA) for review and approval prior to bringing hazardous materials onsite, as required by Mitigation Measure 3.8-2.

Additionally, development of the Project would involve site grading, excavation for utilities, trenching, backfilling, and the construction of proposed facilities that could result in the exposure of construction workers and the general public to hazardous materials. Like most agricultural and farming operations in the Central Valley, agricultural practices in the area have used agricultural chemicals including pesticides and herbicides as a standard practice. Continuous spraying of crops over many years can potentially result in a residual buildup of pesticides, in farm soils. Of highest concern relative to agrichemicals are chlorinated herbicides, organophosphate pesticides, and organochlorine pesticides (OCPs), such as such as Mecoprop (MCPP), Dinoseb, chlordane, dichloro-diphenyltrichloroethane (DDT), and dichloro-diphenyl-dichloroethylene (DDE). Mitigation Measure 3.8-3 requires site-specific soil sampling to determine if chemicals of potential concern associated

with the historical agricultural uses at the Project site are present in shallow soil at concentrations that would pose a threat to human health.

As part of the Phase I Environmental Site Assessment (ESA) completed for the Project, debris and septic systems were identified on-site. Mitigation Measure 3.8-4 requires that the on-site septic systems be abandoned and removed. Mitigation Measure 3.8-5 requires that all debris/miscellaneous nonhazardous solid waste observed at the site be collected and disposed at an appropriate Solid Waste/Landfill facility.

Further, buildout of the Project would involve the demolition of the on-site structures, which were originally constructed in 1972. Given the age of the structures, it is likely that asbestos containing building materials and lead-based paints were used in the construction and/or maintenance of the on-site structures. The potential exists for construction workers to be exposed to these hazardous materials. Pursuant to federal (NESHAP), state (8 CCR 1529), and county (SJVAPCD rule 4002) regulations, all suspect asbestos-containing materials would either be presumed to contain asbestos or adequate rebuttal sampling would be conducted by an accredited building inspector prior to demolition. Demolition contractors would be required to follow applicable regulations and guidelines set forth by federal, state, and county regulations. Prior to demolition and/or renovation of structures within the Project, asbestos-containing building material and lead-based paint surveys should be conducted, as required by Mitigation Measure 3.8-6. If hazardous materials are determined to be present at concentrations exceeding applicable ESLs, appropriate remediation would need to be implemented in coordination with the San Joaquin County Environmental Health Department. Lastly, should any on-site water wells be located on-site, Mitigation Measure 3.8-7 requires proper well abandonment measures to be completed under permit and inspection by the San Joaquin County Environmental Health Department.

The proposed Project, in conjunction with cumulative development in the region, would include areas designated for a variety of urban, agricultural, and open space uses as defined by the City's General Plan. Cumulative development would include continued operation of, or development of, new facilities as allowed under each land use designation. New development would inevitably increase the use of hazardous materials within the region, resulting in potential health and safety effects related to hazardous materials use. For the most part, potential impacts associated with new and future development would be confined to commercial and industrial areas and would not involve the use of hazardous substances in large quantities or that would be particularly hazardous. Incidents, if any, would typically be site specific and would involve accidental spills or inadvertent releases. Associated health and safety risks would generally be limited to those individuals using the materials or to persons in the immediate vicinity of the materials and would not combine with similar effects elsewhere (i.e., construction workers), as hazard-related impacts tend to be site-specific and Project-specific.

Implementation of the proposed Project, in combination with and past, present, and probable future projects, would not result in significant increased risks of hazards in the cumulative area, nor would it result in any significant off-site or indirect impacts. Mitigation measures have been included to reduce the risk of on-site hazards associated with the use of on-site hazardous materials. For these

reasons, cumulative impacts associated with hazards and hazardous materials would be ***less than significant***.

NOISE

The geographic context for noise impacts consists of the existing and future noise sources that could affect the Project site or surrounding uses.

Impact 4.11: Cumulative Exposure of Existing Noise-Sensitive Land Uses to Increased Noise Resulting from Cumulative Development (Less than Significant)

Noise generated by construction would be temporary, and would not add to the permanent noise environment or be considered as part of the cumulative context. The total noise impact of the proposed Project would be fairly small and would not be a substantial increase to the existing future noise environment. Thus, the proposed Project would result in a less-than-significant cumulative impact.

Operational Noise: Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways and on-site activities resulting from operation of the proposed Project. The primary non-transportation noise sources associated with the proposed Project are on-site parking lot circulation and the loading docks. Table 3.9-9 in Section 3.9, Noise, of the original Draft EIR (August 2024) shows cumulative traffic noise levels with and without the proposed Project. As shown, cumulative traffic noise increases would not be significant.

Figure 3.9-2 shows the results of this analysis for the site layout in terms of the peak hour average (Leq). Due to the nature of loading dock operation and parking lot circulation, the maximum noise levels are the same for both daytime and nighttime. Figure 3.9-3 shows the results of this analysis in terms of the peak hour maximum noise levels (Lmax). As shown on Figures 3.9-2 and 3.9-3, the Project noise level contours exceeding the City of Tracy of County of San Joaquin noise level standards do not reach these residential uses. Operational noise levels of the proposed project comply with the applicable standards at these residences.

As shown on Figures 3.9-2 to 3.9-3, the Project noise level contours exceeding the City of Tracy of County of San Joaquin noise level standards do not reach these residential uses. Operational noise levels of the proposed project comply with the applicable standards at these residences. For these reasons, implementation of the proposed project would have a ***less than significant*** cumulative impact on operational noise

Construction Noise: Noise generated by construction would be temporary, and would not add to the permanent noise environment or be considered as part of the cumulative context. Compliance with the City's permissible hours of construction, as well as implementing the best management noise reduction techniques and practices (both outlined in Mitigation Measure 3.9-1), would ensure that construction noise would not result in a substantial temporary increase in ambient noise levels that would result in annoyance or sleep disturbance of nearby sensitive receptors.

The proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within the County), would not be expected to

cause any significant cumulative construction noise impacts. The proposed Project would not have cumulatively considerable impacts associated with construction noise. Implementation of the proposed project would have a ***less than significant*** cumulative impact on construction noise.

Cumulative Conclusion: The operational noise from the proposed Project is not expected to produce noise levels that would exceed City or County standards. Consequently, the total noise impact of the proposed Project would not be a substantial increase to the future noise environment. Consequently, the proposed project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within the County), would be expected to cause ***less than significant*** impact associated with noise.

TRANSPORTATION AND CIRCULATION

The geographic context for this analysis includes the City of Tracy Sphere of Influence (SOI) and nearby areas of San Joaquin County. The analysis models the overall change in vehicle-miles-traveled (VMT) in Tracy as a result of forecast development, with the addition of the proposed Project. The intent is to understand how the proposed Project will influence travel behavior in light of future conditions, and to identify possible significant future impacts.

Impact 4.12: Under Cumulative conditions, the proposed Project would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) (Significant and Unavoidable and Cumulatively Considerable)

The proposed warehouse building was evaluated using the City of Tracy Draft VMT Policy Calculator. For the surrounding industrial land use area, the City's draft threshold is 9.4 VMT per employee. The proposed project is estimated to generate 25 VMT per employee. Per California Governor's Office of Planning and Research (OPR) guidance, the VMT analysis excludes truck trips. As a result, the proposed Project would exceed the threshold by 166% (Kimley Horn, 2022).

The City's Draft VMT Mitigation Banking Fee Program calculates the cost per one VMT reduction as $633.11. However, the VMT Mitigation Banking Fee Program has not yet been finalized and adopted by the City; accordingly, the applicable fee would be the amount provided for under the Mitigation Banking Fee Program adopted by the City Council and effective at the time the applicant obtains building permits. Since it is unknown if the Mitigation Banking Fee Program will be adopted at the time the proposed Project applies for building permits, two VMT mitigation options are outlined in Section 3.10 of the original Draft EIR (August 2024).

Mitigation Measure 3.10-1, which requires TDM strategies, would be required. Implementation of Mitigation Measure 3.10-1 is feasible because it is within the applicant's purview to implement and the TDM measures have been found effective in previous academic studies. However, the precise effectiveness of specific TDM strategies can be difficult to accurately measure due to a number of external factors such as employee responses to strategies and changes to technology.

As part of Mitigation Measure 3.13-1, the proposed Project would be required to monitor and evaluate the effectiveness of the Project's TDM Plan and provide the results to the City of Tracy.

Based on the results of the evaluation, modifications to the TDM Plan may be required by the City in order to improve effectiveness toward achieving the home-based work VMT per worker target.

In order for a specific project to have a less than significant impact related to VMT, the project must demonstrate that per capita VMT would be 15 percent below the regional average. Because future development would likely be equal to the regional average, or above average (or less than average but not fully 15 percent less than average), impacts relate to VMT would be ***significant and unavoidable***. Exceptions to this would be infill projects, or small projects which include VMT reducing strategies. Due to the size of the Project and the fact that the Project exceeds the City threshold by 166 percent, the incremental contribution to this cumulative VMT impact would be ***cumulatively considerable***.

Impact 4.13: Under Cumulative conditions, the proposed Project would not adversely affect pedestrian, bicycle, or transit facilities (Less than Significant)

Implementation of the proposed Project would not result in a conflict with an existing or planned pedestrian facility, bicycle facility, or transit service/facility. In addition, the Project would not interfere with the implementation of a planned bicycle facility, pedestrian facility, or transit service/facility. The Project would not cause a degradation in transit service such that service does not meet performance standards established by the transit operator.

The proposed Project, when considered alongside all past, present, and probable future projects (inclusive of buildout of the various General Plans within San Joaquin County), would not be expected to cause any significant cumulative pedestrian or bicycle facilities impacts. The proposed Project would not have cumulatively considerable impacts associated with pedestrian or bicycle facilities. Implementation of the proposed Project, in combination with and past, present, and probable future projects, would have a ***less than significant*** impact relative to this topic.

UTILITIES AND SERVICE SYSTEMS

The cumulative context includes all areas covered in the service areas of the City's wastewater system, water system, stormwater system, and the solid waste collection and disposal services. Under General Plan buildout conditions, the City would see an increased demand for water service, sewer service, solid waste disposal services, and stormwater infrastructure needs.

Impact 4.14: Cumulative Impact on Wastewater Utilities (Less than Significant)

The City of Tracy's wastewater collection system consists of gravity sewer lines, pump stations and the Wastewater Treatment Plant (WWTP). The NPDES permit for the Tracy WWTP was adopted in May 2007 with proposed amendments initiated in 2008 and 2010. Treated wastewater from the Tracy WWTP is discharged to Old River under Order No. R5-2007-0036 (NPDES No. CA0079154). Because, in the opinion of the Water Board, there is a potential impact to groundwater at the facility, the Tracy WWTP's industrial pretreatment ponds, industrial holding ponds, sludge drying beds, and biosolids storage areas of the facility are regulated by separate waste discharge requirements as defined in Order No. R5-2007-0038. The NPDES permit CA 0079154 allows for discharge of 10.8 million gallons per day (mgd) and up to 16 mgd if applicable treatment facilities are constructed. The

WWTP provides disinfected tertiary level treatment meeting Title 22 requirements of the Code of Regulations from the State Water Resource Control Board. The WWTP includes primary clarifiers, activated sludge, secondary clarifiers, flocculation, tertiary filtration, and disinfection.

The City of Tracy's wastewater treatment system is currently in compliance with the WDR requirements of Order No. R5-2007-0036 NPDES NO. CA0079154. The wastewater treatment system options covered under this Order include: City of Tracy WWTP including the collection system, basin/disposal fields, discharge to the Old River, and recycling conveyance and irrigation system. The development of the proposed Project under this permitted option would not exceed the wastewater discharge requirements in this Order as described under Impact 3.11-1 in Section 3.11 of the original Draft EIR (August 2024).

The overall collection sewer strategy for the City of Tracy, including the proposed Project, consists of a combination trunk sewer gravity collection system with pump or lift stations located along the collection system to convey wastewater to an influent pump station located at the City WWTP.

New wastewater collection and conveyance infrastructure needed for the proposed Project would require trenching/excavation of earth, and placement of pipe within the trenches at specific locations, elevations, and gradients. All wastewater utility improvements would be within the Development Area or on land currently developed with roadways (i.e., Hansen Road and Schulte Road), the impacts of which are discussed throughout this EIR.

The average dry weather flow (ADWF) for the proposed Project was calculated based on the wastewater generation factors adopted in the 2012 Wastewater Master Plan. As shown in the Sewer Collection System Hydraulic Capacity Analysis completed for the Project (Appendix I of the original Draft EIR [August 2024]), the total ADWF for the proposed Project is approximately 22,092 gallons per day (gpd) (or 0.02 mgd) based on a wastewater generation factor of 1,056 gpd/gross acre for the industrial land use designation. The wastewater would be treated at the WWTP, which has an ADWF design capacity of 10.8 mgd. Additionally, the City is in the process of constructing a Project to increase the capacity of the WWTP to manage growth in the future. Based on the Sewer Collection System Hydraulic Capacity Analysis completed for the proposed Project, the existing WWTP has the capacity to treat and dispose of the proposed 0.02 mgd increase in flows from the proposed project. As part of the City's Project review and approval process, the Engineering Division confirms that sewer capacity to accommodate a project is adequate prior to project approval.

The Project by itself does not exceed the existing capacity of the wastewater treatment plant. The Project and any future cumulative projects would be required to secure adequate wastewater treatment capacity/allocation prior to occupancy of any building which would require wastewater treatment services. Implementation of the proposed Project, in combination with and past, present, and probable future projects, would have a ***less than significant*** impact relative to this topic.

Impact 4.15: Cumulative Impact on Water Utilities (Less than Significant)

The provision of public services and the construction of onsite infrastructure improvements will be required to accommodate the development of the proposed Project. Water distribution will be by an underground distribution system to be installed as per the City of Tracy standards and

specifications. The proposed Project would require extension of offsite water conveyance infrastructure to the Project site for potable water and irrigation water. All offsite water utility improvements will be in or adjacent to existing roadways along the perimeter of the Project site, thereby limiting any potential impact to areas that were not already disturbed.

Projected water demands for buildout of the Proposed Project total approximately 32.2 acre-feet per year (AFY) of which about approximately 23.1 AFY is industrial demand, approximately 6.0 AFY is irrigation demand, and approximately 3.1 AFY of unaccounted-for water. The Hydraulic Evaluation completed for the proposed Project demonstrates that the City's existing and available potable water supplies are sufficient to meet the City's existing and projected future potable water demands to the year 2040 under all hydrologic conditions. Implementation of the proposed Project would have a ***less than significant*** and ***less than cumulatively considerable*** impact relative to this topic.

Impact 4.16: Cumulative Impact on Stormwater Facilities (Less than Significant)

Because the proposed project increases impervious surface area from an existing undeveloped and predominately previous site, the Project site could increase runoff significantly, Project impacts to stormwater are considered potentially significant. Onsite storm drainage would be installed to serve the proposed Project. Development of the proposed Project would include construction of a new storm drainage system, including a drainage collection system, and detention basins. All on-site storm drainage runoff will be collected through drain inlets and catch basins along the streets, and conveyed via surface swales and underground trunk lines to detention and water quality basins. The storm water drainage detention basins will be constructed to meet the City of Tracy Standards. Discharge from the basins will be conveyed through controlled flow pumping facilities to existing City of Tracy and main storm drain laterals.

Installation of the Project's storm drainage system will be subject to current City of Tracy Design Specifications and Standards. The proposed storm drainage collection and detention system will be subject to the SWRCB and City of Tracy regulations, including: Tracy Storm Drain Master Plan, 2012; Phase II, NPDES Permit Requirements; NPDES-MS4 Permit Requirements; and LID Guidelines.

The potential environmental effects resulting from construction of the storm drainage system are analyzed throughout this Draft EIR, and in some cases, there are potentially significant impacts associated with construction of this infrastructure. Where impacts are identified for each environmental topic, mitigation measures are developed to avoid, minimize, or compensate for the impact to the extent practicable. All mitigation measures presented throughout this EIR will be implemented to reduce impacts to the extent practicable. There will not be any significant impacts beyond what is disclosed in the other chapters of this document. Implementation of the proposed Project, in combination with and past, present, and probable future projects, would have a ***less than significant*** impact relative to this topic.

4.2 SIGNIFICANT IRREVERSIBLE EFFECTS

LEGAL CONSIDERATIONS

CEQA Section 15126.2(c) and Public Resources Code Sections 21100(b)(2) and 21100.1(a), require that the EIR include a discussion of significant irreversible environmental changes which would be involved in the proposed action should it be implemented. Irreversible environmental effects are described as:

- The project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of a project would generally commit future generations to similar uses (e.g., a highway provides access to previously remote area);
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing of the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Determining whether the proposed Project would result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed such that there would be little possibility of restoring them. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Analysis

Implementation of the proposed Project would result in the conversion of the approximately 20.92-acre Development Area, which is comprised of vacant land previously used for agricultural purposes as well as residential uses in the southern portion of the site for the development of industrial uses. Development of the proposed Project would constitute a long-term commitment to these uses. It is unlikely that circumstances would arise that would justify the return of the land to its previous condition as agricultural or vacant rural land.

A variety of resources, including land, energy, water, construction materials, and human resources would be irretrievably committed for the initial construction, infrastructure installation and connection to existing utilities, and its continued maintenance. Construction of the proposed Project would require the commitment of a variety of other non-renewable or slowly renewable natural resources such as lumber and other forest products, sand and gravel, asphalt, petrochemicals, and metals.

Additionally, a variety of resources would be committed to the ongoing operation and life of the proposed Project. The introduction of an industrial use to the Project site will result in an increase in area traffic over existing conditions. Fossil fuels are the principal source of energy and the proposed Project will increase consumption of available supplies, including gasoline and diesel. These energy resource demands relate to initial Project construction, Project operation and site maintenance and the transport of people and goods to and from the Project site.

4.3 SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(b) requires an EIR to discuss unavoidable significant environmental effects, including those that can be mitigated but not reduced to a level of insignificance. The following significant and unavoidable impacts of the proposed Project are discussed in Sections 3.1 through 3.10 and previously in this chapter (cumulative-level). Refer to those discussions for further details and analysis of the significant and unavoidable impact identified below:

- Impact 3.1-1: Project implementation may result in substantial adverse effects on scenic vistas;
- Impact 3.10-1: Project implementation may conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- Impact 4.2: Cumulative Degradation of the Existing Visual Character of the Region;
- Impact 4.5: Cumulative Impact on the Region's Air Quality; and
- Impact 4.12: Under Cumulative conditions, the proposed Project would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

4.4 GROWTH-INDUCING IMPACTS

Section 15126.2(d) of the CEQA Guidelines requires an EIR to "discuss the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth..." In general terms, a project may result in a significant growth inducing impact if it individually or cumulatively with other projects results in any of the actions described in the following examples:

- The project removes an obstacle to growth, such as: the establishment of an essential public service, the provision of new access to an area, or a change in zoning or general plan designation.
- The project results in economic expansion, population growth or the construction of additional housing occurs in the surrounding environment in response to the project, either directly or indirectly.

Existing storm drain, sewer, water, and gas lines/pipes are currently located along Schulte Road and Hansen Road. The Project would be served by existing sewer, water and other utility services that have been established on the Project site and in the Project area. Site access would be provided by two new driveways: one from the southwest, off of Hansen Road; and one from the north, off of West Schulte Road. The project would also involve improvements to Hansen Road adjacent to the Project site, including roadway resurfacing improvements and construction of an interim driveway access to the site off Hansen Road. In the future, the City may construct a roundabout at the southwestern site access point. Overall, the proposed Project would not require an extension of public services that have the potential to result in or facilitate unplanned growth in the Project area.

The proposed Project would provide employment opportunities for City and County residents on a site that has been planned for industrial development by the City of Tracy General Plan and associated EIR. Overall, the additional industrial uses in the City would not have the long-term effect of inducing population growth.

The Project would result in an increase in employment opportunities by creating full-time job positions. The Project would also generate short-term construction employment opportunities, but these opportunities would not result in substantial population growth in the project region. Therefore, the proposed Project would not result in significant growth inducing impacts.

APPENDIX A

Plan Set

NEW WAREHOUSE BUILDING

16286 W SCHULTE RD

TRACY, CA 95377

DEVELOPMENT REVIEW

PROJECT DIRECTORY

CLIENT: PANATTONI DEVELOPMENT COMPANY, INC.
400 CAPITOL MALL, SUITE 2040
SACRAMENTO, CA 95814
TEL: (916) 379-1109
EMAIL: AWERTHEIM@PANATTONI.COM
CONTACT: ABBIE WERTHEIM

ARCHITECT: VITAE ARCHITECTURE PLANNING INTERIORS
555 CAPITOL MALL, SUITE 255
SACRAMENTO, CA 95814
TEL: (916) 921-6584
EMAIL: BKOON@VITAEARCHITECTURE.COM
CONTACT: BRENDAN KOON

CIVIL ENGINEER: SIEGRFRIED ENGINEERING, INC.
3428 BROOKSIDE ROAD
STOCKTON, CA 95219
TEL: (209)337-7717
EMAIL: AMERRILL@SIEGFRIEDENG.COM
CONTACT: ADAM MERRILL

LANDSCAPE ARCHITECT: SIEGRFRIED ENGINEERING, INC.
3428 BROOKSIDE ROAD
STOCKTON, CA 95219
TEL: (209)337-7717
EMAIL: AMERRILL@SIEGFRIEDENG.COM
CONTACT: ADAM MERRILL

ELECTRICAL ENGINEER: LP CONSULTING ENGINEERS, INC.
1209 PLEASANT GROVE BLVD.
ROSEVILLE, CA 95678
TEL: (916)721-2916
EMAIL: SBOGEN@LPENGINEERS.COM
CONTACT: SAMUEL BOGEN

SHEET INDEX

ARCHITECTURAL:

A0.01	TITLE SHEET
A0.02	SITE PHOTOGRAPHS, AERIAL PHOTO & LOCATION/ LAND USE MAP
A1.01	OVERALL SITE PLAN
A1.02	ENLARGED SITE PLAN
A1.03	ENLARGED SITE PLAN
A1.04	ENLARGED SITE PLAN
A1.05	ENLARGED SITE PLAN
A2.01	OVERALL FLOOR PLAN
A2.02	ENLARGED FLOOR PLAN
A2.03	ENLARGED FLOOR PLAN
A2.04	ENLARGED FLOOR PLAN
A2.05	ENLARGED FLOOR PLAN
A3.01	EXTERIOR ELEVATIONS
A6.01	CROSS SECTIONS
A10.01	RENDERINGS

CIVIL:

C1.0	COVER SHEET
C2.0	EXISTING TOPOGRAPHY & DEMOLITION PLAN
C3.0	PAVING & DIMENSIONING PLAN
C3.1	W. SCHULTE RD. CROSS SECTIONS
C3.2	HANSEN RD. CROSS SECTIONS
C4.0	GRADING PLAN
C5.0	UTILITY PLAN

LANDSCAPE:

L2.0	TREE PLAN
L2.1	SHRUB AND GROUNDCOVER PLAN
L2.2	LANDSCAPE CALCULATIONS

ELECTRICAL:

E1.0	SITE LIGHTING PLAN
E1.1	SITE LIGHTING PHOTOMETRIC PLAN

ARCHITECTURE PLANNING INTERIORS
VITAE ©
555 Capitol Mall, Suite 255, Sacramento, CA 95814 916/921.6584

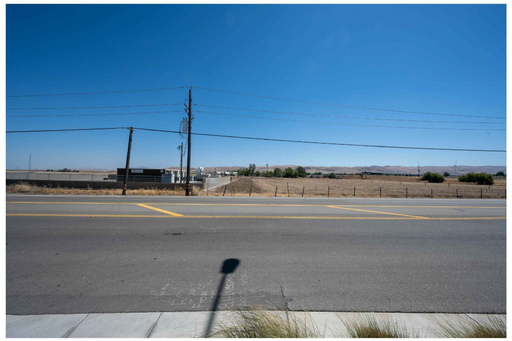
PANATTONI®

NEW WAREHOUSE BUILDING
16286 W SCHULTE RD
TRACY, CA 95377

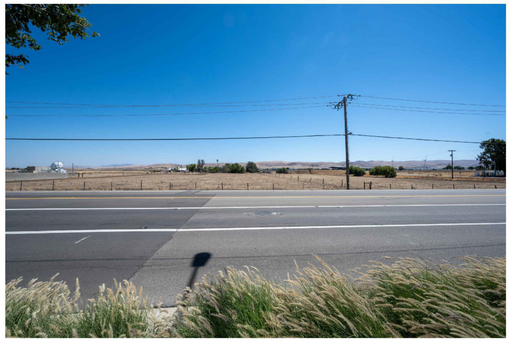
JOB NO.	221111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

TITLE SHEET

A 0.01

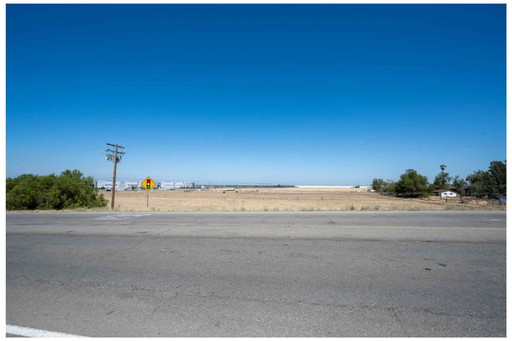


A



B

C



D

E

F

G

H

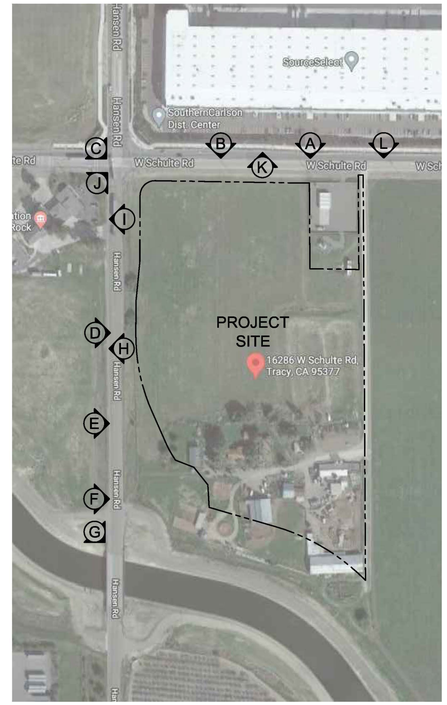
I

J

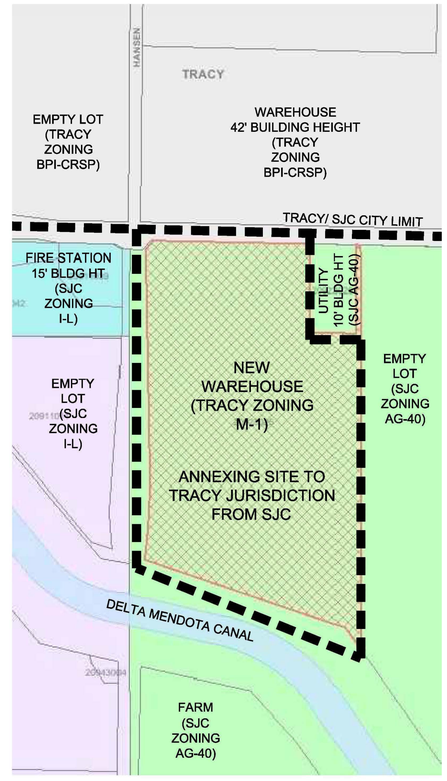
K

L

KEY PLAN / AERIAL PHOTO - NTS



LOCATION / LAND USE MAP - NTS



ARCHITECTURE
PLANNING
INTERIORS
VITAE ©

555 Capitol Mall, Suite 255, Sacramento, CA 95814 916.921.6584

PANATTONI®

NEW WAREHOUSE BUILDING

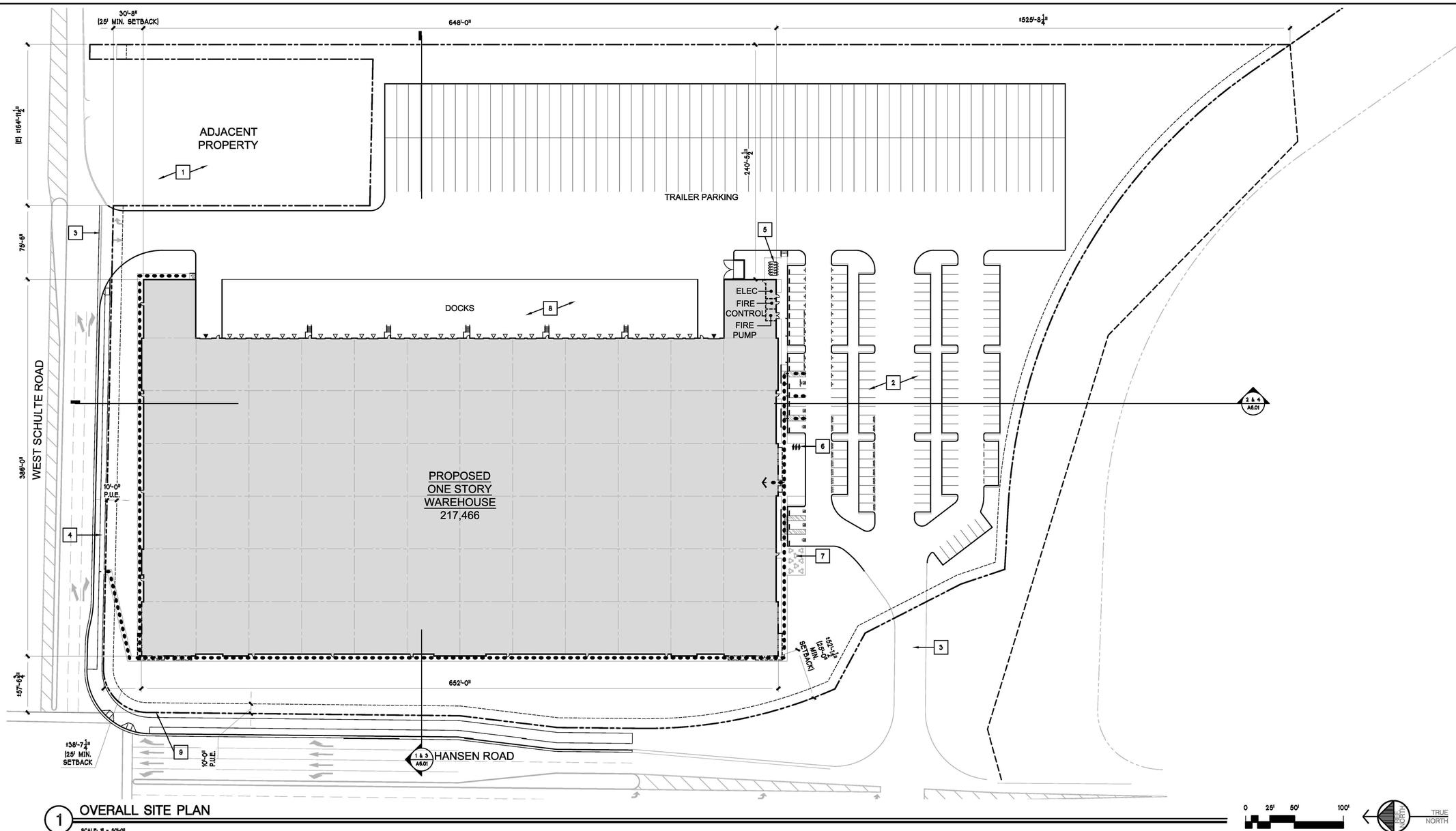
16286 W SCHULTE RD
TRACY, CA 95377

JOB NO.	221111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

SITE PHOTOGRAPHS, AERIAL PHOTO & LOCATION/ LAND USE MAP

A 0.02

XREFS: D 24X36



1 OVERALL SITE PLAN

SCALE: 1" = 50'-0"

KEYNOTES

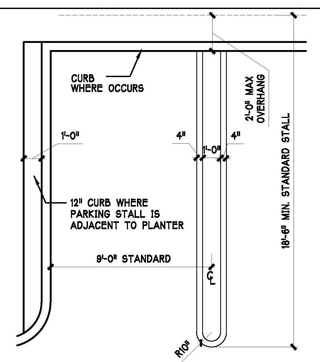
1. [E] ADJACENT UTILITY BUILDING & CMU FENCE.
2. OFF-STREET CAR PARKING.
3. DRIVEWAY.
4. SIDEWALK.
5. (5) BICYCLE LOCKERS (2 STALLS EACH - 10 TOTAL STALLS).
6. (3) BICYCLE RACKS (2 STALLS EACH = 6 TOTAL SALLS).
7. OUTDOOR EMPLOYEE BREAK AREA W/ TABLES (W/ UMBRELLAS) & CHAIRS.
8. DOCK SIDE OF BUILDING UTILIZED AS AERIAL APPARATUS ACCESS ROAD. GRADES LESS THAN 10% AT DOCKS AND GRADE LEVEL DOORS - SEE CIVIL DRAWINGS.
9. PROPOSED PROPERTY LINE.

LEGEND

PROPERTY LINE

ACCESSIBLE PATH OF TRAVEL TO HAVE A CONTINUOUS SURFACE, NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/2" AND SHALL BE A MINIMUM OF 48" IN WIDTH PER CBC CHAPTER 11 DIVISION 4. ACCESSIBLE ROUTES OF TRAVEL WHERE NECESSARY TO CHANGE ELEVATION AT A SLOPE EXCEEDING 1:20 SHALL HAVE RAMPS COMPLYING WITH CBC 11B-405. WALKS SHALL NOT EXCEED 1:20 IN DIRECTION OF TRAVEL AND 1:48 CROSS SLOPE.

TYPICAL CAR PARKING STRIPING DETAIL



SCOPE OF WORK

- NEW WAREHOUSE BUILDING & DEVELOPED SITE
- ANNEXING SITE FROM SAN JOAQUIN COUNTY TO TRACY JURISDICTION. SITE TO BE ZONED M-1 (LIGHT INDUSTRIAL)

PROJECT DATA

JURISDICTION:	TRACY (PREVIOUSLY SAN JOAQUIN COUNTY)
APN:	20923025
ZONING:	LIGHT INDUSTRIAL (M-1)
USE:	WAREHOUSE
EXISTING LOT SIZE:	20.92 AC.
LOT SIZE AFTER R.O.W. DEDICATION:	649,074 SF (14.9 AC)
BUILDING GROSS AREA:	217,466 SF
WAREHOUSE (95%) = 206,593 SF	
OFFICE (5%) = 10,873 SF	
FLOOR AREA RATIO:	0.34
PARKING REQUIRED:	116 STALLS
WAREHOUSE (95%):	
1 STALL / 1,000 SF 1ST 20K = 20 STALLS	
1 STALL / 2,000 SF 2ND 20K = 10 STALLS	
1 STALL / 4,000 SF AFTER 40K = 42 STALLS	
OFFICE (5%):	
1 STALL / 250 SF = 44 STALLS	
PARKING PROPOSED:	148 STALLS
STANDARD: 95 STALLS	
COMPACT: 5 STALLS	
ACCESSIBLE: 5 STALLS	
ELECTRIC VEHICLE CAPABLE: 25 STALLS (6 W/ EVSE)	
CLEAN AIR/VANPOOL/EV: 18 STALLS	
TRAILER PARKING PROPOSED:	116 STALLS
DOCK LEVEL DOORS:	31
GRADE LEVEL DOORS:	2
BICYCLE PARKING:	16 STALLS
SHORT TERM RACKS (5% VISITOR): 6 STALLS	
LONG TERM LOCKERS (5% EMPLOYEE): 10 STALLS	

ARCHITECTURE PLANNING INTERIORS
VITAE ©
555 Capitol Mall, Suite 255, Sacramento, CA 95814 916.921.6584

PANATTONI®

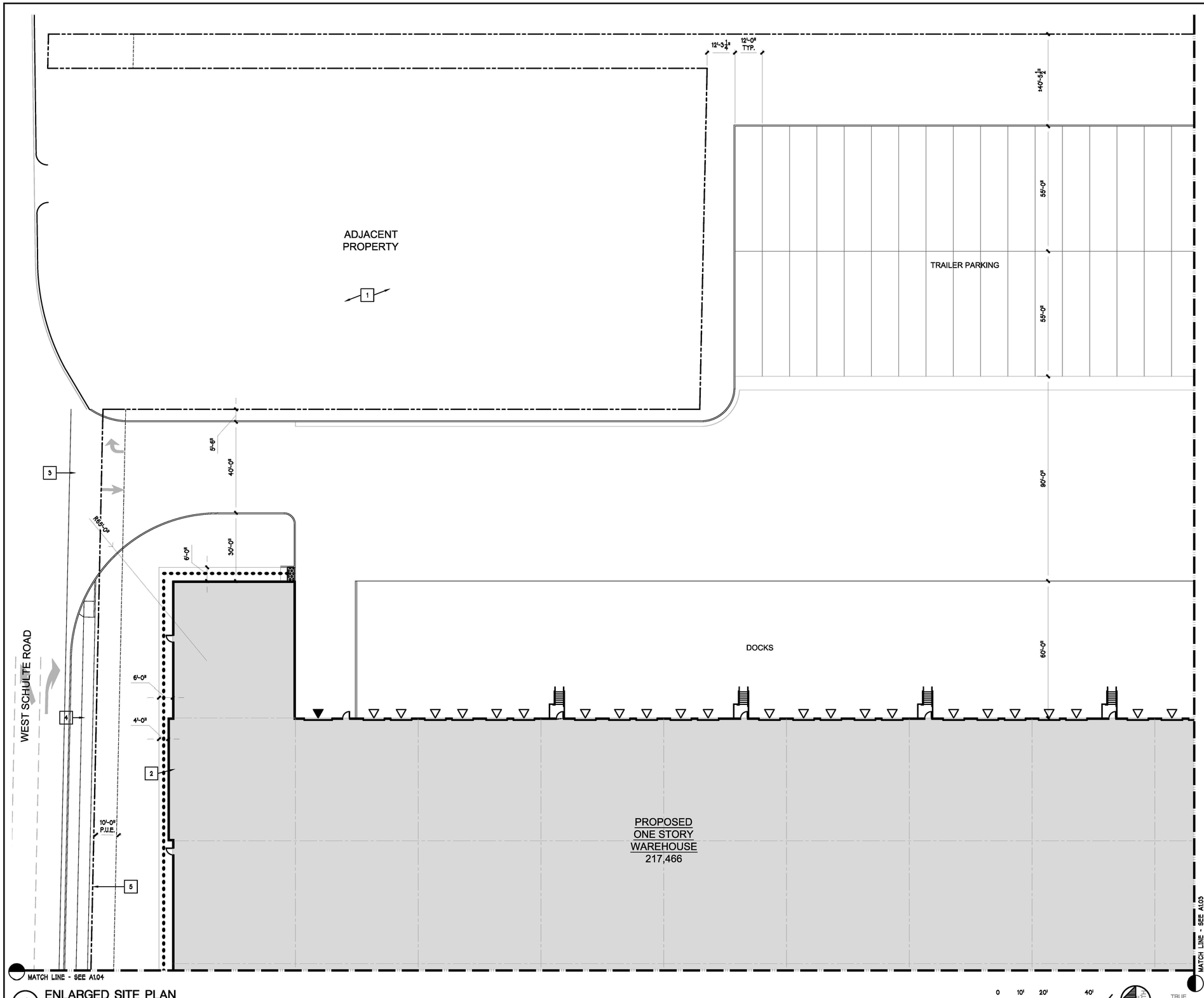
NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

JOB NO.	221111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

OVERALL SITE PLAN

A1.01



1 ENLARGED SITE PLAN

SCALE: 1" = 20'-0"

0 10' 20' 40'

TRUE NORTH

KEYNOTES

1. (E) ADJACENT UTILITY BUILDING & CMU FENCE.
2. CONCRETE WALK.
3. DRIVEWAY.
4. SIDEWALK.
5. PROPOSED PROPERTY LINE.

LEGEND

- PROPERTY LINE
- ACCESSIBLE PATH OF TRAVEL TO HAVE A CONTINUOUS SURFACE, NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/2" AND SHALL BE A MINIMUM OF 48" IN WIDTH PER CBC CHAPTER 11 DIVISION 4. ACCESSIBLE ROUTES OF TRAVEL WHERE NECESSARY TO CHANGE ELEVATION AT A SLOPE EXCEEDING 1:20 SHALL HAVE RAMPS COMPLYING WITH CBC 11B-405. WALKS SHALL NOT EXCEED 1:20 IN DIRECTION OF TRAVEL AND 1:48 CROSS SLOPE.
- GRADE LEVEL OVERHEAD DOOR
- DOCK LEVEL OVERHEAD DOOR

ARCHITECTURE PLANNING INTERIORS VITAE ©

555 Capitol Mall, Suite 255, Sacramento, CA 95814 916.921.6584

PANATTONI®

NEW WAREHOUSE BUILDING

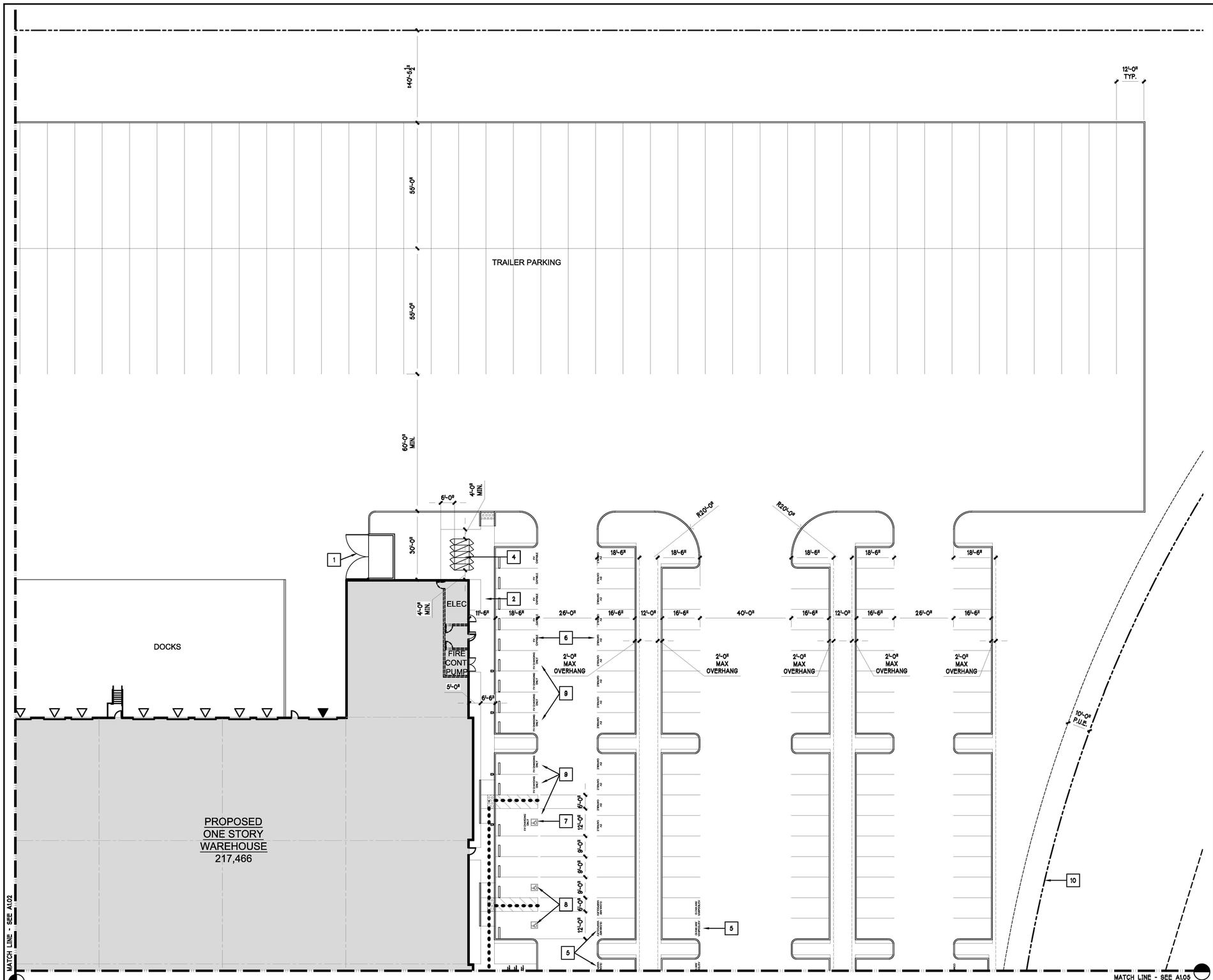
16286 W SCHULTE RD
TRACY, CA 95377

JOB NO.	221111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

ENLARGED SITE PLAN

A 1.02

XREFS: [] 24X36; [] \ZS-xSP01 [] \ACAD-20174-BM



1 ENLARGED SITE PLAN

SCALE: 1" = 20'-0"

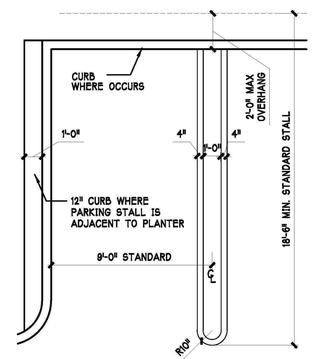
KEYNOTES

1. CMU TRASH ENCLOSURE W/ METAL GATES.
2. CONCRETE WALK.
3. DRIVEWAY.
4. (5) BICYCLE LOCKERS (2 STALLS EACH - 10 TOTAL STALLS).
5. DESIGNATED CLEAN AIR/VANPOOL/EV PARKING STALLS.
6. ELECTRICAL VEHICLE CAPABLE PARKING STALLS.
7. VAN ACCESSIBLE ELECTRICAL VEHICLE READY PARKING STALL.
8. VAN ACCESSIBLE & STANDARD ACCESSIBLE PARKING STALLS.
9. ELECTRICAL VEHICLE CAPABLE PARKING STALLS W/ INSTALLED ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).
10. PROPOSED PROPERTY LINE.

LEGEND

- PROPERTY LINE
- ACCESSIBLE PATH OF TRAVEL TO HAVE A CONTINUOUS SURFACE, NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/2" AND SHALL BE A MINIMUM OF 48" IN WIDTH PER CBC CHAPTER 11 DIVISION 4. ACCESSIBLE ROUTES OF TRAVEL WHERE NECESSARY TO CHANGE ELEVATION AT A SLOPE EXCEEDING 1:20 SHALL HAVE RAMPS COMPLYING WITH CBC 11B-405. WALKS SHALL NOT EXCEED 1:20 IN DIRECTION OF TRAVEL AND 1:48 CROSS SLOPE.
- GRADE LEVEL OVERHEAD DOOR
- DOCK LEVEL OVERHEAD DOOR

TYP. CAR PARKING STRIPING DETAIL



VITAE ©
ARCHITECTURE
PLANNING
INTERIORS
555 Capitol Mall, Suite 255, Sacramento, CA 95814 916.921.6584

PANATTONI®

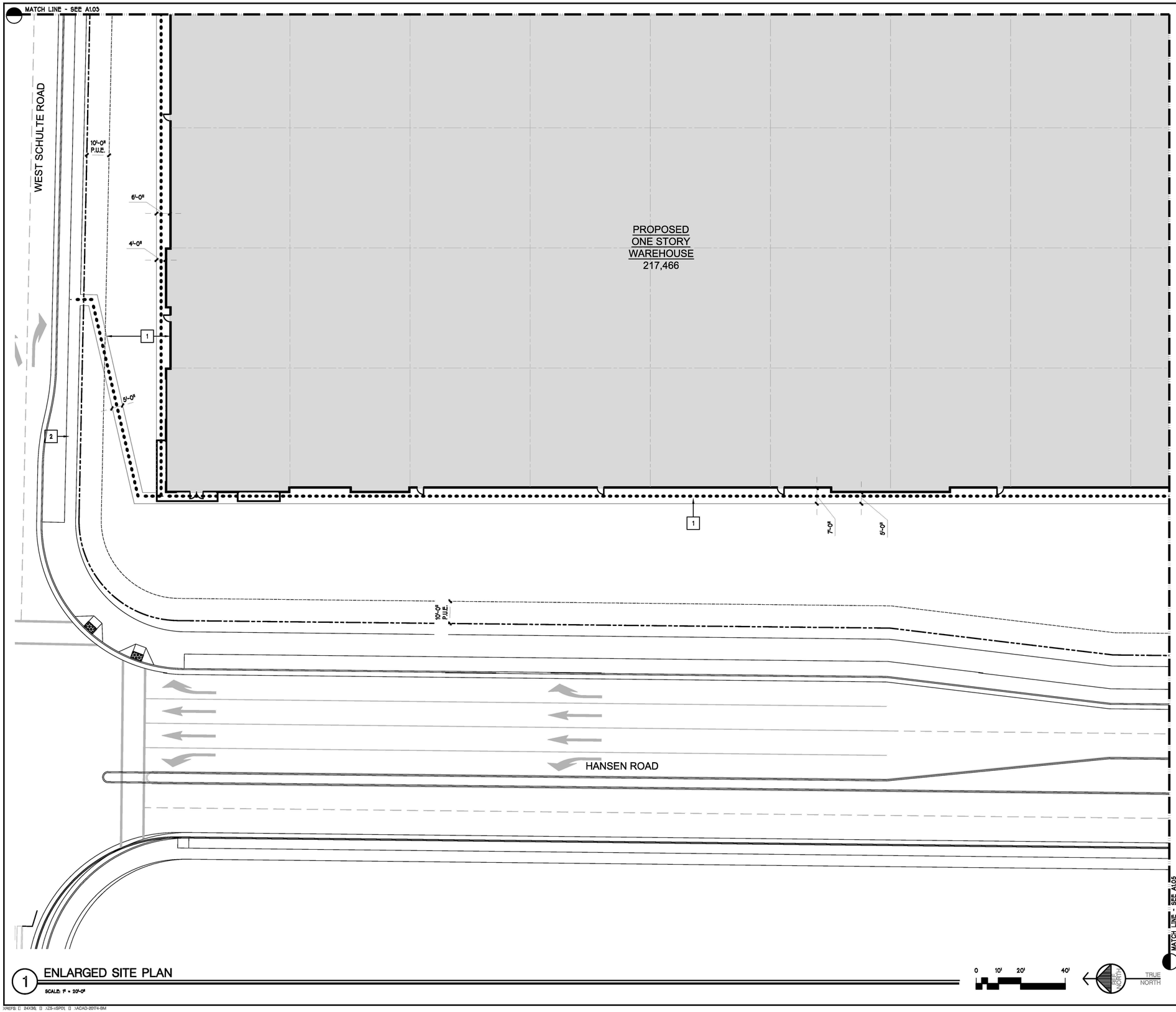
NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

JOB NO.	221111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

ENLARGED SITE PLAN

A1.03



1 ENLARGED SITE PLAN

SCALE: 1" = 20'-0"

0 10' 20' 40'

TRUE NORTH

KEYNOTES

1 CONCRETE WALK.
2 SIDEWALK.

LEGEND

PROPERTY LINE

ACCESSIBLE PATH OF TRAVEL TO HAVE A CONTINUOUS SURFACE, NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/2" AND SHALL BE A MINIMUM OF 48" IN WIDTH PER CBC CHAPTER 11 DIVISION 4. ACCESSIBLE ROUTES OF TRAVEL WHERE NECESSARY TO CHANGE ELEVATION AT A SLOPE EXCEEDING 1:20 SHALL HAVE RAMPS COMPLYING WITH CBC 11B-405. WALKS SHALL NOT EXCEED 1:20 IN DIRECTION OF TRAVEL AND 1:48 CROSS SLOPE.

ARCHITECTURE
PLANNING
INTERIORS
VITAE ©

555 Capitol Mall, Suite 255, Sacramento, CA 95814 916.921.6584

PANATTONI®

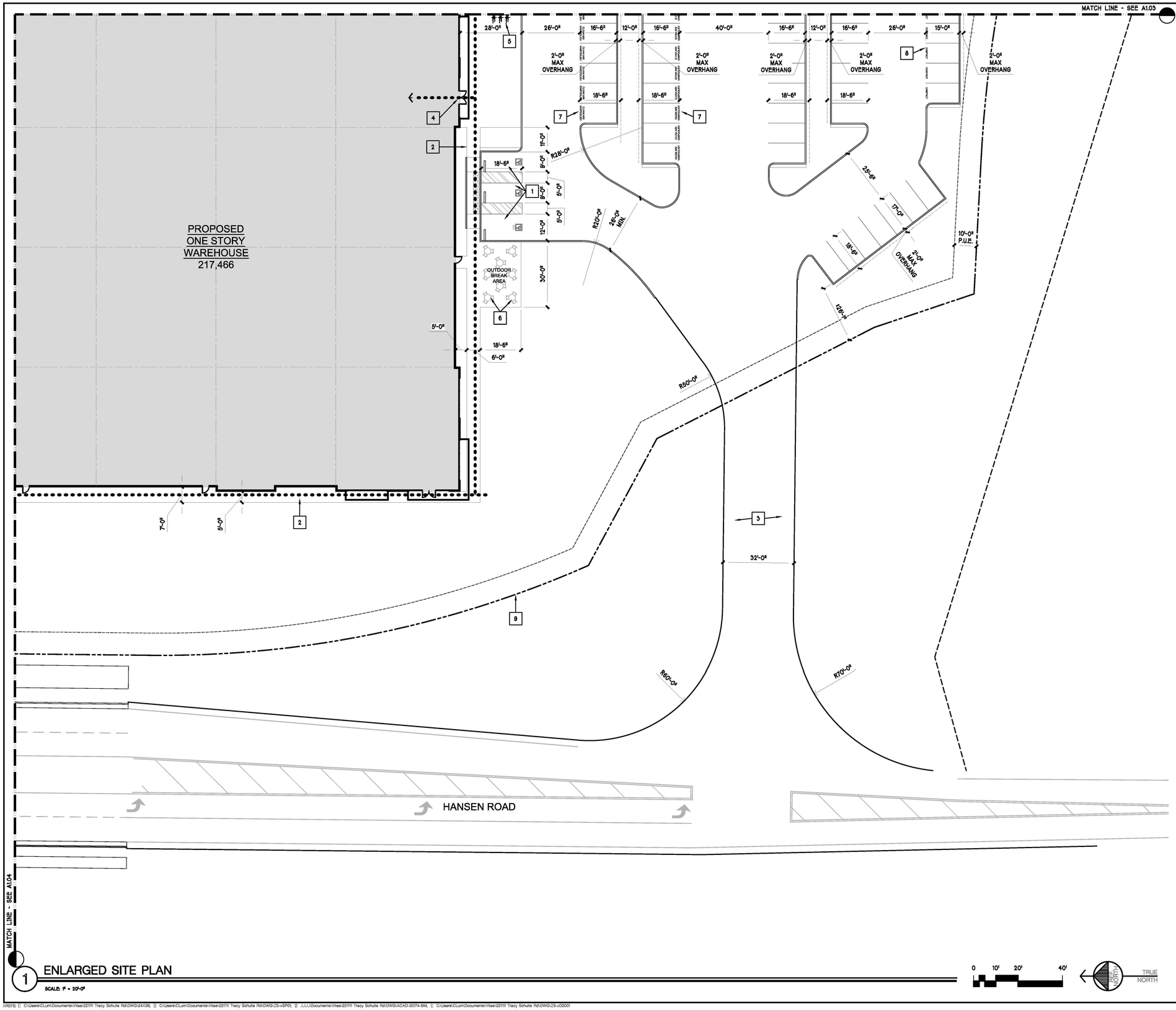
NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

JOB NO.	221111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

ENLARGED SITE PLAN

A1.04



KEYNOTES

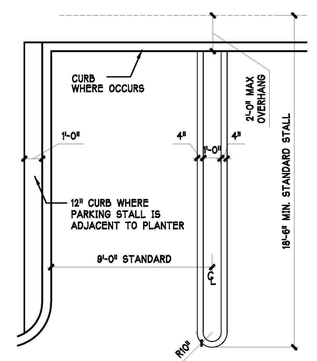
1. VAN ACCESSIBLE & STANDARD ACCESSIBLE PARKING STALLS.
2. CONCRETE WALK.
3. DRIVEWAY.
4. ACCESSIBLE MAIN ENTRY.
5. (3) BICYCLE RACKS (3 STALLS EACH = 6 TOTAL SALLS).
6. OUTDOOR EMPLOYEE BREAK AREA W/ TABLES (W/ UMBRELLAS) & CHAIRS.
7. DESIGNATED CLEAN AIR/VANPOOL/EV PARKING STALLS.
8. COMPACT PARKING STALLS.
9. PROPOSED PROPERTY LINE.

LEGEND

PROPERTY LINE

ACCESSIBLE PATH OF TRAVEL TO HAVE A CONTINUOUS SURFACE, NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/2" AND SHALL BE A MINIMUM OF 48" IN WIDTH PER CBC CHAPTER 11 DIVISION 4. ACCESSIBLE ROUTES OF TRAVEL WHERE NECESSARY TO CHANGE ELEVATION AT A SLOPE EXCEEDING 1:20 SHALL HAVE RAMPS COMPLYING WITH CBC 11B-405. WALKS SHALL NOT EXCEED 1:20 IN DIRECTION OF TRAVEL AND 1:48 CROSS SLOPE.

TYP. CAR PARKING STRIPING DETAIL



1 ENLARGED SITE PLAN
SCALE: 1" = 20'-0"

0 10' 20' 40'

TRUE NORTH

ARCHITECTURE
PLANNING
INTERIORS
VITAE
555 Capitol Mall, Suite 255, Sacramento, CA 95814 916.921.6584

PANATTONI

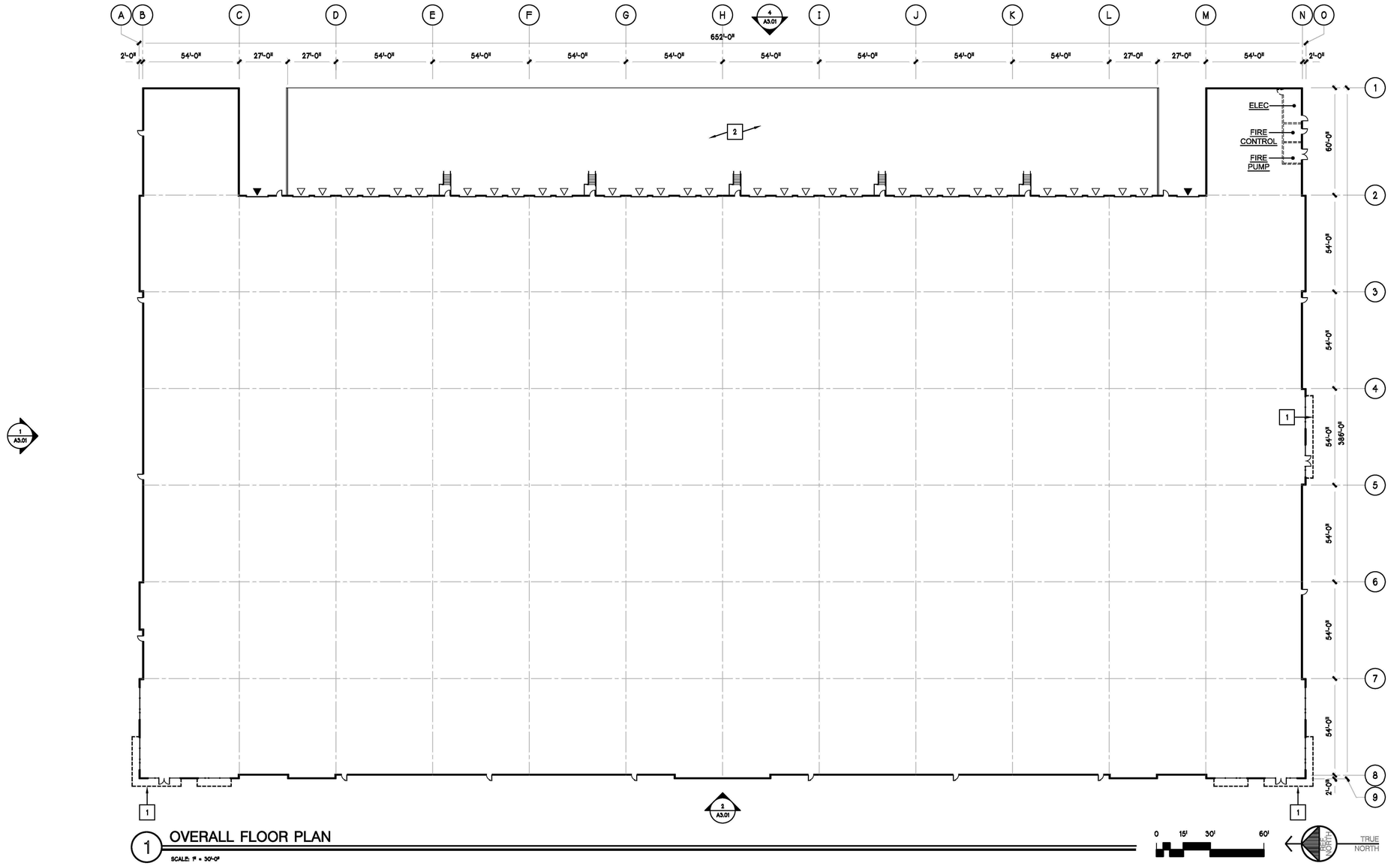
NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

JOB NO.	221111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

ENLARGED SITE PLAN

A1.05



1 OVERALL FLOOR PLAN

SCALE: 1" = 30'-0"

KEYNOTES

1 OUTLINE OF CANOPY ABOVE.
2 DOCKS.

LEGEND

CONCRETE PANEL WALL

DOOR

CONCRETE STAIRS W/ GUARDRAIL & HANDRAIL.

GRADE LEVEL OVERHEAD DOOR

DOCK LEVEL OVERHEAD DOOR

ARCHITECTURE
PLANNING
INTERIORS
VITAE ©

555 Capitol Mall, Suite 255, Sacramento, CA 95814 916.930.6584

PANATTONI®

NEW WAREHOUSE BUILDING

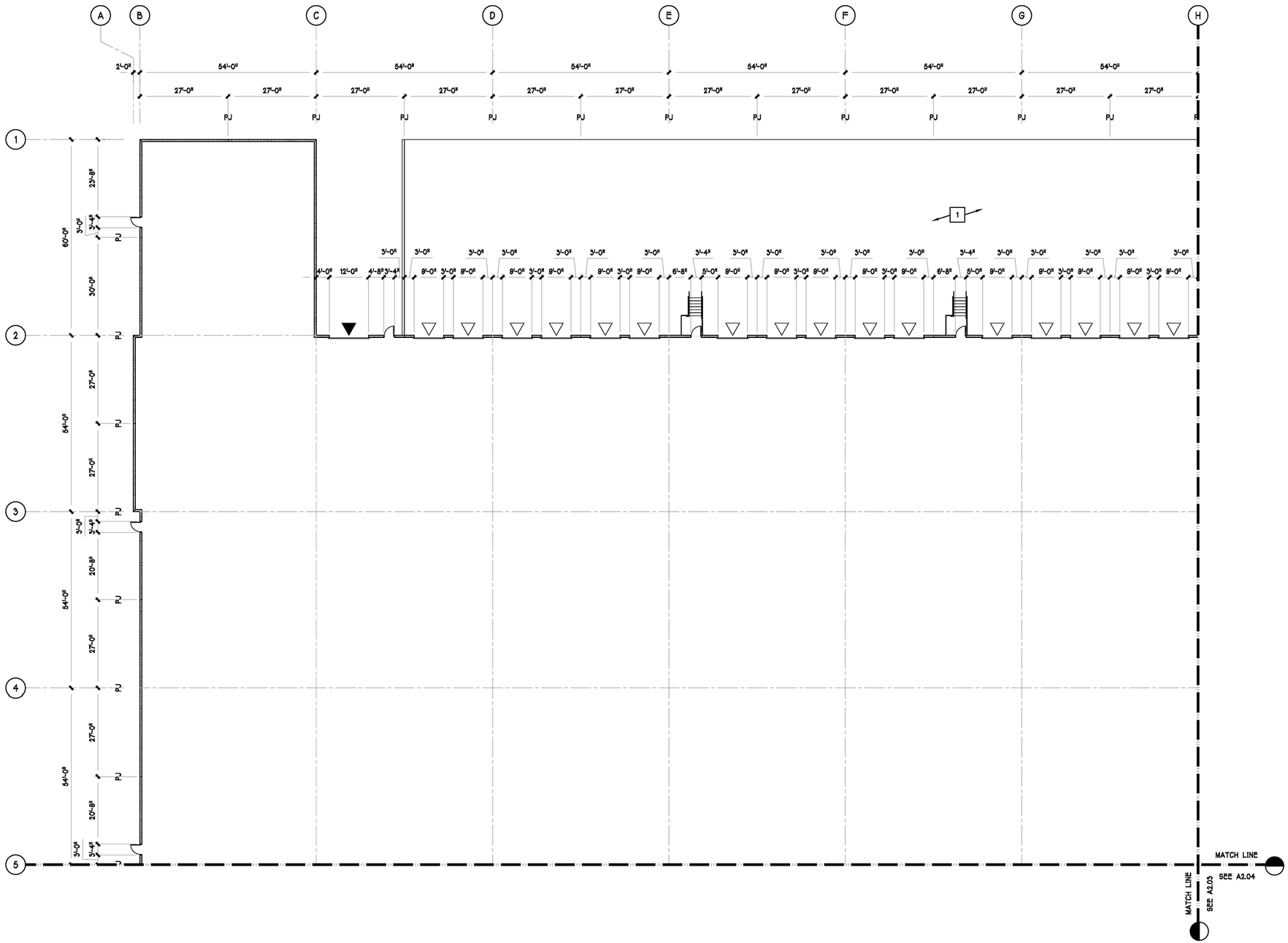
16286 W SCHULTE RD
TRACY, CA 95377

JOB NO.	221111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

OVERALL FLOOR PLAN

A 2.01

XREFS: {} 24X36; {} XZS-1FL01



1 ENLARGED FLOOR PLAN

SCALE: 1/16" = 1'-0"

0 8' 16' 32'

TRUE NORTH

KEYNOTES

1 DOCKS.

LEGEND

- CONCRETE PANEL WALL
- DOOR
- CONCRETE STAIRS W/ GUARDRAIL & HANDRAIL.
- GRADE LEVEL OVERHEAD DOOR
- DOCK LEVEL OVERHEAD DOOR
- PJ — PANEL JOINT

ARCHITECTURE
PLANNING
INTERIORS
VITAE ©

555 Capitol Mall, Suite 255, Sacramento, CA 95814 916.921.6584

PANATTONI®

NEW WAREHOUSE BUILDING

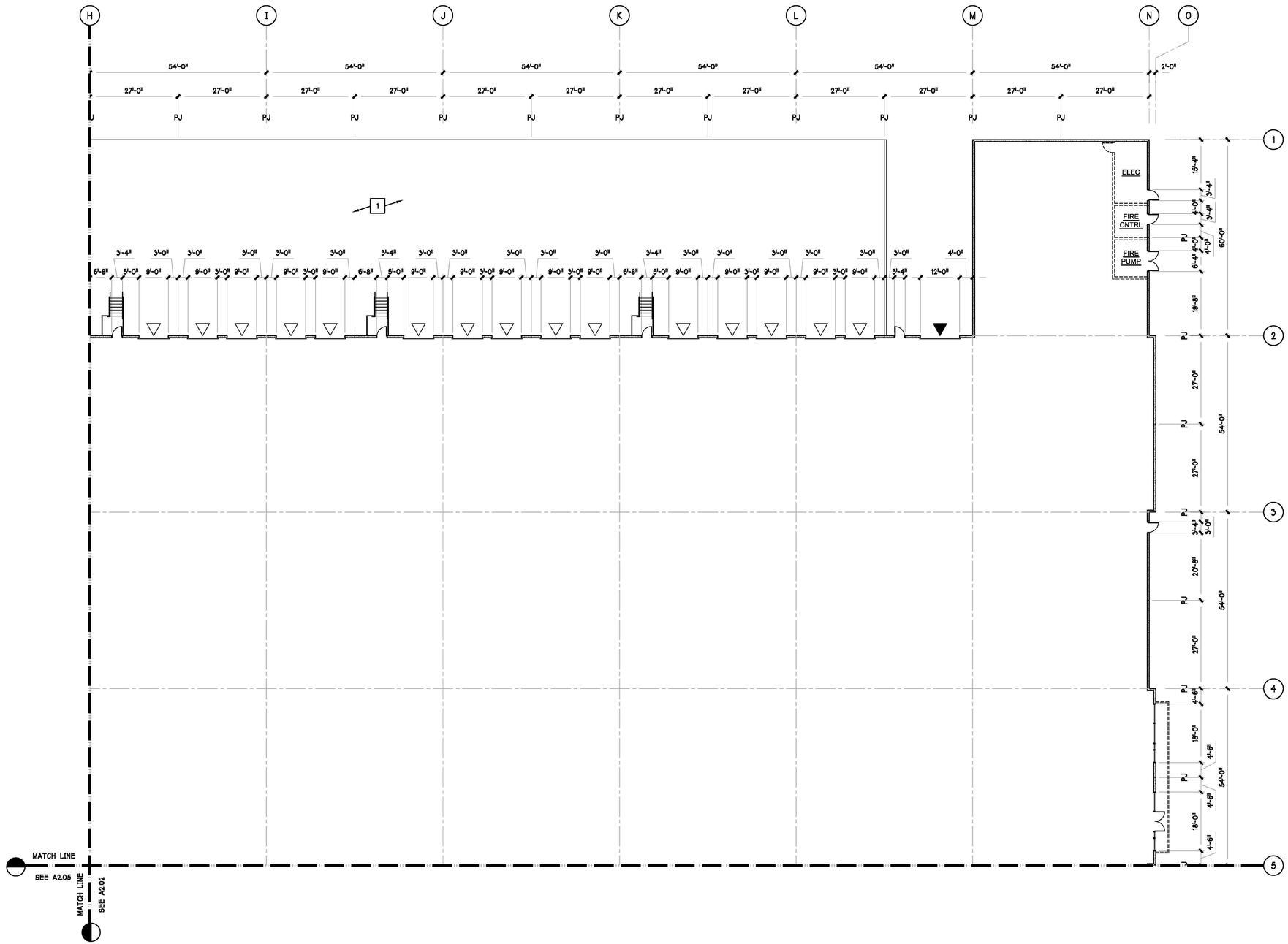
16286 W SCHULTE RD
TRACY, CA 95377

JOB NO.	221111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

ENLARGED FLOOR PLAN

A 2.02

XREFS: [] 24X36; [] A2S-xFL01



1 ENLARGED FLOOR PLAN

SCALE: 1/16" = 1'-0"

0 8' 16' 32'

TRUE NORTH

KEYNOTES

1 DOCKS.

LEGEND

- CONCRETE PANEL WALL
- DOOR
- CONCRETE STAIRS W/ GUARDRAIL & HANDRAIL
- GRADE LEVEL OVERHEAD DOOR
- DOCK LEVEL OVERHEAD DOOR
- PJ — PANEL JOINT

ARCHITECTURE
PLANNING
INTERIORS
VITAE ©

555 Capitol Mall, Suite 255, Sacramento, CA 95814 916.921.6584

PANATTONI®

NEW WAREHOUSE BUILDING

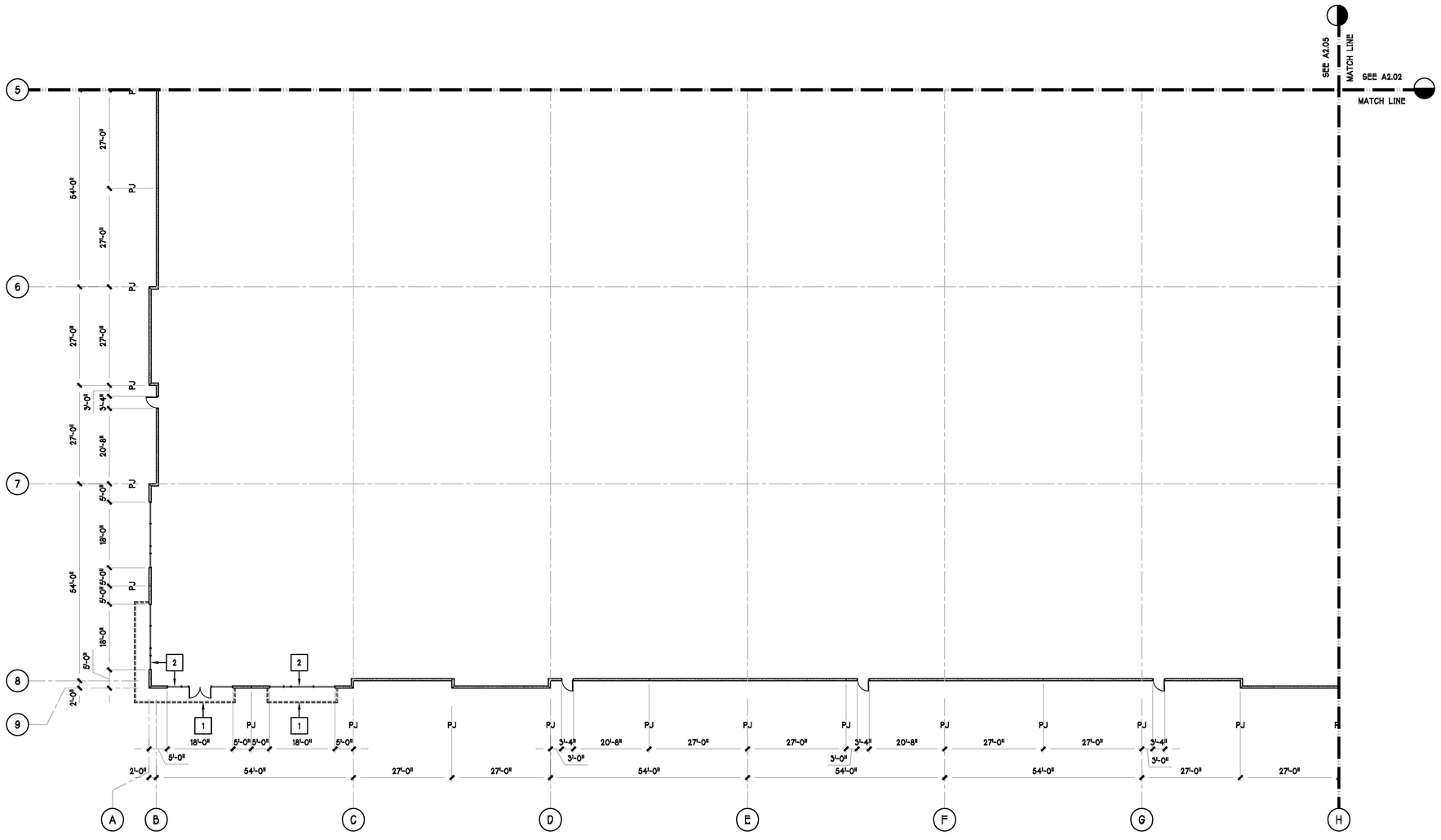
16286 W SCHULTE RD
TRACY, CA 95377

JOB NO.	221111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

ENLARGED FLOOR PLAN

A 2.03

XREFS: [] 24X36; [] XZS-xFL01



1 ENLARGED FLOOR PLAN

SCALE: 1/16" = 1'-0"

0 8' 16' 32'

TRUE NORTH

KEYNOTES

1 METAL CANOPY ABOVE.
2 STOREFRONT.

LEGEND

CONCRETE PANEL WALL

DOOR

CONCRETE STAIRS W/ GUARDRAIL & HANDRAIL.

PJ PANEL JOINT

ARCHITECTURE
PLANNING
INTERIORS
VITAE ©

555 Capitol Mall, Suite 255, Sacramento, CA 95814 916.921.6584

PANATTONI®

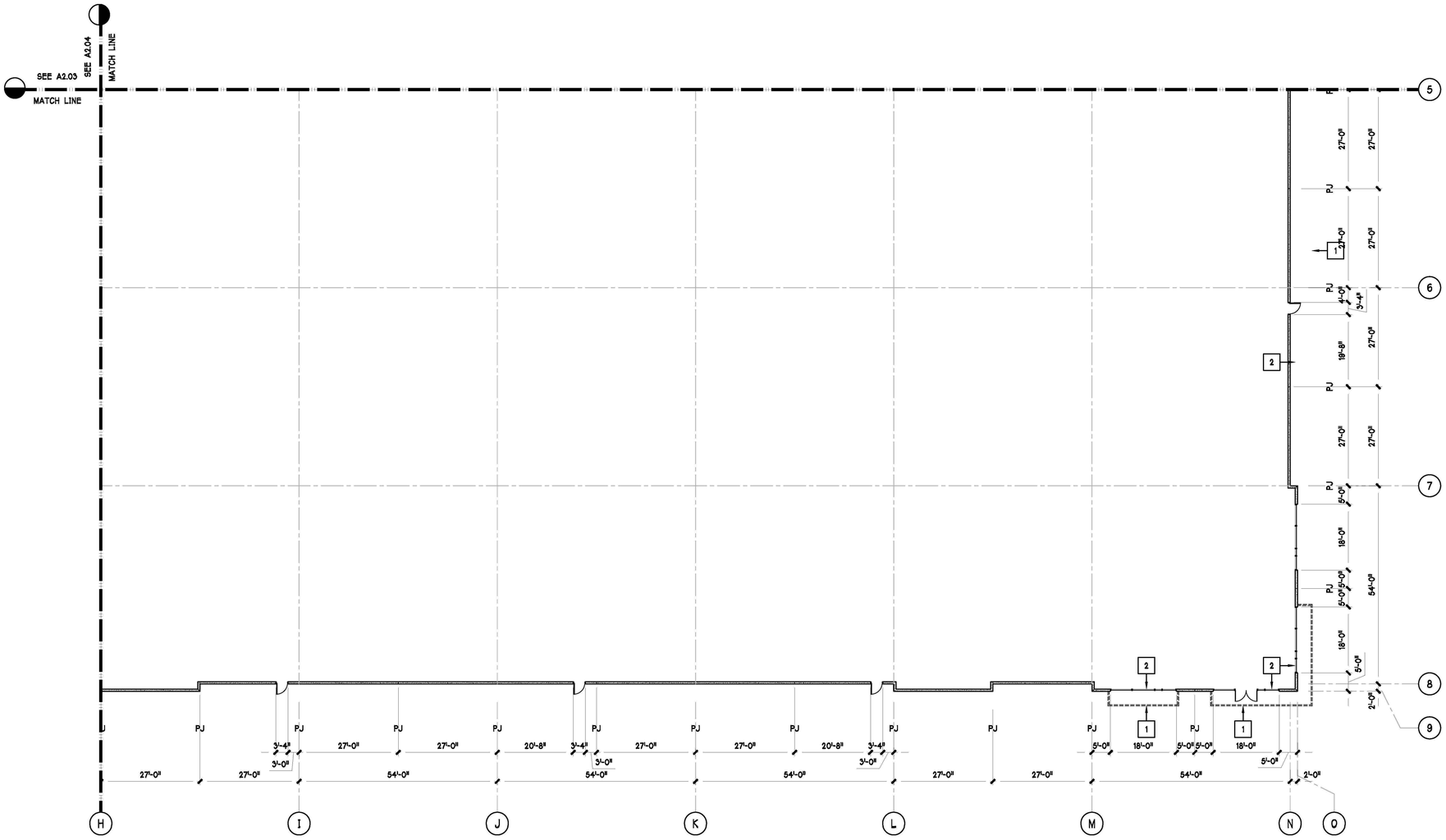
NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

JOB NO.	221111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

ENLARGED FLOOR PLAN

A 2.04



1 ENLARGED FLOOR PLAN

SCALE: 1/16" = 1'-0"

0 8' 16' 32'

TRUE NORTH

KEYNOTES

1 METAL CANOPY ABOVE.
2 STOREFRONT.

LEGEND

CONCRETE PANEL WALL

DOOR

CONCRETE STAIRS W/ GUARDRAIL & HANDRAIL.

PJ PANEL JOINT

ARCHITECTURE PLANNING INTERIORS VITAE ©

555 Capitol Mall, Suite 255, Sacramento, CA 95814 916.921.6584

PANATTONI®

NEW WAREHOUSE BUILDING

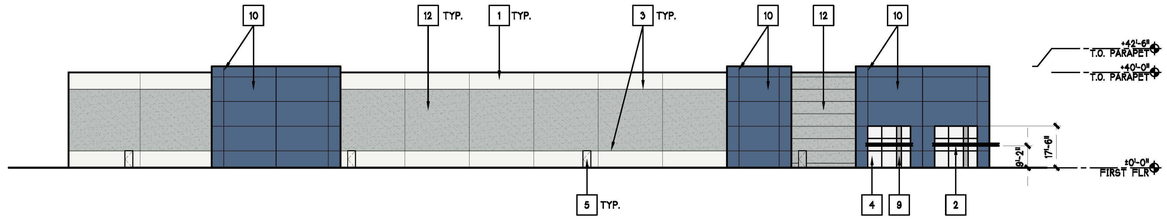
16286 W SCHULTE RD
TRACY, CA 95377

JOB NO.	221111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

ENLARGED FLOOR PLAN

A 2.05

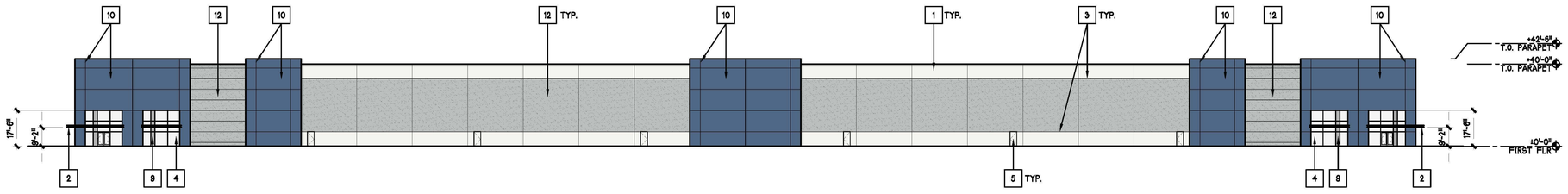
XREFS: [] 24X36; [] XZS-xFL01



1 NORTH ELEVATION (W SCHULTE RD)

SCALE: 1" = 30'-0"

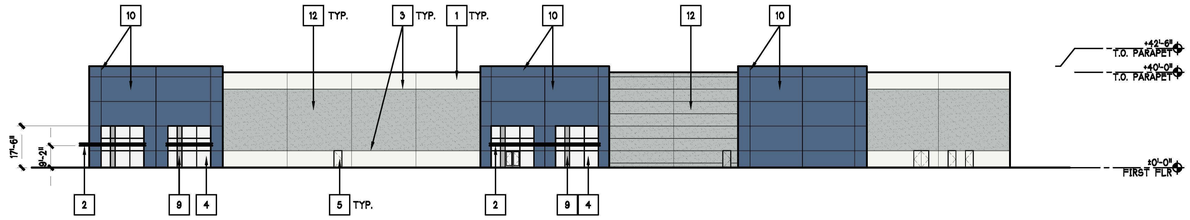
0 15' 30' 60'



2 WEST ELEVATION (HANSEN RD)

SCALE: 1" = 30'-0"

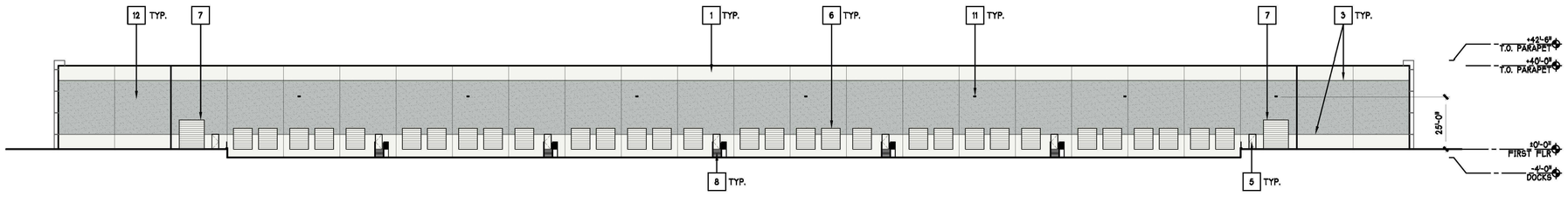
0 15' 30' 60'



3 SOUTH ELEVATION (PARKING)

SCALE: 1" = 30'-0"

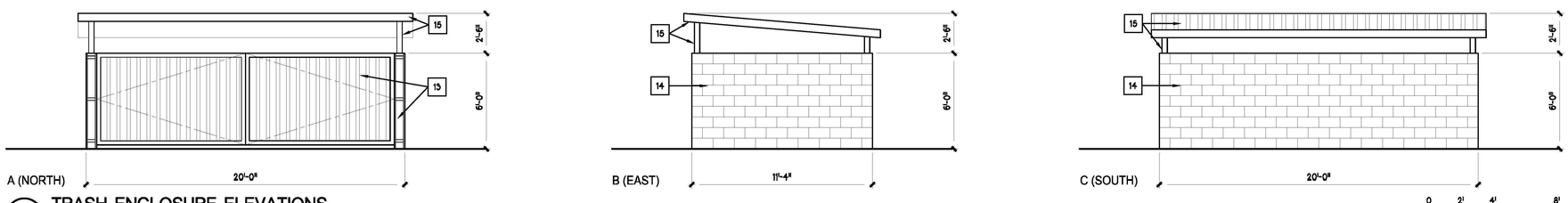
0 15' 30' 60'



4 EAST ELEVATIONS (DOCKS)

SCALE: 1" = 30'-0"

0 15' 30' 60'



5 TRASH ENCLOSURE ELEVATIONS

SCALE: 1/4" = 1'-0"

0 2' 4' 8'

KEYNOTES

1. CONCRETE PANEL.
2. PAINTED METAL CANOPY.
3. CONCRETE REVEALS.
4. STOREFRONT SYSTEM.
5. MAN DOOR.
6. 9'x10' OVERHEAD DOCK DOOR.
7. 12'x14' OVERHEAD GRADE LEVEL DOOR.
8. CONCRETE STAIRS W/ PAINTED METAL GUARDRAIL & HANDRAIL.
9. ACCENT GLASS.
10. CONCRETE PANEL BUILDING BUMP OUT W/ REVEALS & ACCENT PAINT.
11. WALL MOUNTED LIGHT FIXTURE.
12. ACCENT PAINT.
13. PRE-FINISHED CORRUGATED METAL TRASH ENCLOSURE GATES & POSTS - PAINTED TO MATCH BUILDING.
14. SMOOTH FACED CMU TRASH ENCLOSURE - PAINTED TO MATCH BUILDING.
15. PRE-FINISHED CORRUGATED METAL ROOF W/ TUBE STEEL FRAMING - PAINTED TO MATCH BUILDING.

MATERIALS LIST

FIELD WALLS, MAN DOORS & OVERHEAD DOORS:	OFF-WHITE
ACCENT PAINT:	GREY
ACCENT PAINT @ BUMP OUTS:	STEEL BLUE
ACCENT PAINT @ CANOPY:	CHARCOAL GREY
STOREFRONT GLASS:	GREY GLASS
STOREFRONT ACCENT GLASS:	DARK GREY
STOREFRONT FRAME:	CLEAR ANODIZED

ARCHITECTURE
PLANNING
INTERIORS
VITAE ©

555 Capitol Mall, Suite 255, Sacramento, CA 95814 916.921.6584

PANATTONI®

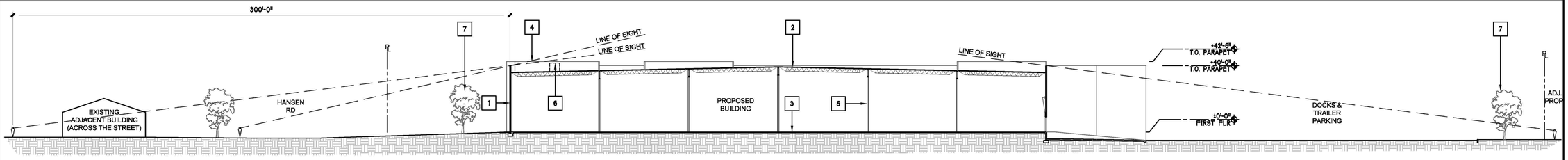
NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

JOB NO.	221111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

EXTERIOR ELEVATIONS

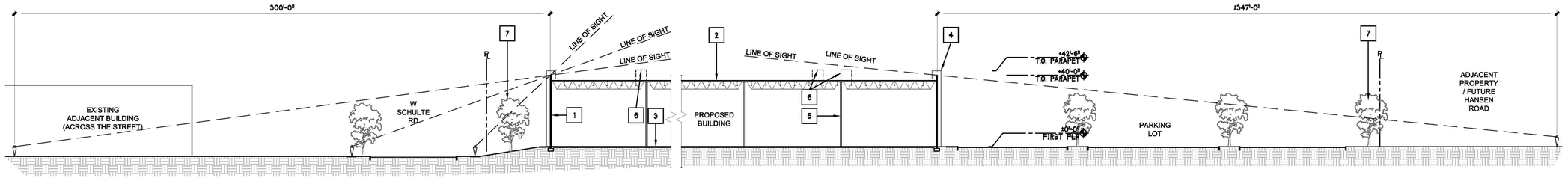
A 3.01



1 CROSS SECTION

SCALE: 1" = 30'-0"

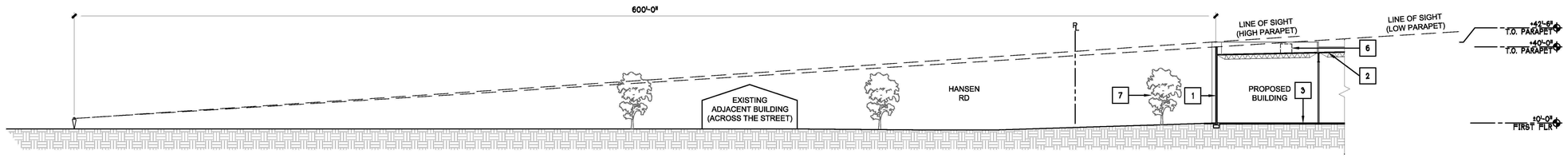
0 15' 30' 60'



2 CROSS SECTION

SCALE: 1" = 30'-0"

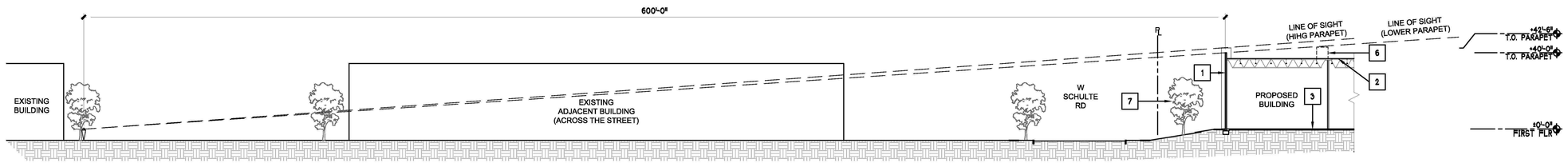
0 15' 30' 60'



3 CROSS SECTION

SCALE: 1" = 30'-0"

0 15' 30' 60'



4 CROSS SECTION

SCALE: 1" = 30'-0"

0 15' 30' 60'

KEYNOTES

1 CONCRETE PANEL.

2 SINGLE PLY ROOFING SYSTEM O/ COVER BOARD O/ STRUCTURAL DECK O/ ROOF FRAMING.

3 CONCRETE SLAB.

4 HIGH PARAPET BEYOND.

5 STEEL COLUMN.

6 OUTLINE OF FUTURE MECHANICAL EQUIPMENT SCREENED BY PARAPET.

7 LANDSCAPING - SEE LANDSCAPE DRAWINGS.

ARCHITECTURE
PLANNING
INTERIORS
VITAE ©

555 Capitol Mall, Suite 255, Sacramento, CA 95814 916.921.6584

PANATTONI®

NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

JOB NO.	22111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

CROSS SECTIONS

A 6.01

1 VIEW FROM W SCHULTE RD & HANSEN RD

2 VIEW FROM HANSEN RD (MAIN ENTRY & PARKING)

3 VIEW FROM W SCHULTE RD

ARCHITECTURE
PLANNING
INTERIORS
VITAE ©

555 Capitol Mall, Suite 255, Sacramento, CA 95814 916.930.6584

PANATTONI®

NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

JOB NO.	221111
SCALE	AS SHOWN
DATE	10/10/24
CHECKED BY	BK
DRAWN BY	CL
DEVELOPMENT REVIEW & REZONING	06/23/21
DEVELOPMENT REVIEW & REZONING	10/07/21
DEVELOPMENT REVIEW	01/14/22
DEVELOPMENT REVIEW	10/18/22
DEVELOPMENT REVIEW	06/08/23
DEVELOPMENT REVIEW	03/19/24
DEVELOPMENT REVIEW	10/10/24

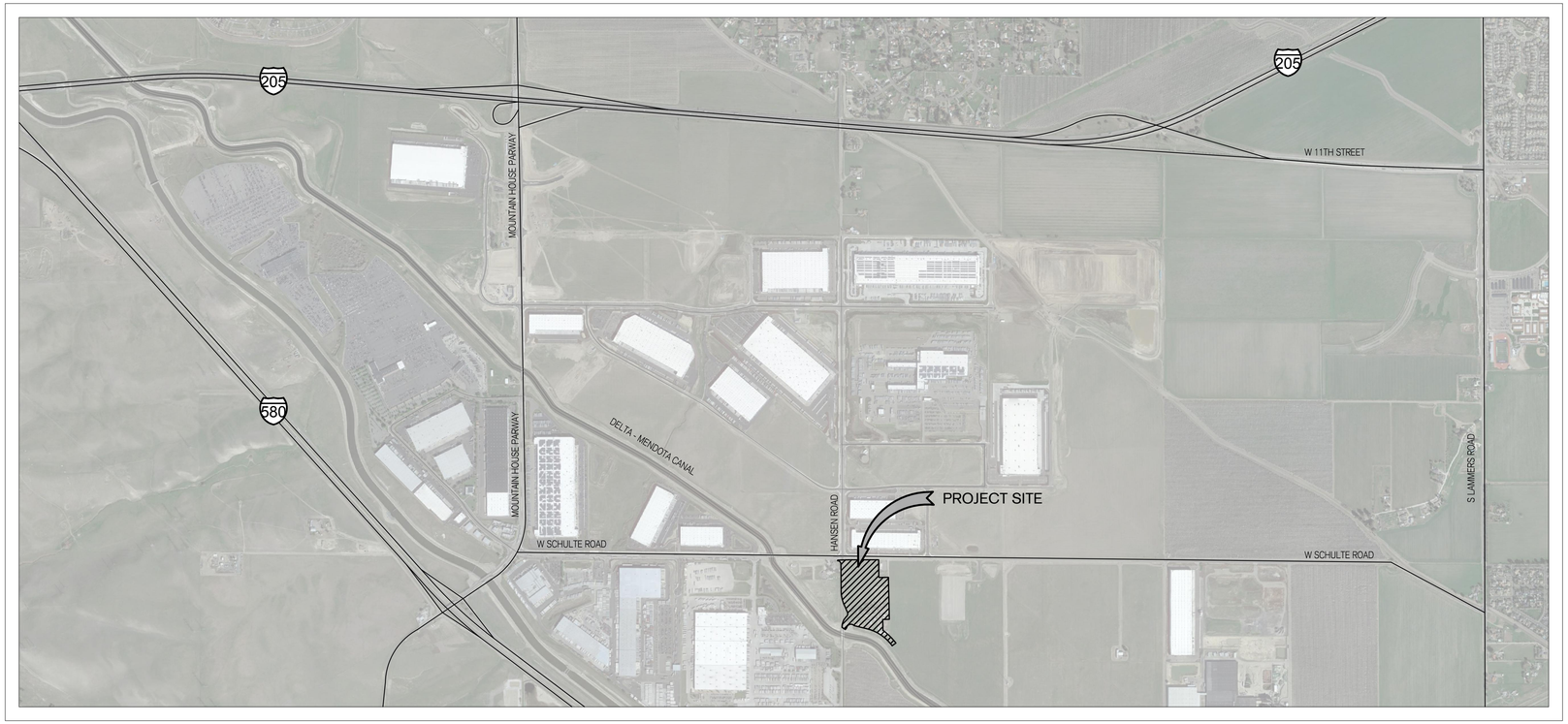
RENDERINGS

A10.01

XREFS: D 24X36

NEW WAREHOUSE BUILDING

16286 W. SCHULTE ROAD
CITY OF TRACY, CALIFORNIA
SAN JOAQUIN COUNTY



PROJECT SITE MAP
NOT TO SCALE

ABBREVIATIONS:

AB	AGGREGATE BASE	LF	LINEAR FEET
AC	ASPHALT CEMENT	MIL	MILIMETER
APN	ASSESSOR PARCEL NUMBER	N.T.S.	NOT TO SCALE
ASSY	ASSEMBLY	OC	ON CENTER
BFP	BACKFLOW PREVENTER	OH	OVERHEAD ELECTRIC
C	CONCRETE	P	PAVEMENT
C.O.T.	CITY OF TRACY	POC	POINT OF CONNECTION
DI	DUCTILE IRON	PSI	POUNDS PER SQUARE INCH
DIP	DUCTILE IRON PIPE	PUE	PUBLIC UTILITY EASEMENT
E	ELECTRIC	PVC	POLYVINYL CHLORIDE
EC	EXISTING CONCRETE	R/W	RIGHT-OF-WAY
EFL	EXISTING FLOW LINE	RC	RELATIVE COMPACTION
EG	EXISTING GRADE	RCP	REINFORCED CLAY PIPE
EP	EXISTING PAVEMENT	SD	STORM DRAIN
ETC	EXISTING TOP OF CURB	SDCB	STORM DRAIN CATCH BASIN
EX	EXISTING	SF	SQUARE FEET
FG	FINISHED GRADE	SS	SANITARY SEWER
FL	FLOW LINE	STD	STANDARD
G	GAS	STDS	STANDARDS
GPH	GALLONS PER HOUR	TC	TOP OF CURB
GPM	GALLONS PER MINUTE	TYP	TYPICAL
ICV	IRRIGATION CONTROL VALVE	VCP	VITRIFIED CLAY PIPE
INV	INVERT	W	WATER

PROJECT CONTACTS

CIVIL ENGINEER
SIEGFRIED
3428 BROOKSIDE ROAD
STOCKTON, CA 95219
CONTACT: ADAM MERRILL, P.E.
PHONE: (209) 943-2021
FAX: (209) 942-0214
EMAIL: amerrill@siegfriedeng.com

LANDSCAPE ARCHITECT
SIEGFRIED
3428 BROOKSIDE ROAD
STOCKTON, CA 95219
CONTACT: ROBERT NORBUTAS, JR., ASLA
PHONE: (209) 943-2021
FAX: (209) 942-0214
EMAIL: bnorbutas@siegfriedeng.com

SHEET INDEX

SHEET NO.	SHEET TITLE
C1.0	COVER SHEET
C2.0	EXISTING TOPOGRAPHY AND DEMOLITION PLAN
C3.0	PAVING AND DIMENSIONING PLAN
C3.1	W SCHULTE RD. CROSS- SECTIONS
C3.2	HANSEN RD. CROSS- SECTIONS
C4.0	GRADING PLAN
C5.0	UTILITY PLAN
L2.0	TREE PLAN
L2.1	SHRUB AND GROUNDCOVER PLAN

Know what's **below.**
Call before you dig.

SIEGFRIED
3428 Brookside Rd
Stockton,CA 95219
209-943-2021

REGISTERED PROFESSIONAL ENGINEER
ADAM K. MERRILL
No. 78826
Exp. 12/31/24
CIVIL
STATE OF CALIFORNIA

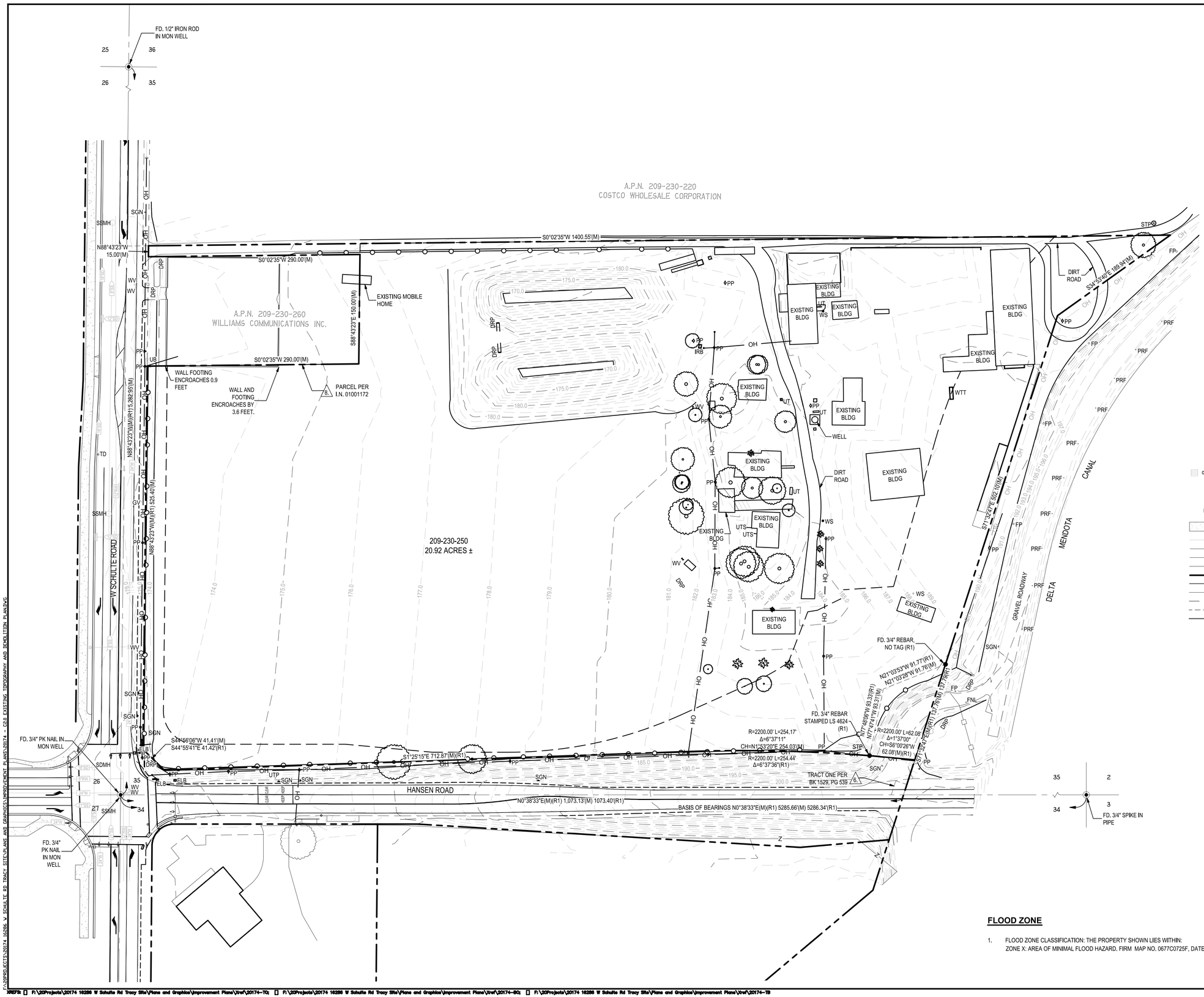
PANATTONI®

NEW
WAREHOUSE
BUILDING
16286 W SCHULTE RD
TRACY, CA 95377

JOB NO. 20174
SCALE AS SHOWN
DATE October 25, 2024
CHECKED BY AKM
DRAWN BY ARM

COVER SHEET

C1.0



LEGEND:

A.P.N.	ASSESSOR'S PARCEL NUMBER
BFP	BACK FLOW PREVENTER
BOL	BOLLARD
COM	COMMUNICATIONS BOX
COMC	COMMUNICATIONS CABINET
D.N.	DOCUMENT NUMBER
DRP	DRAIN PIPE
ELB	ELECTRIC BOX
ELP	ELECTRIC PULL BOX
ELV	ELECTRIC VAULT
ET	ELECTRIC TRANSFORMER
FD.	FOUND
FDC	FIRE DEPARTMENT CONNECTION
FH	FIRE HYDRANT
FNL	FENCE LATCH
FP	FENCE POST
GV	GAS VALVE
IRB	IRRIGATION BOX
P.M.	PARCEL MAP, BOOK-PAGE, S.J.C.R.
D.N.	DOCUMENT NUMBER, S.J.C.R.
P.O.C.	POINT OF COMMENCEMENT
P.O.B.	POINT OF BEGINNING
PP	POWER POLE
PRF	POLE WITH REFLECTOR
P.U.E.	PUBLIC UTILITY EASEMENT
SDDI	STORM DRAIN INLET OR CATCH BASIN
SDMH	STORM DRAIN MANHOLE
SGN	SIGN
SSMH	SEWER MANHOLE
SP	SIGN POST
STP	STAND PIPE
TD	TRAFFIC DETECTOR
TRD	TRENCH DRAIN
TVB	TELEVISION BOX
UB	UTILITY BOX
UT	UTILITY TANK
UTP	UTILITY POLE
UTS	UTILITY STUB
WB	WATER BOX
WS	WATER SPIGOT
WTT	WATER TROUGH
WV	WATER VALVE
10	PLOTTED TITLE EXCEPTION NO.
	STREET LIGHT
	TRAFFIC LIGHT
	CATCH BASIN
	SIGN
	POWER POLE
	TREE
	CONCRETE
OH OH	OVERHEAD LINES
Z	BARBED WIRE FENCE
	CHAIN LINK FENCE (TYPICAL)
	STEAL RAIL FENCE (TYPICAL)
	BOUNDARY LINE (TYPICAL)
	CURB (TYPICAL)
	DRAINAGE CHANNEL FLOW LINE
	DRAINAGE CHANNEL HIGH POINT
	FUTURE RW LINE
	WALL (TYPICAL)

REFERENCES:

(R1) 33/S/062

ALL REFERENCES ARE PER SAN JOAQUIN COUNTY RECORDS

0' 30' 60' 120'

SCALE: 1"=60'

FLOOD ZONE

1. FLOOD ZONE CLASSIFICATION: THE PROPERTY SHOWN LIES WITHIN: ZONE X: AREA OF MINIMAL FLOOD HAZARD. FIRM MAP NO. 0677C0725F, DATED OCTOBER 16, 2009.

811 Know what's **below.** **Call** before you dig.

SIEGFRIED
3428 Brookside Rd
Stockton,CA 95219
209-943-2021

REGISTERED PROFESSIONAL ENGINEER ADAM K. MERRILL No. 76826 Exp. 12/31/24 CIVIL STATE OF CALIFORNIA

PANATTONI

NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

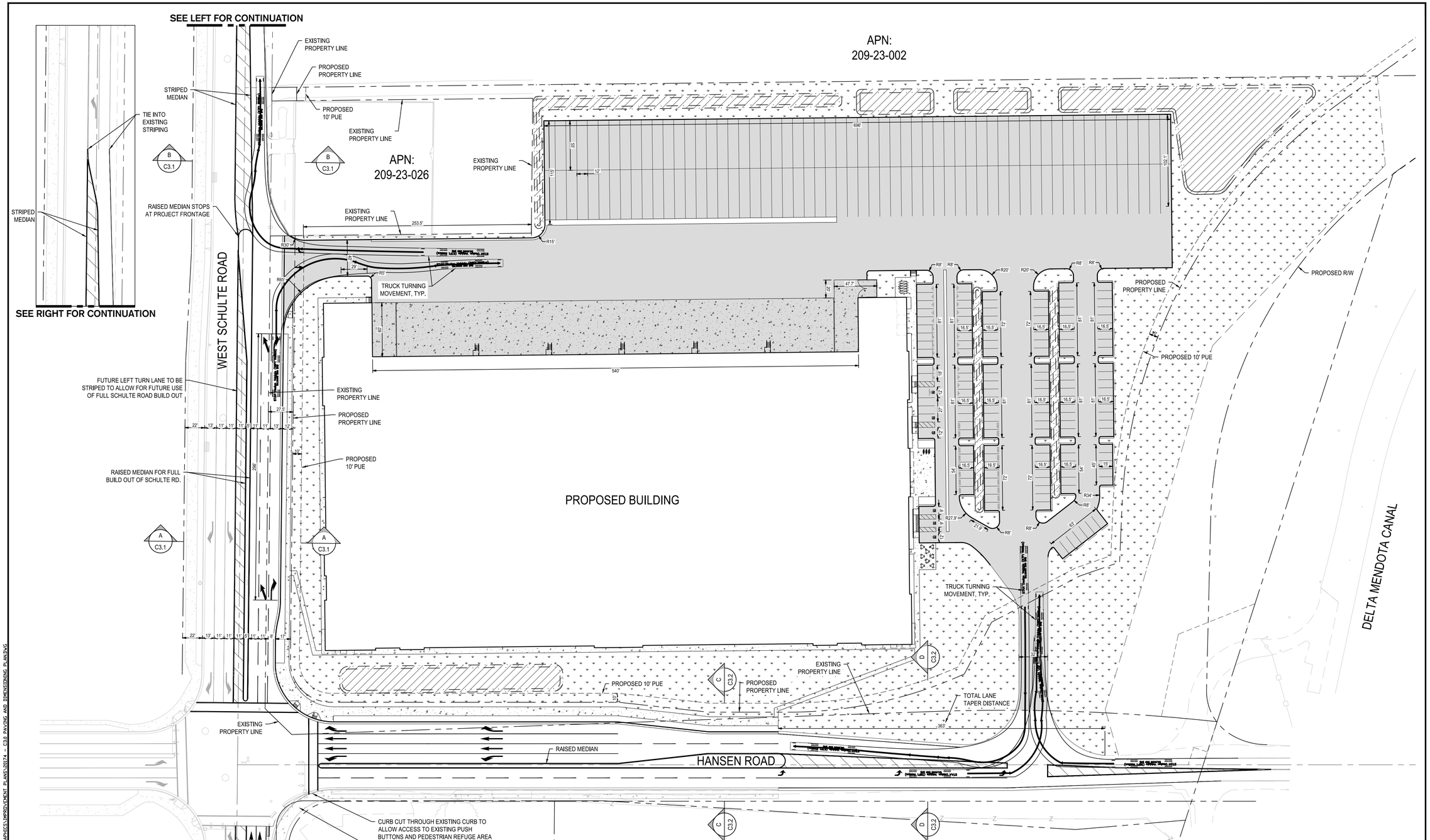
JOB NO. 20174
SCALE AS SHOWN
DATE October 25, 2024
CHECKED BY ARM
DRAWN BY ARM

EXISTING TOPOGRAPHY & DEMOLITION PLAN

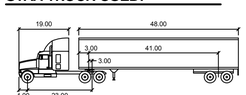
C2.0

F:\2PROJECTS\20174 16286 W SCHULTE RD TRACY SITE\PLANS AND GRAPHICS\IMPROVEMENT PLANS\20174 - C2.0 EXISTING TOPOGRAPHY AND DEMOLITION PLAN.DWG

XREFS: F:\2Projects\20174 16286 W Schulte Rd Tracy Site\Plans and Graphics\Improvement Plans\Xref\20174-TO; F:\2Projects\20174 16286 W Schulte Rd Tracy Site\Plans and Graphics\Improvement Plans\Xref\20174-BO; F:\2Projects\20174 16286 W Schulte Rd Tracy Site\Plans and Graphics\Improvement Plans\Xref\20174-TB



STAA TRUCK USED:



STAA Design Vehicle (56Ft Radius)

feet			
Tractor Width	: 8.50	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 26.1
Tractor Track	: 8.50	Articulating Angle	: 70.0
Trailer Track	: 8.50		

PAVING LEGEND:

- HEAVY DUTY CONCRETE
- ASPHALT PAVEMENT
- PEDESTRIAN CONCRETE
- LANDSCAPE AREA
- STORM WATER TREATMENT AREA

GENERAL PAVING AND DIMENSIONING NOTES:

ALL MATERIAL AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIE PROJECT SHALL CONFORM TO ALL APPLICABLE CITY OF TRACY STANDARD SPECIFICATIONS (LATEST EDITION).

1. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY QUESTION THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS NECESSARY FOR CONSTRUCTION OF THIS PROJECT.
2. ALL DIMENSIONS ARE TO FACE OF CURB, FACE OF BUILDING, CENTER OF PAINT STRIPING OR PERPENDICULAR TO THE PROPERTY LINE. CONTRACTOR SHALL VERIFY DIMENSIONS MATCH STRUCTURAL AND ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
3. ALL COORDINATE POINTS ARE AT FACE OF CURB OR RADIUS POINT. BUILDING CONTROL POINTS ARE AT THE OUTER MOST EDGE OF THE BUILDING ENVELOPE.
4. THE CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT, CURBS, AND SIDEWALKS AT NEW PAVEMENT, CURB AND SIDEWALK JUNCTURES. NO JAGGED OR IRREGULAR CUTS WILL BE ALLOWED OR ACCEPTED.
5. ALL PAINT SHALL BE 4" WIDE REFLECTIVE PAINT: WHITE ON TOP OF 6" WIDE BLACK STRIPE ON CONCRETE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
6. ALL PAVEMENT MARKINGS SHALL RECEIVE TWO COATS OF PAINT.
7. ALL SIGNS SHALL CONFORM TO MUTCD, LATEST EDITION.
8. ALL CURBS ARE 6" HIGH UNLESS OTHERWISE NOTED.
9. CONTRACTOR TO REFER TO GEOTECHNICAL REPORT FOR CONSTRUCTION JOINT SPACING REQUIREMENTS IN CONCRETE PAVEMENT.
10. ALL CRACKED, DAMAGED, OR DISPLACED CONCRETE CURB, GUTTER, AND SIDEWALK TO BE REMOVED AND REPLACED TO CURRENT CITY STANDARDS.

0' 25' 50' 100'
SCALE: 1"=50'

SIEGFRIED
3428 Brookside Rd
Stockton,CA 95219
209-943-2021

REGISTERED PROFESSIONAL ENGINEER
ADAM K. MERRILL
No. 78826
Exp. 12/31/24
CIVIL
STATE OF CALIFORNIA

PANATTONI

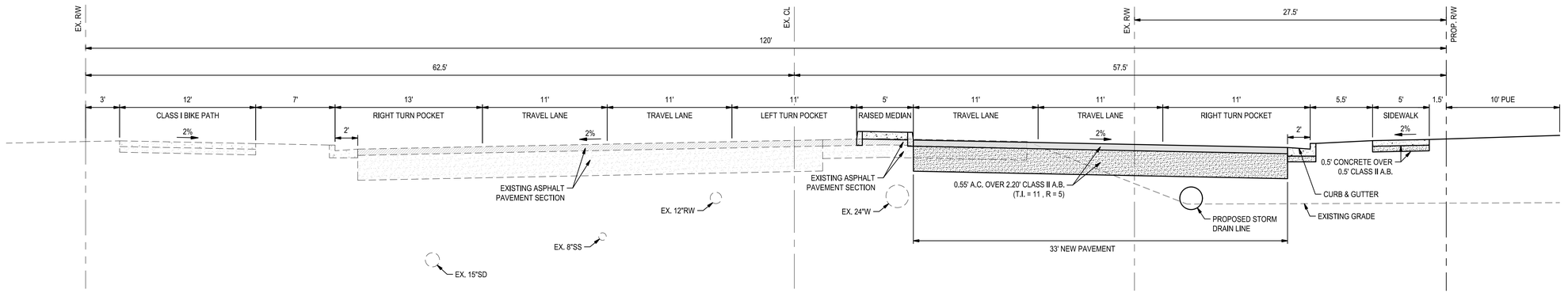
NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

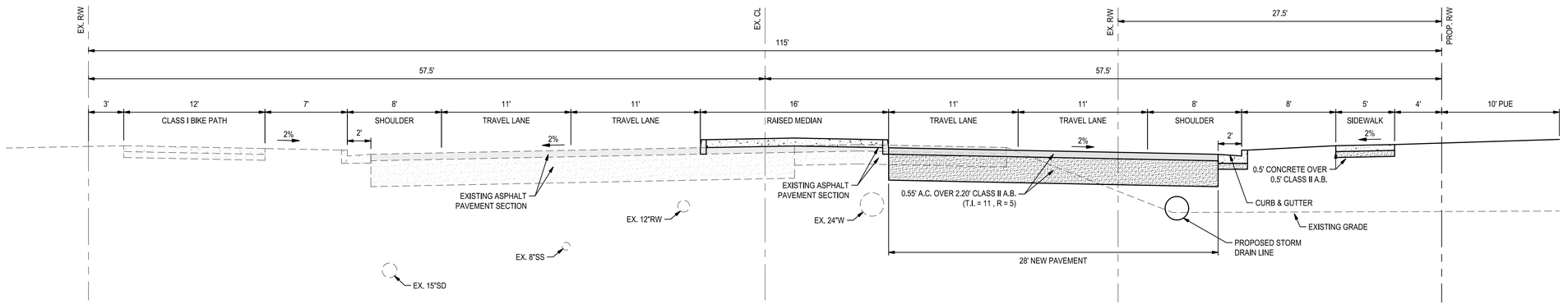
JOB NO.	20174
SCALE	AS SHOWN
DATE	October 25, 2024
CHECKED BY	AKM
DRAWN BY	ARM

PAVING & DIMENSIONING PLAN

C3.0



A-A **WEST SCHULTE ROAD TYPICAL CROSS SECTION 1**
NOT TO SCALE



B-B **WEST SCHULTE ROAD TYPICAL CROSS SECTION 2**
NOT TO SCALE

SIEGFRIED
3428 Brookside Rd
Stockton,CA 95219
209-943-2021

REGISTERED PROFESSIONAL ENGINEER
ADAM K. MERRILL
No. 78826
Exp. 12/31/24
CIVIL
STATE OF CALIFORNIA

PANATTONI®

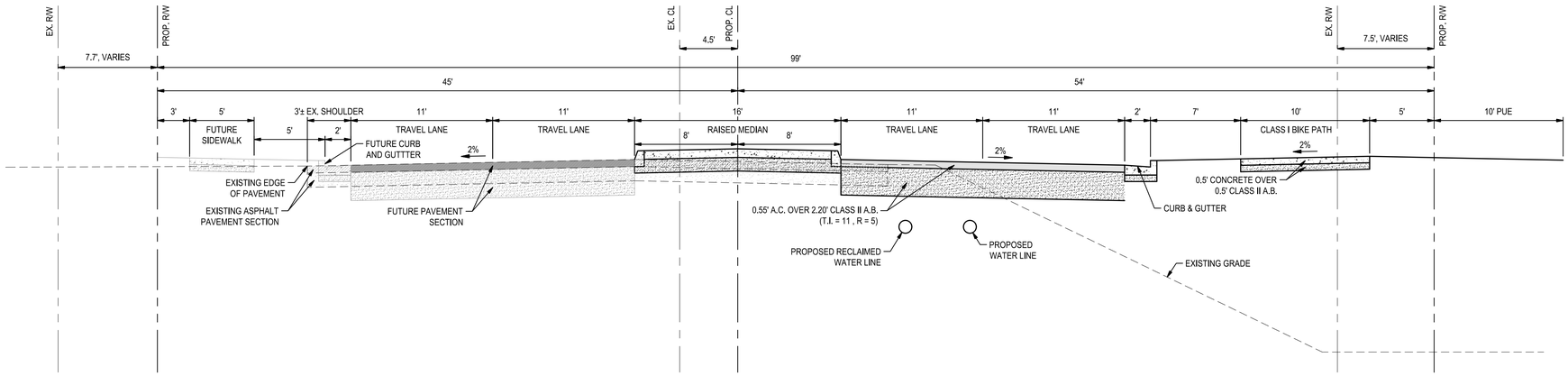
NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

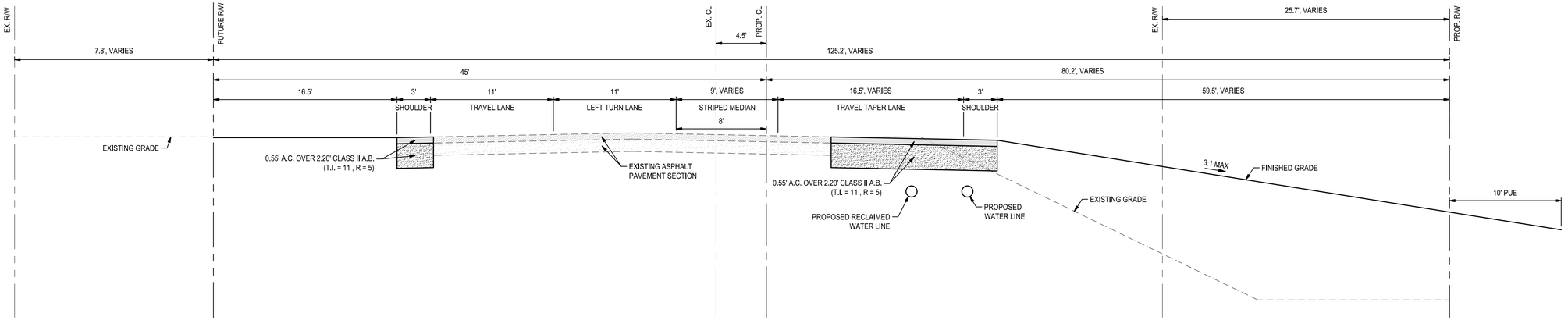
JOB NO. 20174
SCALE AS SHOWN
DATE October 25, 2024
CHECKED BY ARM
DRAWN BY ARM

W SCHULTE RD. CROSS-SECTIONS

C3.1



C-C **HANSEN ROAD TYPICAL CROSS SECTION 1**
NOT TO SCALE



D-D **HANSEN ROAD TYPICAL CROSS SECTION 2**
NOT TO SCALE

SIEGFRIED
3428 Brookside Rd
Stockton,CA 95219
209-943-2021

REGISTERED PROFESSIONAL ENGINEER
ADAM K. MERRILL
No. 78826
Exp. 12/31/24
CIVIL
STATE OF CALIFORNIA

PANATTONI®

NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

JOB NO. 20174
SCALE AS SHOWN
DATE October 25, 2024
CHECKED BY AKM
DRAWN BY ARM

HANSEN RD. CROSS-SECTIONS

C3.2

APN:
209-23-002

APN:
209-23-026

WEST SCHULTE ROAD

PROPOSED 5' MAX RETAINING WALL

EXISTING PROPERTY LINE

PROPOSED PROPERTY LINE

PROPOSED 10' PUE

PROPOSED BUILDING
FF=182.94

PROPOSED PROPERTY LINE

PROPOSED 10' PUE

PROPOSED R/W

DELTA MENDOTA CANAL

VEGETATED SWALE

VEGETATED SWALE

PROPOSED 10' PUE

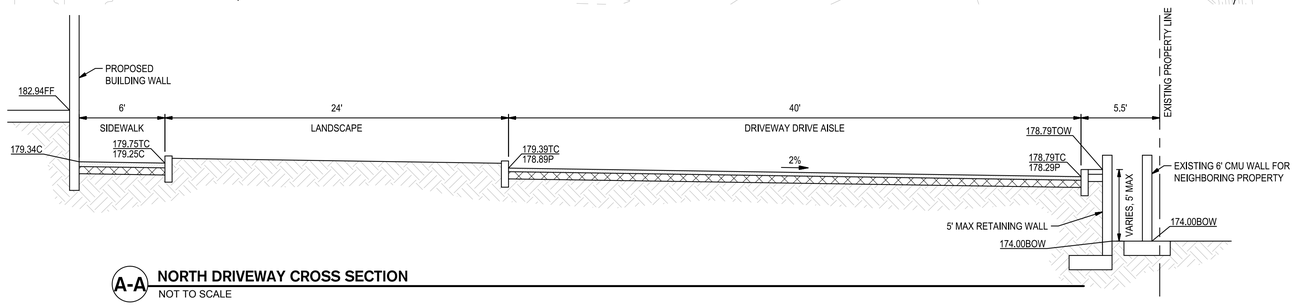
PROPOSED PROPERTY LINE

HANSEN ROAD

LEGEND:

3.0 EXISTING GROUND CONTOUR

3.0 PROPOSED GROUND CONTOUR



A-A **NORTH DRIVEWAY CROSS SECTION**
NOT TO SCALE

0' 25' 50' 100'
SCALE: 1"=50'

Know what's **below.**
Call before you dig.

XREFS: F:\20Projects\20174 16286 W Schulte Rd Tracy Site\Plans and Graphics\Improvement Plans\Xref\20174-TB; F:\20Projects\20174 16286 W Schulte Rd Tracy Site\Plans and Graphics\Improvement Plans\Xref\20174-TO; F:\20Projects\20174 16286 W Schulte Rd Tracy Site\Plans and Graphics\Improvement Plans\Xref\20174-BO; .\Xref\20174-BM; .\xref\20174-BM GRADING; F:\20Projects\20174 16286 W Schulte Rd Tracy Site\Plans and Graphics\Improvement Plans\Xref\20174-BM UTILITY; .\Xref\20174-BM ARCH

F:\20PROJECTS\20174 16286 W SCHULTE RD TRACY SITE\PLANS AND GRAPHICS\IMPROVEMENT PLANS\20174 - C4.0 GRADING PLAN.DWG

SIEGFRIED
3428 Brookside Rd
Stockton,CA 95219
209-943-2021

REGISTERED PROFESSIONAL ENGINEER
ADAM K. MERRILL
No. 78826
Exp. 12/31/24
CIVIL
STATE OF CALIFORNIA

PANATTONI

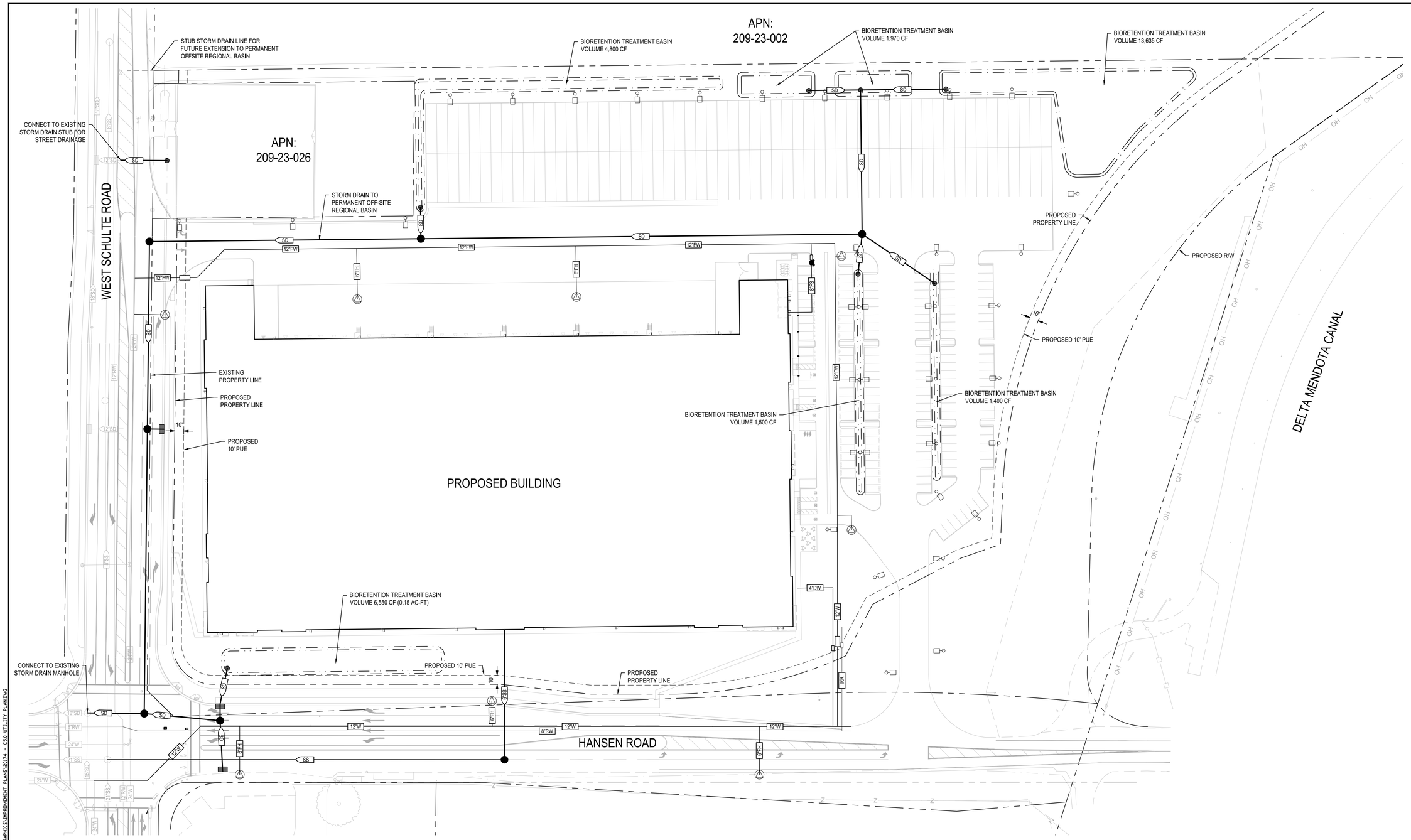
NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

JOB NO. 20174
SCALE AS SHOWN
DATE October 25, 2024
CHECKED BY AKM
DRAWN BY ARM

GRADING PLAN

C4.0



LEGEND:

- PROPOSED MANHOLE
- PROPOSED CITY DRAIN STORM INLET
- PROPOSED SITE DRAIN INLET
- PROPOSED FIRE HYDRANT
- PROPOSED FDC
- PROPOSED SITE LIGHT SHOWN FOR REFERENCE ONLY
- PROPOSED SANITARY SEWER LINE
- PROPOSED STORM DRAIN PIPE
- PROPOSED WATER LINE
- PROPOSED FIRE SERVICE LINE
- PROPOSED FIRE HYDRANT LINE

STORM DRAIN DESIGN:

1. ONSITE TREATMENT AND RETENTION TO MEET THE POST CONSTRUCTION STANDARDS MANUAL IN THE BIORETENTION STORM WATER TREATMENT BASINS WITH A TOTAL TREATMENT VOLUME OF 31,825 CF. THE STORM RUNOFF OF WILL THEN OVERFLOW INTO THE ONSITE UNDERGROUND PIPES TO BE DISCHARGED OFFSITE AND CONNECTED TO THE EXISTING STORM DRAIN MANHOLE LOCATED AT THE INTERSECTION OF WEST SCHULTE RD. AND HANSEN RD. THE CITY CONFIRMED THAT THE STORM DRAIN SYSTEM IS SIZED PROPERLY FOR THE PROPOSED PROJECT TO DISCHARGE TO.

0' 25' 50' 100'
SCALE: 1"=50'

Know what's **below.** **Call** before you dig.

SIEGFRIED
3428 Brookside Rd
Stockton,CA 95219
209-943-2021

REGISTERED PROFESSIONAL ENGINEER
ADAM K. MERRILL
No. 78826
Exp. 12/31/24
CIVIL
STATE OF CALIFORNIA

PANATTONI

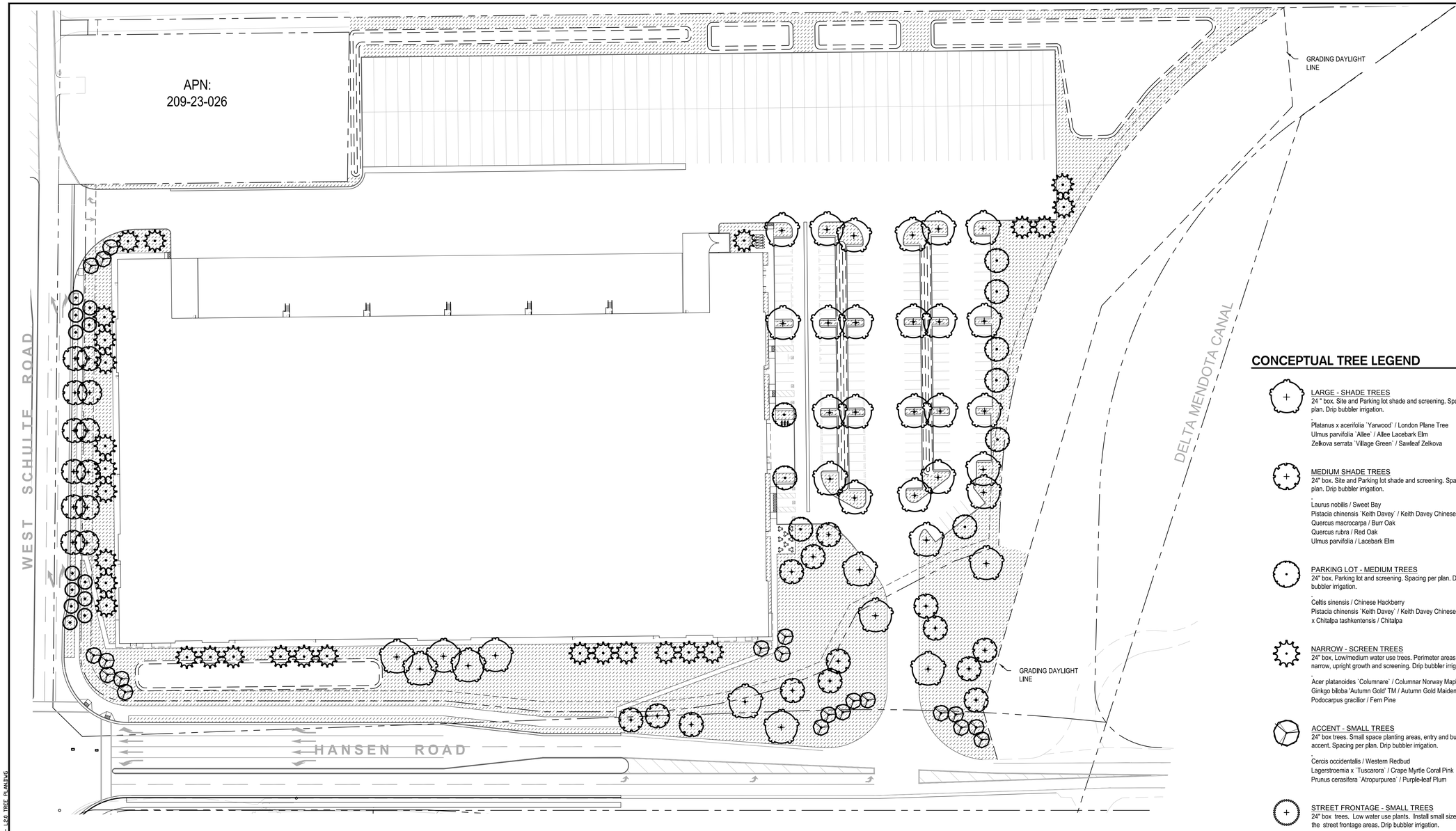
NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

JOB NO. 20174
SCALE AS SHOWN
DATE October 25, 2024
CHECKED BY AKM
DRAWN BY ARM

UTILITY PLAN

C5.0



CONCEPTUAL TREE LEGEND

		MATURE SIZE
LARGE - SHADE TREES 24 " box. Site and Parking lot shade and screening. Spacing per plan. Drip bubbler irrigation.	59	
Platanus x acerifolia `Yarwood` / London Plane Tree		60'H x 45'W
Ulmus parvifolia `Allee` / Allee Lacebark Elm		60'H x 55'W
Zelkova serrata `Village Green` / Sawleaf Zelkova		60'H x 45'W
MEDIUM SHADE TREES 24" box. Site and Parking lot shade and screening. Spacing per plan. Drip bubbler irrigation.	89	
Laurus nobilis / Sweet Bay		35'H x 30'W
Pistacia chinensis `Keith Davey` / Keith Davey Chinese Pistache		35'H x 30'W
Quercus macrocarpa / Burr Oak		60'H x 40'W
Quercus rubra / Red Oak		60'H x 40'W
Ulmus parvifolia / Lacebark Elm		60'H x 45'W
PARKING LOT - MEDIUM TREES 24" box. Parking lot and screening. Spacing per plan. Drip bubbler irrigation.	30	
Celtis sinensis / Chinese Hackberry		40'H x 5'W
Pistacia chinensis `Keith Davey` / Keith Davey Chinese Pistache x Chitalpa tashkentensis / Chitalpa		35'H x 30'W
		35'H x 30'W
NARROW - SCREEN TREES 24" box, Low/medium water use trees. Perimeter areas requiring narrow, upright growth and screening. Drip bubbler irrigation.	67	
Acer platanoides `Columnare` / Columnar Norway Maple		45'H x 15'W
Ginkgo biloba 'Autumn Gold' TM / Autumn Gold Maidenhair Tree		45'H x 25'W
Podocarpus gracilior / Fern Pine		55'H x 20W
ACCENT - SMALL TREES 24" box trees. Small space planting areas, entry and building accent. Spacing per plan. Drip bubbler irrigation.	58	
Cercis occidentalis / Western Redbud		18'H x 15'W
Lagerstroemia x `Tuscarora` / Crape Myrtle Coral Pink		20'H x 15'W
Prunus cerasifera `Atropurpurea` / Purple-leaf Plum		20'H x 15'W
STREET FRONTAGE - SMALL TREES 24" box trees. Low water use plants. Install small sized trees in the street frontage areas. Drip bubbler irrigation.	57	
Arbutus x 'Marina' / Marina Strawberry Tree		30'H x 25'W
Cercis occidentalis / Western Redbud		20'H x 17'W
Olea europaea / European Olive		30'H x 25'W

BARK MULCH-LANDSCAPED AREAS
Natural chip bark mulch. 3" thick layer minimum. Landscape planting areas within the project site including open space area in street frontage to receive chip bark mulch. Mirafi under all mulched areas. Not installed in bioretention basins and non-irrigated hydroseeded areas.

SEE L2.1 FOR SHRUB AND GROUNDCOVER PLAN

GENERAL PLANTING NOTES

1. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH LOCAL AND STATE STANDARDS AND CODES.
2. ALL ASPHALT, BASE COURSE AND OTHER DEBRIS ARE TO BE REMOVED COMPLETELY BELOW PLANTING AREAS TO NATIVE SOIL LEVEL.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR POSITIVE SURFACE DRAINAGE AT 2% MINIMUM IN PLANTING AREAS EXCEPT WHERE SHOWN.
4. THE CONTRACTOR SHALL FURNISH AND APPLY THE APPROPRIATE PRE-EMERGENT HERBICIDE AT RATES PRESCRIBED BY LAW AND THE MANUFACTURER'S RECOMMENDATIONS. ALL PRE-EMERGENT HERBICIDES SHALL BE APPLIED BY LICENSED OPERATORS UNDER FAVORABLE WEATHER CONDITIONS.
5. THE CONTRACTOR TO BE RESPONSIBLE FOR OBTAINING A SOILS TEST AND PROVIDING THE APPROPRIATE AMENDMENTS BASED ON THE TEST RESULTS.
6. FINISH GRADE OF PLANTED AREAS TO BE ONE (1) INCH BELOW PAVING. WATER SOIL THOROUGHLY BEFORE PLANTING. ALL PLANTS SHALL BE SET AT SUCH A LEVEL THAT AFTER SETTLING THEY BEAR THE SAME RELATIONSHIP TO THE SURROUNDING FINISH GRADE AS THEY BORE TO THE SOIL LINE GRADE IN THE CONTAINER, UNLESS OTHERWISE NOTED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE DRAINAGE OF ALL PLANTINGS, SUFFICIENT TO INSURE HEALTHY GROWTH.

GENERAL IRRIGATION NOTES

1. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ALL STATE AND LOCAL CODES AND STANDARDS.
2. THE INTENT OF THIS IRRIGATION SYSTEM IS TO PROVIDE THE MINIMUM AMOUNT OF WATER REQUIRED TO SUSTAIN GOOD PLANT HEALTH. LANDSCAPE SUBCONTRACTOR SHALL GUARANTEE 100% COVERAGE OF SYSTEM.
3. INSTALL NEW REMOTE CONTROL VALVE BOXES 12" FROM WALK, CURB, EQUIPMENT, OR LANDSCAPE FEATURE. AT MULTIPLE VALVE BOX GROUPS, EACH BOX SHALL BE AN EQUAL DISTANCE FROM THE WALK, CURB, LAWN, ETC. AND EACH BOX SHALL BE 12" APART. SHORT SIDE OF RECTANGULAR VALVE BOXES SHALL BE PARALLEL TO WALK, CURB, LAWN, ETC.
4. ALL PVC SLEEVES UNDER PAVEMENT AND ROADWAYS TO BE SCH. 40. SLEEVES TO BE TWICE THE DIAMETER OF PIPE OR WIRE BUNDLE THAT WILL PASS THROUGH SLEEVE. CHANGE ALL RING-TITE PIPE THAT WOULD PASS THROUGH SLEEVES TO CLASS 315 SOLVENT WELD PIPE OF SAME SIZE.
5. THE IRRIGATION CONTRACTOR SHALL NOT WILLFULLY INSTALL THE SYSTEM AS DESIGNED WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS OR GRADE DIFFERENCES EXIST THAT WERE NOT IDENTIFIED IN THE DRAWINGS. SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. OTHERWISE, THE CONTRACTOR MUST ASSUME FULL RESPONSIBILITY FOR ANY NECESSARY REVISIONS.
6. STREET FRONTAGE LANDSCAPE IRRIGATION MAINLINE LAYOUT SHALL BE INSTALLED AND PROVIDE THE OPPORTUNITY TO BE ISOLATED AND CONNECTED TO FUTURE RIGHT-OF-WAY PROJECTS.

IRRIGATION DESIGN SUMMARY

1. ISOLATED WATER METER AND CONNECTION FOR LANDSCAPE IRRIGATION SYSTEM.
2. NEW BACKFLOW PREVENTER, BOOSTER PUMP(IF NECESSARY), MASTER VALVE AND FLOW SENSOR SHALL BE INSTALLED.
3. NEW PEDESTAL, WEATHER-BASED IRRIGATION CONTROLLER WITH RAIN SENSOR.
4. IRRIGATION SHALL CONSIST OF DRIP FOR SHRUBS AND GROUNDCOVERS, OVERHEAD SPRAY ROTATORS FOR BIORETENTION AREAS AND AN ISOLATED VALVE WITH DRIP BUBBLERS FOR TREES.

I SHALL COMPLY WITH THE CRITERIA OF THE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE AND APPLIED THEM FOR THE EFFICENT USE OF WATER IN THE LANDSCAPE AND IRRIGATION DESIGN PLANS.

ROBERT J. NORBUTAS, JR., RLA 5595

0' 25' 50' 100'
SCALE: 1"=50'

Know what's **below.** **Call** before you dig.

SIEGFRIED
3428 Brookside Rd
Stockton,CA 95219
209-943-2021

LICENSED LANDSCAPE ARCHITECT
ROBERT J. NORBUTAS JR.
No.5595
Signature
Exp. 11/30/26
STATE OF CALIFORNIA

PANATTONI

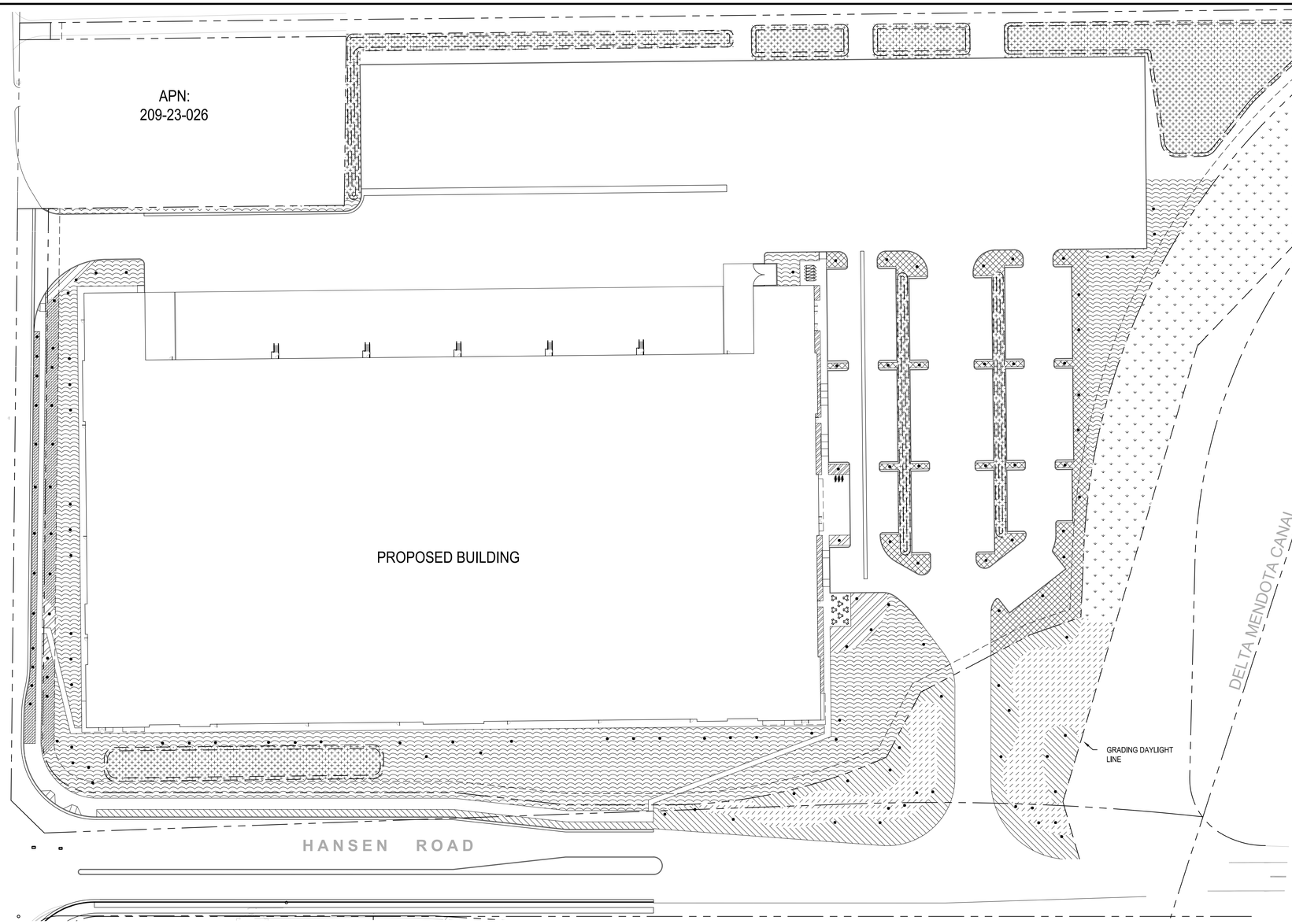
NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

JOB NO. 20174
SCALE AS SHOWN
DATE October 25, 2024
CHECKED BY AKM
DRAWN BY ARM

TREE PLAN

L2.0



CONCEPTUAL SHRUB AND GROUNDCOVER LEGEND

HANSEN ROAD ENTRY- SHRUBS & GROUNDCOVERS 18,915 sf
Temporary landscaping at entry driveway and Hansen Road frontage.
Medium and small sized
shrubs groundcovers and grasses,
(18"-4' high, 5 gallon and 1 gallon).
Drip Irrigation.

	MATURE SIZE
Abelia x grandiflora / Glossy Abelia	3'H x 3'W
Arctostaphylos x 'Emerald Carpet' / Emerald Carpet Manzanita	1'H x 15'W
Baccharis pilularis 'Pigeon Point' / Pigeon Point Coyote Brush	2'H x 7'W
Cenchrus alopecuroides / Fountain Grass	1.5'H x 2'W
Chondropetalum tectorum / Small Cape Rush	2'H x 3'W
Cistus x purpureus / Orchid Rockrose	4'H x 4'W
Festuca glauca / Blue Fescue	1.5'H x 1'W
Lantana montevidensis / Trailing Lantana	1'H x 1.5' W
Myoporum parvifolium / Trailing Myoporum	6"H x 9" W
Rhaphiolepis indica / Indian Hawthorn	3'H x4'W
Rosmarinus officinalis 'Prostratus' / Dwarf Rosemary	2'H x 4'W
Salvia greggii / Autumn Sage	2'H X 2'W
Westringia fruticosa 'Morning Light' / Morning Light Coast Rosemary	3'H x 3'W

BARK MULCH-LANDSCAPED AREAS
Natural chip bark mulch. 3" thick layer minimum. Landscape planting areas within the project site including open space area in street frontage to receive chip bark mulch. Mirafi under all mulched areas. Not installed in bioretention basins and non-irrigated hydroseeded areas.

ENTRY ACCENT - SHRUB & GROUNDCOVERS 4,127 sf
Entry and Roadway corner accent planter areas.
Large background shrubs (6'-12' high, 15 gallon) with medium and small sized shrubs groundcovers and grasses, (18"-4' high, 5 gallon and 1 gallon).
Drip Irrigation.

	MATURE SIZE
Acacia redolens 'Low Boy' / Low Boy Bank Catclaw	2'H x 12'W
Arctostaphylos uva-ursi `Emerald Carpet` / Emerald Carpet Manzanita	1'H x 15'W
Calamagrostis x acutiflora 'Karl Foerster' / Karl Foerster Feather Reed Grass	2'H x 2'W
Ceanothus griseus horizontalis `Yankee Point` / California Lilac	2'H x 8'W
Coleonema pulchellum 'Sunset Gold' / Sunset Gold Breath of Heaven	2'H x 4'W
Dietes vegeta / African Iris	3'H x 3'W
Dodonaea viscosa 'Purpurea' / Purple Hopseed Bush	10'H x 8'W
Erigeron karvinskianus `Profusion` / Santa Barbara Daisy	1'H x 3' W
Festuca glauca 'Elijah Blue' / Blue Fescue	1.5'H x 1'W
Hesperaloe parviflora 'Perpa' TM / Brakelights Red Yucca	3'H x4'W
Heteromeles arbutifolia / Toyon	6'H x 10'W
Lantana montevidensis 'Yellow' / Trailing Lantana	1.5'H X 3'W
Leymus condensatus 'Canyon Prince' / Canyon Prince Giant Wild Rye	2'H x 3'W
Lomandra longifolia 'Platinum Beauty' / Platinum Beauty Dwarf Mat Rush	2'H x 3'W
Mulhenbergia capilaris 'Regal Mist' / Pink Muhly	4'H x 4'W
Nandina domestica `Monem` / Plum Passion Heavenly Bamboo	4'H x 4'W
Penstemon heterophyllus 'Margarita BOP' / Margarita BOP Penstemon	1'H x 2'W
Phormium tenax `Amazing Red` / Dwarf Red Flax	1.5'H x 1.5'W
Rhaphiolepis umbellata / Yedda Hawthorn	4'H x 4'W
Salvia spathacea / Hummingbird Sage	2'H x 4'W
Xylosma congestum / Shiny Xylosma	6'H X 5'W

SITE - SHRUBS & GROUNDCOVERS 64,900 sf
General site landscape areas.
Medium and small sized
shrubs groundcovers and grasses,
(18"-4' high, 5 gallon and 1 gallon).
Drip Irrigation.

	MATURE SIZE
Abelia x grandiflora / Glossy Abelia	3'H x 3'W
Arctostaphylos x 'Emerald Carpet' / Emerald Carpet Manzanita	1'H x 15'W
Baccharis pilularis 'Pigeon Point' / Pigeon Point Coyote Brush	2'H x 7'W
Cenchrus alopecuroides / Fountain Grass	1.5'H x 2'W
Chondropetalum tectorum / Small Cape Rush	2'H x 3'W
Cistus x purpureus / Orchid Rockrose	4'H x 4'W
Festuca glauca / Blue Fescue	1.5'H x 1'W
Lantana montevidensis / Trailing Lantana	1'H x 1.5' W
Myoporum parvifolium / Trailing Myoporum	6"H x 9" W
Rhaphiolepis indica / Indian Hawthorn	3'H x4'W
Rosmarinus officinalis 'Prostratus' / Dwarf Rosemary	2'H x 4'W
Salvia greggii / Autumn Sage	2'H X 2'W
Westringia fruticosa 'Morning Light' / Morning Light Coast Rosemary	3'H x 3'W

PARKING LOT - SHRUBS AND GROUNDCOVERS 11,665 sf
Medium and small sized shrubs and grasses (18"-4' high, 5 gallon) with evergreen low groundcover planting (6"-18" high, 1 gallon).
Plants for use around the parking lot and drive aisle areas.
Drip and overhead spray rotator Irrigation.

	MATURE SIZE
Callistemon viminalis `Little John` / Dwarf Weeping Bottlebrush	3'H x 3'W
Cistus x purpureus / Orchid Rockrose	4'H x 4'W
Dietes vegeta / African Iris	3'H x 3'W
Erigeron karvinskianus `Profusion` / Santa Barbara Daisy	1'H x 3'W
Lomandra longifolia `Platinum Beauty` / Platinum Beauty Dwarf Mat Rush	2'H x 3'W
Osteospermum fruticosum `African Queen` / Trailing African Daisy	1'H x 1'W
Rhaphiolepis indica `Ballerina` / Ballerina Indian Hawthorn	3'H x 4'W
Rhaphiolepis umbellata 'Minor' / Yedda Hawthorn	3'H x 3' W
Rosa x 'Flower Carpet Pink' / Rose	2'H x 2'W
Rosmarinus officinalis 'Prostratus' / Dwarf Rosemary	2'H x4'W

STREET FRONTAGE - SHRUB & GROUNDCOVERS 6,167 sf
Medium and small sized shrubs and grasses (18"-4' high, 5 gallon and 1 gallon).
West Schulte road streetscape planter areas in curb planter strips and at back of walk.
Drip and overhead spray rotator Irrigation.

	MATURE SIZE
Arctostaphylos x `Emerald Carpet` / Emerald Carpet Manzanita	1'H x 15'W
Baccharis pilularis `Pigeon Point` / Coyote Brush	2'H x 8'W
Callistemon viminalis `Little John` / Dwarf Weeping Bottlebrush	3'H x 3'W
Dietes vegeta / African Iris	4'H x 4'W
Leucophyllum frutescens 'Silver Cloud' / Texas Ranger	3'H x 3'W
Muhlenbergia capillaris 'Regal Mist / Pink Muhly	1'H x 3'W
Pennisetum orientale 'Karley Rose' / Karley Rose Fountain Grass	2'H x 3'W
Pennisetum setaceum 'Eaton Canyon' / Eaton Canyon Fountain Grass	1'H x 1'W
Rosa x 'Flower Carpet Pink' / Rose	3'H x 4'W
Viburnum tinus 'Spring Bouquet' / Spring Bouquet Laurustinus	3'H x 3' W

BIORETENTION BASIN-SHRUB & GRASSES 41,648 sf
1 gallon plant plugs. Wet and dry tolerant plants.
Installed at bottom of basins, 36" - 48".
Bioretention compost mix installed.
Overhead spray rotator irrigation.

	MATURE SIZE
Carex testacea / Orange Sedge	2'H x 3'W
Chondropetalum tectorum / Small Cape Rush	2'H x 3'W
Juncus patens / California Gray Rush	2'H x 3'W

OFFSITE- NON-IRRIGATED HYDROSEED 41,760 sf
Non-irrigated hydroseed mix.

Non-Irrigated Hydroseed
Native Erosion Control Non-irrigated Mix
Bromus carinatus (25 lbs./acre)
Elymus glaucus (10 lbs./acre)
Festuca microstachys (6 lbs./acre)
Trifollium willdenovii (4 lbs./acre)

● TREE LOCATION (PROPOSED FOR REFERENCE)

SEE L2.0 FOR TREE PLAN

I SHALL COMPLY WITH THE CRITERIA OF THE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE AND APPLIED THEM FOR THE EFFICENT USE OF WATER IN THE LANDSCAPE AND IRRIGATION DESIGN PLANS.

ROBERT J. NORBUTAS, JR., RLA 5595

0' 25' 50' 100'
SCALE: 1"=50'

SIEGFRIED
3428 Brookside Rd
Stockton,CA 95219
209-943-2021

LICENSED LANDSCAPE ARCHITECT
ROBERT J. NORBUTAS JR.
No.5595
Signature
Exp/ 11/30/26
STATE OF CALIFORNIA

PANATTONI®

NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

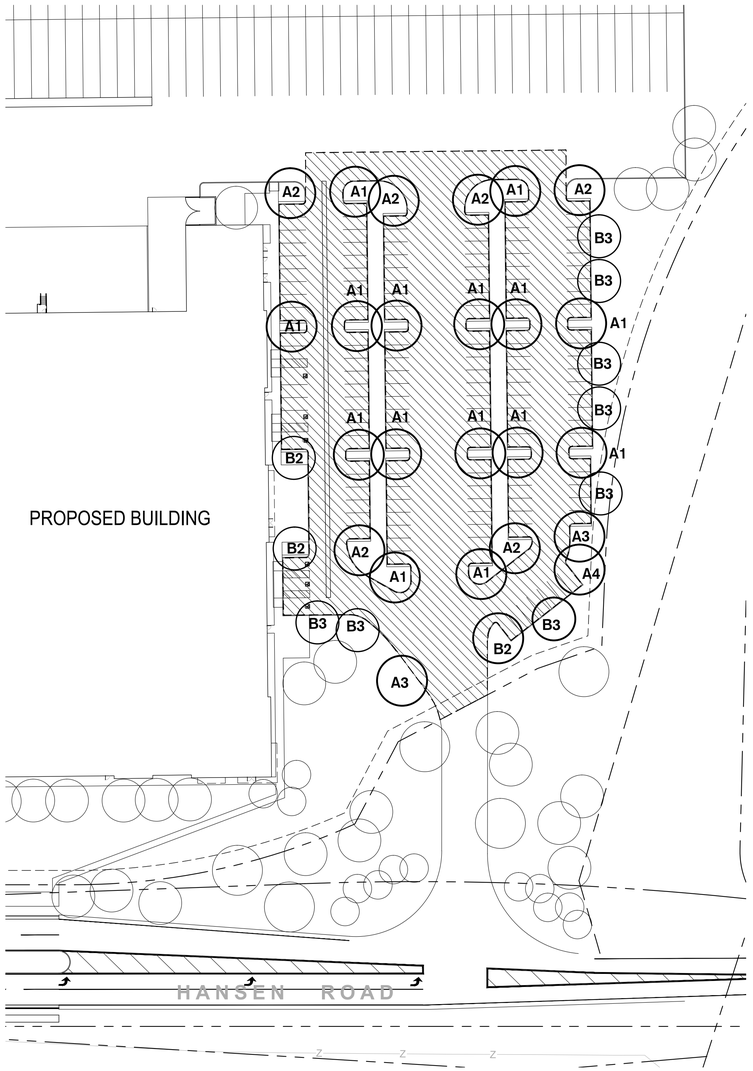
JOB NO. 20174
SCALE AS SHOWN
DATE October 25, 2024
CHECKED BY AKM
DRAWN BY ARM

SHRUB AND GROUNDCOVER PLAN

L2.1

J:\20PROJECTS\20174 16286 W SCHULTE RD TRACY SITE\PLANS AND GRAPHICS\IMPROVEMENT PLANS\20174 - L2.1 SHRUB AND GROUNDCOVER PLAN.DWG

XREFS: .\Xref\20174-TB; .\Xref\20174-TO; .\Xref\20174-BO; .\Xref\20174-BM; .\Xref\20174 - BM-HATCH; .\20174 - L2.0 TREE PLAN



PROPOSED BUILDING

PARKING LOT AREAS NOTE:

1. PER TRACY MUNICIPAL CODE SECTION 10.08.3560
2. **40%** TREE SHADING REQUIREMENT OVER PARKING AREAS AT TREE MATURITY.
3. SHADE PERCENTAGE FIGURES ARE BASED ON THE CANOPY SPREAD PER CODE REQUIREMENTS.
4. TREE IS ASSUMED TO BE PLANTED FROM 24" BOX CONTAINERS MINIMUM, PER CITY STANDARD.

PARKING LOT SHADE CALCULATIONS

SHADE COVERAGE

TREE TYPE	CANOPY	1 (100%)	2 (75%)	3 (50%)	4 (25%)	
A	30'-35'	15 @ 962 SF=14,430	6 @ 722 SF= 4,332	2 @ 481 SF= 962	1 @240 SF= 240	
B	25'-30'	—	3 @ 530 SF= 1,590	8 @ 354 SF= 2,832	—	
C	20'-25'	—	—	—	—	
D	15'-20'	—	—	—	—	
	TOTALS	14,430 SF	5,922 SF	3,794 SF	240 SF	24,386 SF

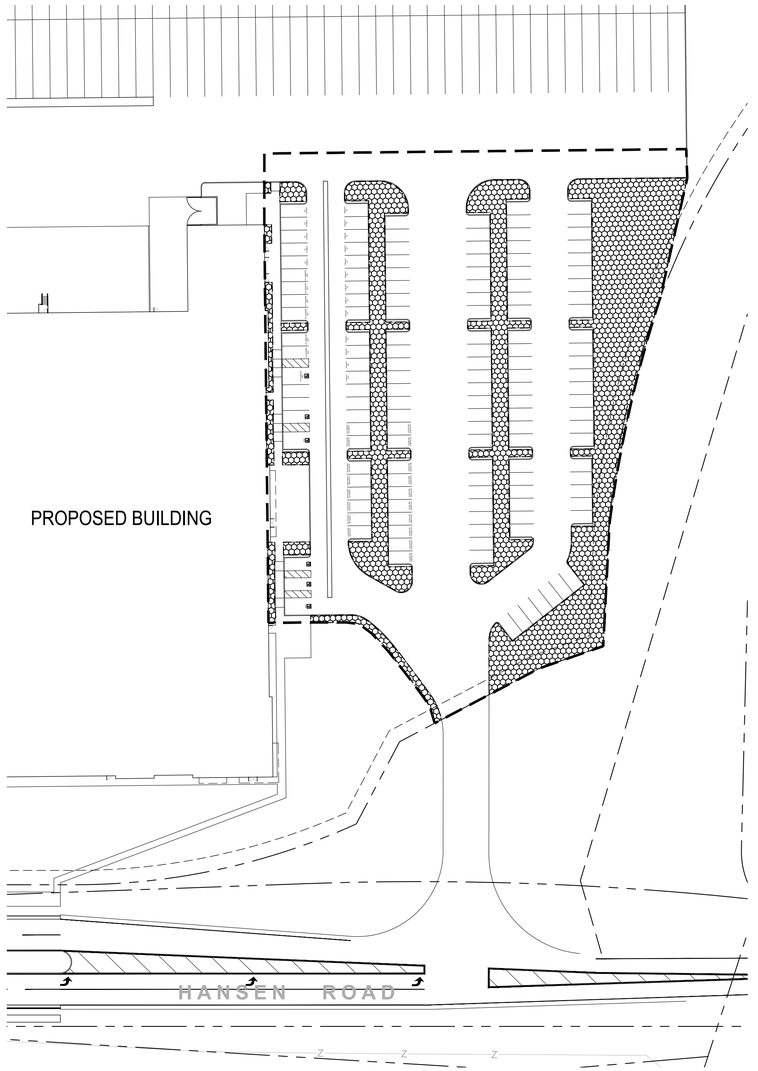
TOTAL PARKING AREA	59,892 SF
TOTAL SHADED AREA	24,386 SF
REQUIRED SHADED AREA (40%)	23,957 SF
PERCENT SHADED	41%

MEETS CODE REQUIREMENTS

TREES NOT APPLIED TO SHADE COVERAGE CALCULATION

XX — TREE APPLIED TO SHADE COVERAGE CALCULATION

REPRESENTS PARKING AREA REQUIRED TO MEET SHADING REQUIREMENTS.



PROPOSED BUILDING

PARKING LANDSCAPE CALCULATIONS NOTE:

1. CITY OF TRACY REQUIRES A MINIMUM OF **20%** OF THE PARKING AREA TO BE LANDSCAPED.

PARKING LOT LANDSCAPE CALCULATIONS

TOTAL PARKING AREA	92,445 SF
TOTAL LANDSCAPE AREA	24,717 SF
REQUIRED LANDSCAPE AREA (20%)	18,570 SF
PERCENT LANDSCAPE	27%

MEETS CODE REQUIREMENTS

REPRESENTS LANDSCAPE PARKING AREA

PARKING LOT AREA

SEE L2.0 FOR TREE PLAN

0' 25' 50' 100'

SCALE: 1"=50'

SIEGFRIED
3428 Brookside Rd
Stockton,CA 95219
209-943-2021

LICENSED LANDSCAPE ARCHITECT
ROBERT J. NORBUT AS JR.
No.5595
Signature
Exp/ 11/30/26
STATE OF CALIFORNIA

PANATTONI

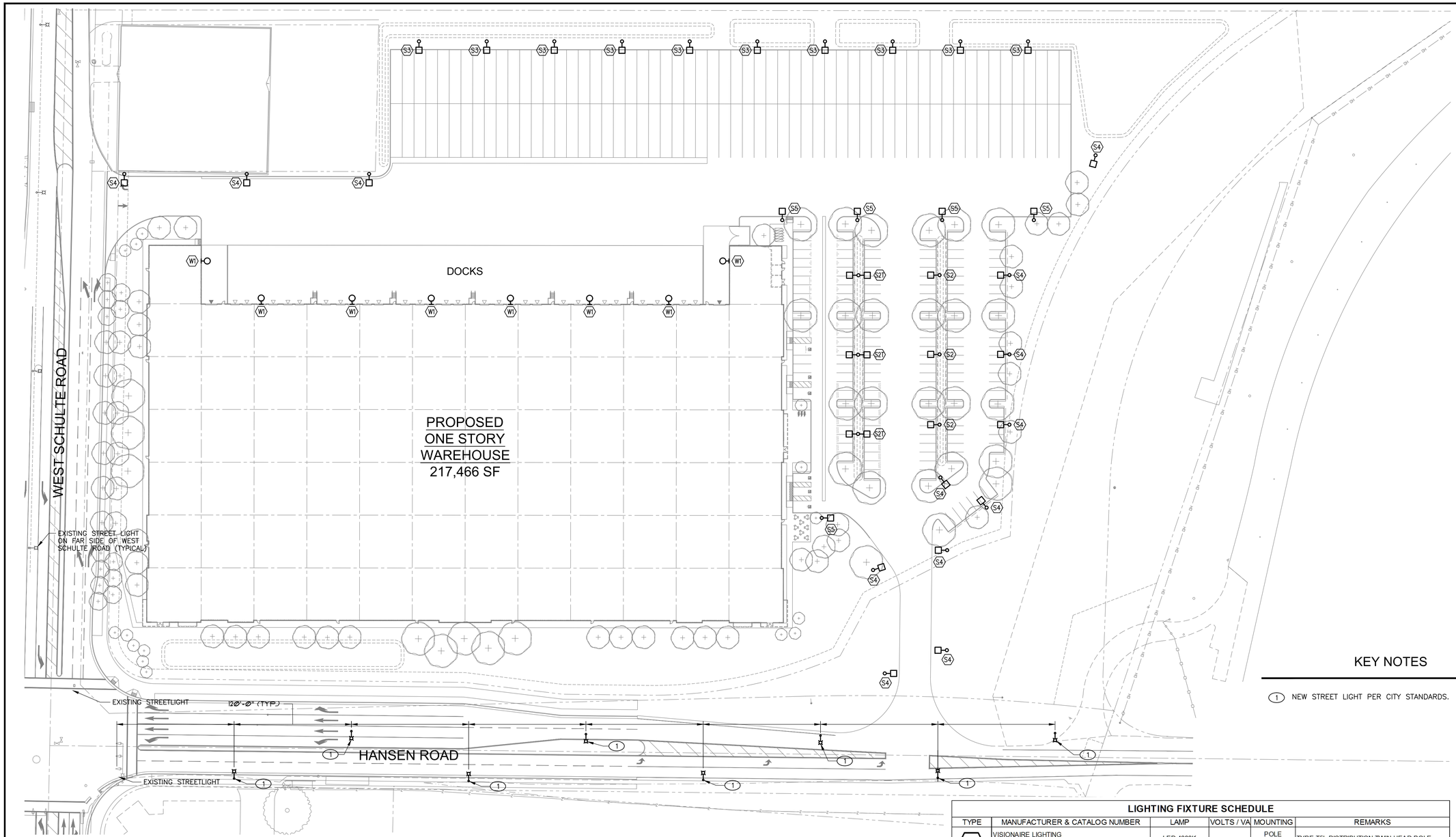
NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

JOB NO. 20174
SCALE AS SHOWN
DATE October 25, 2024
CHECKED BY ARM
DRAWN BY ARM

LANDSCAPE CALCULATIONS

L2.2



1 ENLARGED SITE LIGHTING PLAN

SCALE: 1" = 50'-0"

KEY NOTES

(1) NEW STREET LIGHT PER CITY STANDARDS.

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER & CATALOG NUMBER	LAMP	VOLTS / VA	MOUNTING	REMARKS
S2T	VISIONAIRE LIGHTING VMX-II-T5LS-25L-4K-UNV-AR-DIM	LED 4000K 25368 LUMENS	277 / 172	POLE MOUNTED @25'	TYPE T5L DISTRIBUTION TWIN-HEAD POLE FIXTURE WITH 172W LED LAMP
S2	VISIONAIRE LIGHTING VMX-II-T5LS-25L-4K-UNV-AR-DIM	LED 4000K 25368 LUMENS	277 / 172	POLE MOUNTED @25'	TYPE T5LS DISTRIBUTION SINGLE-HEAD POLE FIXTURE WITH 172W LED LAMP
S3	VISIONAIRE LIGHTING VMX-II-T4-55L-4K-UNV-AR-DIM	LED 4000K 52765 LUMENS	277 / 400	POLE MOUNTED @25'	TYPE 4 DISTRIBUTION SINGLE-HEAD POLE FIXTURE WITH 400W LED LAMP
S4	LEOTEK LIGHTING AR13-48N-MV-NW-3-XX-120-BLS	LED 4000K 7450 LUMENS	277 / 88	POLE MOUNTED @25'	TYPE 3 DISTRIBUTION SINGLE-HEAD POLE FIXTURE WITH 88W LED LAMP
S5	VISIONAIRE LIGHTING VMX-II-T4-25L-4K-UNV-AR-DIM	LED 4000K 23524 LUMENS	277 / 172	POLE MOUNTED @25'	TYPE 4 DISTRIBUTION SINGLE-HEAD POLE FIXTURE WITH 172W LED LAMP
W1	VISIONAIRE LIGHTING VMS-1-T2-96LC-7-4K-UNV-WM-DIM	LED 4000K 24916 LUMENS	277 / 212	WALL MOUNTED @25'	FORWARD THROW DISTRIBUTION WALL PACK WITH 212W LED LAMP

LIGHTING FIXTURE NOTES:

1. COORDINATE LUMINAIRE FINISH WITH ARCHITECT (TYPICAL).
1. SITE FIXTURES TO BE CONTROLLED BY LIGHTING CONTROL PANEL ASTRONOMICAL TIME CLOCK.

CONSULTING ENGINEERS
1209 Pleasant Grove Blvd.
Roseville, CA 95678
p 916-771-0778
www.lpengineers.com
Job #: 21-2141

REGISTERED PROFESSIONAL ENGINEER
RAMI S. ZEIDAN
No. E 16762
Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

PANATTONI

NEW WAREHOUSE BUILDING

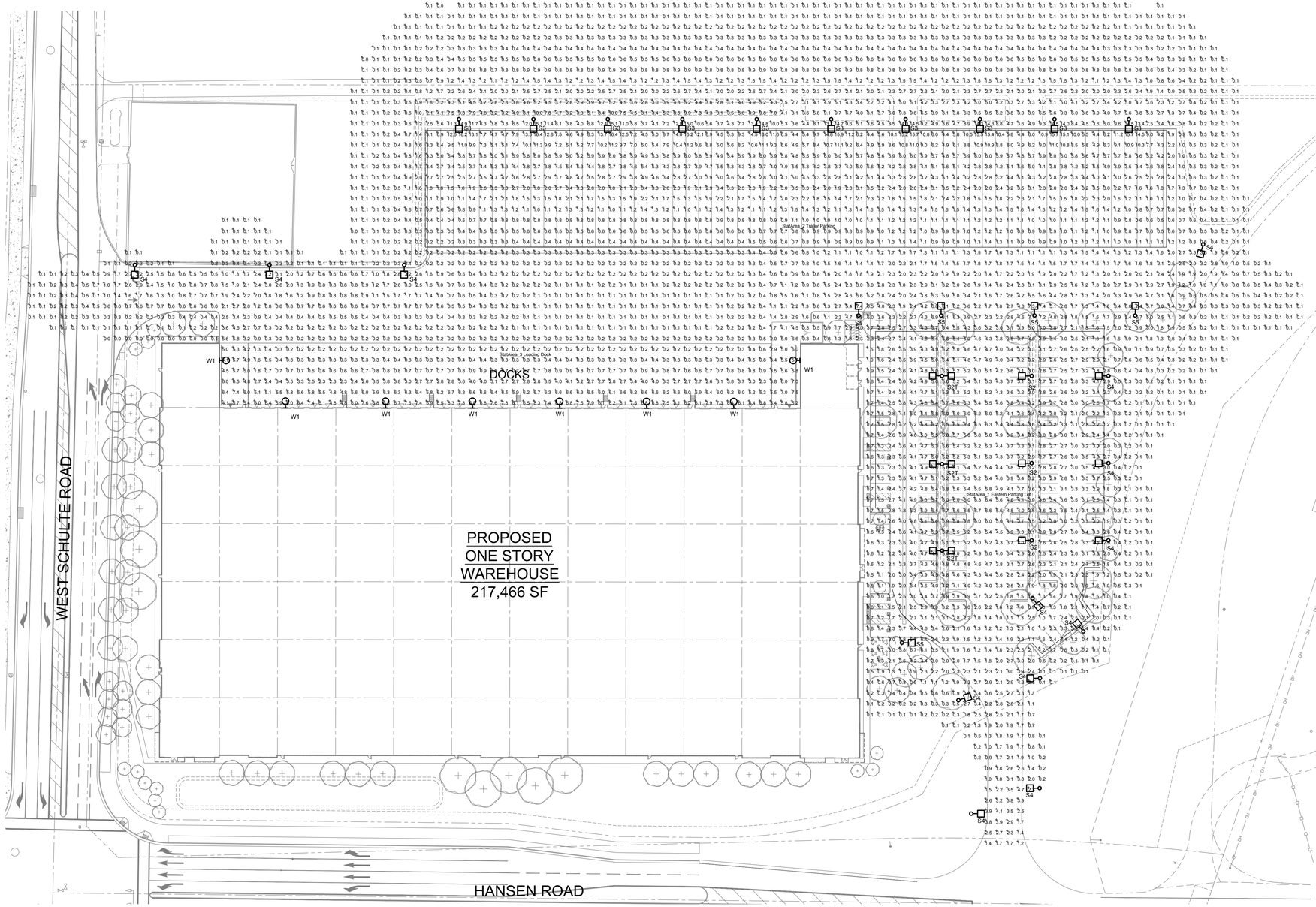
16286 W SCHULTE RD
TRACY, CA 95377

JOB NO. –
SCALE 1":50'
DATE 10/05/2021
CHECKED BY TOM SCHLEPP
DRAWN BY SAMUEL BOGEN

SITE LIGHTING PLAN

E 1.0

XREFS: [] P:\1-Project files\2021 LP Projects\21-2141 Tracy Warehouse Building Lighting\LP CAD\1-XREFs\212141_xTB; [] .\1-XREFs\212141_xBM; [] .\1-XREFs\212141_xFP



1 ENLARGED SITE LIGHTING PHOTOMETRIC PLAN

SCALE: 1" = 50'-0"

Luminaire Schedule											
Symbol	Qty	Tag	Arrangement	Luminaire Lumens	LLF	LLD	LDD	Description	Mounting Height	Luminaire Watts	Data Source Filename
	3	S2	Single	25360	0.850	0.944	0.900	Visionaire VMX-II_T5LS_25L_4K 25360L	25	172	VMX-II_T5LS_25L_4K.ies
	3	S2T	Back-Back	25360	0.850	0.944	0.900	Visionaire VMX-II_T5LS_25L_4K 25360L	25	172	VMX-II_T5LS_25L_4K.ies
	10	S3	Single	52758	0.850	0.944	0.900	Visionaire VMX-II_T4_55L_4K 52758L	25	400	VMX-II_T4_55L_4K.ies
	9	S4	Single	7450	0.850	0.944	0.900	Leotek AR13-48N-MV-NW-3-XX-120-BLS 7450L	25	88	AR13-48N-MV-NW-3-XX-120-BLS S.ies
	5	S5	Single	24063	0.850	0.944	0.900	Visionaire VMX-II_T4_25L_4K 24063L	25	172	VMX-II_T4_25L_4K.ies
	8	W1	Single	24611	0.850	0.944	0.900	Visionaire VMS-1_T2_96LC_7_4K 24611L	25	212	VMS-1_T2_96LC_7_4K.ies

Calculation Summary										
Label	Description	CalcType	Grid Z	Units	Avg	Max	Min	Avg/Min	Max/Min	# Pts
StatArea_1	Eastern Parking Lot	Illuminance	0	Fc	3.64	6.70	0.70	5.20	9.57	567
StatArea_2	Trailor Parking	Illuminance	0	Fc	3.54	16.40	0.20	17.70	82.00	759
StatArea_3	Loading Dock	Illuminance	0	Fc	3.16	8.30	0.20	15.80	41.50	324

CONSULTING ENGINEERS
1209 Pleasant Grove Blvd.
Roseville, CA 95678
p 916-771-0778
www.lpengineers.com
Job #: 21-2141

REGISTERED PROFESSIONAL ENGINEER
RAMI S. ZEIDAN
No. E 16762
Exp. 9/30/26
ELECTRICAL
STATE OF CALIFORNIA

PANATTONI®

NEW WAREHOUSE BUILDING

16286 W SCHULTE RD
TRACY, CA 95377

JOB NO. –
SCALE 1": 50'
DATE 10/05/2021
CHECKED BY TOM SCHLEPP
DRAWN BY SAMUEL BOGEN

SITE LIGHTING PHOTOMETRIC PLAN

E 1.1

XREFS: [] P:\1-Project files\2021 LP Projects\21-2141 Tracy Warehouse Building Lighting\LP CAD\1-XREFs\212141_xTB; [] .\1-XREFs\212141_xSN; [] .\1-XREFs\212141_xFP

APPENDIX B

1. CalEEMod Outputs
2. Screening Prioritization Calculator Output
3. Energy Calculations

Tracy Schulte - Proposed Project (Warehouse)_7.30.2024 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

2.6. Operations Emissions by Sector, Mitigated

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

3.2. Demolition (2025) - Mitigated

3.3. Site Preparation (2025) - Unmitigated

3.4. Site Preparation (2025) - Mitigated

3.5. Grading (2025) - Unmitigated

3.6. Grading (2025) - Mitigated

3.7. Building Construction (2025) - Unmitigated

3.8. Building Construction (2025) - Mitigated

3.9. Building Construction (2026) - Unmitigated

3.10. Building Construction (2026) - Mitigated

3.11. Building Construction (2027) - Unmitigated

3.12. Building Construction (2027) - Mitigated

3.13. Paving (2027) - Unmitigated

3.14. Paving (2027) - Mitigated

3.15. Architectural Coating (2027) - Unmitigated

3.16. Architectural Coating (2027) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Tracy Schulte - Proposed Project (Warehouse)_7.30.2024
Construction Start Date	6/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	6.60
Location	37.72031078643626, -121.51200929384544
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2107
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.26

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
Unrefrigerated Warehouse-No Rail	207	1000sqft	4.74	206,593	0.00	0.00	—	—

General Office Building	10.9	1000sqft	0.25	10,873	0.00	0.00	—	—
Other Asphalt Surfaces	15.9	Acre	15.9	15.9	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-9	Use Dust Suppressants
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

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.	60.3	60.2	31.7	31.1	0.06	1.37	19.8	21.2	1.26	10.1	11.4	—	6,784	6,784	0.28	0.20	5.88	6,810
Mit.	60.3	60.2	31.7	31.1	0.06	1.37	7.81	9.18	1.26	3.97	5.23	—	6,784	6,784	0.28	0.20	5.88	6,810
% Reduced	—	—	—	—	—	—	61%	57%	—	61%	54%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	60.3	60.2	12.1	17.2	0.03	0.45	1.03	1.48	0.41	0.25	0.66	—	4,162	4,162	0.14	0.20	0.15	4,225
Mit.	60.3	60.2	12.1	17.2	0.03	0.45	1.03	1.48	0.41	0.25	0.66	—	4,162	4,162	0.14	0.20	0.15	4,225
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.57	3.55	8.12	12.1	0.02	0.31	1.76	2.07	0.29	0.70	0.99	—	2,961	2,961	0.10	0.14	1.62	3,008
Mit.	3.57	3.55	8.12	12.1	0.02	0.31	0.89	1.20	0.29	0.32	0.61	—	2,961	2,961	0.10	0.14	1.62	3,008
% Reduced	—	—	—	—	—	—	49%	42%	—	54%	39%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.65	0.65	1.48	2.20	< 0.005	0.06	0.32	0.38	0.05	0.13	0.18	—	490	490	0.02	0.02	0.27	498
Mit.	0.65	0.65	1.48	2.20	< 0.005	0.06	0.16	0.22	0.05	0.06	0.11	—	490	490	0.02	0.02	0.27	498
% Reduced	—	—	—	—	—	—	49%	42%	—	54%	39%	—	—	—	—	—	—	—

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	4.02	3.38	31.7	31.1	0.06	1.37	19.8	21.2	1.26	10.1	11.4	—	6,784	6,784	0.28	0.20	5.88	6,810
2026	1.72	1.46	11.3	17.7	0.03	0.39	1.03	1.42	0.36	0.25	0.62	—	4,206	4,206	0.13	0.20	5.24	4,273
2027	60.3	60.2	0.87	1.93	< 0.005	0.02	0.15	0.17	0.02	0.04	0.05	—	294	294	0.01	0.01	0.50	297
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.78	1.50	12.1	17.2	0.03	0.45	1.03	1.48	0.41	0.25	0.66	—	4,162	4,162	0.14	0.20	0.15	4,225
2026	1.69	1.43	11.4	16.8	0.03	0.39	1.03	1.42	0.36	0.25	0.62	—	4,128	4,128	0.14	0.20	0.14	4,191
2027	60.3	60.2	10.9	16.5	0.03	0.35	1.03	1.38	0.32	0.25	0.58	—	4,096	4,096	0.14	0.20	0.12	4,159
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.06	0.90	7.82	8.84	0.02	0.31	1.76	2.07	0.29	0.70	0.99	—	2,019	2,019	0.07	0.06	0.69	2,040

2026	1.21	1.02	8.12	12.1	0.02	0.28	0.73	1.01	0.26	0.18	0.44	—	2,961	2,961	0.10	0.14	1.62	3,008
2027	3.57	3.55	1.15	1.78	< 0.005	0.04	0.08	0.12	0.04	0.02	0.06	—	379	379	0.01	0.01	0.16	384
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.19	0.16	1.43	1.61	< 0.005	0.06	0.32	0.38	0.05	0.13	0.18	—	334	334	0.01	0.01	0.11	338
2026	0.22	0.19	1.48	2.20	< 0.005	0.05	0.13	0.18	0.05	0.03	0.08	—	490	490	0.02	0.02	0.27	498
2027	0.65	0.65	0.21	0.32	< 0.005	0.01	0.02	0.02	0.01	< 0.005	0.01	—	62.7	62.7	< 0.005	< 0.005	0.03	63.5

2.3. Construction Emissions by Year, Mitigated

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	4.02	3.38	31.7	31.1	0.06	1.37	7.81	9.18	1.26	3.97	5.23	—	6,784	6,784	0.28	0.20	5.88	6,810
2026	1.72	1.46	11.3	17.7	0.03	0.39	1.03	1.42	0.36	0.25	0.62	—	4,206	4,206	0.13	0.20	5.24	4,273
2027	60.3	60.2	0.87	1.93	< 0.005	0.02	0.15	0.17	0.02	0.04	0.05	—	294	294	0.01	0.01	0.50	297
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.78	1.50	12.1	17.2	0.03	0.45	1.03	1.48	0.41	0.25	0.66	—	4,162	4,162	0.14	0.20	0.15	4,225
2026	1.69	1.43	11.4	16.8	0.03	0.39	1.03	1.42	0.36	0.25	0.62	—	4,128	4,128	0.14	0.20	0.14	4,191
2027	60.3	60.2	10.9	16.5	0.03	0.35	1.03	1.38	0.32	0.25	0.58	—	4,096	4,096	0.14	0.20	0.12	4,159
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.06	0.90	7.82	8.84	0.02	0.31	0.89	1.20	0.29	0.32	0.61	—	2,019	2,019	0.07	0.06	0.69	2,040
2026	1.21	1.02	8.12	12.1	0.02	0.28	0.73	1.01	0.26	0.18	0.44	—	2,961	2,961	0.10	0.14	1.62	3,008
2027	3.57	3.55	1.15	1.78	< 0.005	0.04	0.08	0.12	0.04	0.02	0.06	—	379	379	0.01	0.01	0.16	384
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.19	0.16	1.43	1.61	< 0.005	0.06	0.16	0.22	0.05	0.06	0.11	—	334	334	0.01	0.01	0.11	338
2026	0.22	0.19	1.48	2.20	< 0.005	0.05	0.13	0.18	0.05	0.03	0.08	—	490	490	0.02	0.02	0.27	498

2027	0.65	0.65	0.21	0.32	< 0.005	0.01	0.02	0.02	0.01	< 0.005	0.01	—	62.7	62.7	< 0.005	< 0.005	0.03	63.5

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.	7.62	7.29	8.88	20.2	0.08	0.17	4.20	4.37	0.16	1.09	1.25	205	10,547	10,752	21.2	1.32	5,527	17,204
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.88	5.69	9.41	8.88	0.08	0.16	4.20	4.35	0.15	1.09	1.24	205	10,282	10,487	21.2	1.33	5,506	16,920
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.72	6.46	9.23	13.7	0.08	0.16	4.18	4.34	0.16	1.08	1.24	205	10,352	10,558	21.2	1.33	5,515	16,998
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.23	1.18	1.68	2.51	0.02	0.03	0.76	0.79	0.03	0.20	0.23	34.0	1,714	1,748	3.51	0.22	913	2,814

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	0.86	0.68	8.41	10.4	0.08	0.12	4.20	4.32	0.12	1.09	1.21	—	8,617	8,617	0.17	1.06	21.7	8,959
Area	6.72	6.59	0.08	9.46	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.9	38.9	< 0.005	< 0.005	—	39.0
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,800	1,800	0.26	0.03	—	1,815
Water	—	—	—	—	—	—	—	—	—	—	—	95.3	90.6	186	9.78	0.23	—	500

Waste	—	—	—	—	—	—	—	—	—	—	—	110	0.00	110	11.0	0.00	—	385
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,506	5,506
Total	7.62	7.29	8.88	20.2	0.08	0.17	4.20	4.37	0.16	1.09	1.25	205	10,547	10,752	21.2	1.32	5,527	17,204
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.80	0.63	9.02	8.55	0.08	0.13	4.20	4.32	0.12	1.09	1.21	—	8,391	8,391	0.17	1.07	0.56	8,714
Area	5.04	5.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,800	1,800	0.26	0.03	—	1,815
Water	—	—	—	—	—	—	—	—	—	—	—	95.3	90.6	186	9.78	0.23	—	500
Waste	—	—	—	—	—	—	—	—	—	—	—	110	0.00	110	11.0	0.00	—	385
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,506	5,506
Total	5.88	5.69	9.41	8.88	0.08	0.16	4.20	4.35	0.15	1.09	1.24	205	10,282	10,487	21.2	1.33	5,506	16,920
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.81	0.64	8.80	8.74	0.08	0.13	4.18	4.31	0.12	1.08	1.20	—	8,442	8,442	0.17	1.06	9.35	8,773
Area	5.87	5.80	0.04	4.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	19.2	19.2	< 0.005	< 0.005	—	19.3
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,800	1,800	0.26	0.03	—	1,815
Water	—	—	—	—	—	—	—	—	—	—	—	95.3	90.6	186	9.78	0.23	—	500
Waste	—	—	—	—	—	—	—	—	—	—	—	110	0.00	110	11.0	0.00	—	385
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,506	5,506
Total	6.72	6.46	9.23	13.7	0.08	0.16	4.18	4.34	0.16	1.08	1.24	205	10,352	10,558	21.2	1.33	5,515	16,998
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.15	0.12	1.61	1.60	0.01	0.02	0.76	0.79	0.02	0.20	0.22	—	1,398	1,398	0.03	0.18	1.55	1,452
Area	1.07	1.06	0.01	0.85	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.18	3.18	< 0.005	< 0.005	—	3.19
Energy	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	298	298	0.04	< 0.005	—	300
Water	—	—	—	—	—	—	—	—	—	—	—	15.8	15.0	30.8	1.62	0.04	—	82.8
Waste	—	—	—	—	—	—	—	—	—	—	—	18.2	0.00	18.2	1.82	0.00	—	63.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	912	912

Total	1.23	1.18	1.68	2.51	0.02	0.03	0.76	0.79	0.03	0.20	0.23	34.0	1,714	1,748	3.51	0.22	913	2,814

2.6. Operations Emissions by Sector, Mitigated

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	0.86	0.68	8.41	10.4	0.08	0.12	4.20	4.32	0.12	1.09	1.21	—	8,617	8,617	0.17	1.06	21.7	8,959
Area	6.72	6.59	0.08	9.46	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.9	38.9	< 0.005	< 0.005	—	39.0
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,800	1,800	0.26	0.03	—	1,815
Water	—	—	—	—	—	—	—	—	—	—	—	95.3	90.6	186	9.78	0.23	—	500
Waste	—	—	—	—	—	—	—	—	—	—	—	110	0.00	110	11.0	0.00	—	385
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,506	5,506
Total	7.62	7.29	8.88	20.2	0.08	0.17	4.20	4.37	0.16	1.09	1.25	205	10,547	10,752	21.2	1.32	5,527	17,204
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.80	0.63	9.02	8.55	0.08	0.13	4.20	4.32	0.12	1.09	1.21	—	8,391	8,391	0.17	1.07	0.56	8,714
Area	5.04	5.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,800	1,800	0.26	0.03	—	1,815
Water	—	—	—	—	—	—	—	—	—	—	—	95.3	90.6	186	9.78	0.23	—	500
Waste	—	—	—	—	—	—	—	—	—	—	—	110	0.00	110	11.0	0.00	—	385
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,506	5,506
Total	5.88	5.69	9.41	8.88	0.08	0.16	4.20	4.35	0.15	1.09	1.24	205	10,282	10,487	21.2	1.33	5,506	16,920
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.81	0.64	8.80	8.74	0.08	0.13	4.18	4.31	0.12	1.08	1.20	—	8,442	8,442	0.17	1.06	9.35	8,773
Area	5.87	5.80	0.04	4.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	19.2	19.2	< 0.005	< 0.005	—	19.3
Energy	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	1,800	1,800	0.26	0.03	—	1,815

Water	—	—	—	—	—	—	—	—	—	—	—	95.3	90.6	186	9.78	0.23	—	500
Waste	—	—	—	—	—	—	—	—	—	—	—	110	0.00	110	11.0	0.00	—	385
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,506	5,506
Total	6.72	6.46	9.23	13.7	0.08	0.16	4.18	4.34	0.16	1.08	1.24	205	10,352	10,558	21.2	1.33	5,515	16,998
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.15	0.12	1.61	1.60	0.01	0.02	0.76	0.79	0.02	0.20	0.22	—	1,398	1,398	0.03	0.18	1.55	1,452
Area	1.07	1.06	0.01	0.85	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.18	3.18	< 0.005	< 0.005	—	3.19
Energy	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	298	298	0.04	< 0.005	—	300
Water	—	—	—	—	—	—	—	—	—	—	—	15.8	15.0	30.8	1.62	0.04	—	82.8
Waste	—	—	—	—	—	—	—	—	—	—	—	18.2	0.00	18.2	1.82	0.00	—	63.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	912	912
Total	1.23	1.18	1.68	2.51	0.02	0.03	0.76	0.79	0.03	0.20	0.23	34.0	1,714	1,748	3.51	0.22	913	2,814

3. Construction Emissions Details

3.1. Demolition (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	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	1.01	1.01	—	0.15	0.15	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.09	< 0.005	0.05	—	0.05	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
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	0.22	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.78	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	139	139	0.01	0.01	0.52	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	0.03	0.02	0.96	0.23	0.01	0.02	0.21	0.23	0.02	0.06	0.07	—	805	805	0.02	0.12	1.95	845
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	7.04	7.04	< 0.005	< 0.005	0.01	7.15

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	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.1	44.1	< 0.005	0.01	0.05	46.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.17	1.17	< 0.005	< 0.005	< 0.005	1.18
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.31	7.31	< 0.005	< 0.005	0.01	7.66

3.2. Demolition (2025) - Mitigated

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	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	1.01	1.01	—	0.15	0.15	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.09	< 0.005	0.05	—	0.05	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—

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	0.22	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.78	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	139	139	0.01	0.01	0.52	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	0.03	0.02	0.96	0.23	0.01	0.02	0.21	0.23	0.02	0.06	0.07	—	805	805	0.02	0.12	1.95	845
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	7.04	7.04	< 0.005	< 0.005	0.01	7.15
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	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.1	44.1	< 0.005	0.01	0.05	46.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.17	1.17	< 0.005	< 0.005	< 0.005	1.18
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.31	7.31	< 0.005	< 0.005	0.01	7.66

3.3. Site Preparation (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	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 Movement	—	—	—	—	—	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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 Movement	—	—	—	—	—	—	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 Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.91	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	162	162	0.01	0.01	0.60	165
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	4.11	4.11	< 0.005	< 0.005	0.01	4.17
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	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.69
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

3.4. Site Preparation (2025) - Mitigated

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	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 Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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 Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—
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 Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.91	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	162	162	0.01	0.01	0.60	165
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	4.11	4.11	< 0.005	< 0.005	0.01	4.17
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	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.69
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. Grading (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	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.31	2.85	2.71	0.01	0.12	—	0.12	0.11	—	0.11	—	633	633	0.03	0.01	—	635
Dust From Material Movement	—	—	—	—	—	—	0.88	0.88	—	0.35	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.52	0.50	< 0.005	0.02	—	0.02	0.02	—	0.02	—	105	105	< 0.005	< 0.005	—	105
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.06	0.06	—	—	—	—	—	—	—
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	0.09	0.08	0.06	1.04	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	185	185	0.01	0.01	0.69	188
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.4	16.4	< 0.005	< 0.005	0.03	16.7
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	—	2.72	2.72	< 0.005	< 0.005	< 0.005	2.76
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

3.6. Grading (2025) - Mitigated

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	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622

Dust From Material Movement	—	—	—	—	—	—	3.59	3.59	—	1.42	1.42	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.31	2.85	2.71	0.01	0.12	—	0.12	0.11	—	0.11	—	633	633	0.03	0.01	—	635
Dust From Material Movement	—	—	—	—	—	—	0.34	0.34	—	0.14	0.14	—	—	—	—	—	—	—
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	0.07	0.06	0.52	0.50	< 0.005	0.02	—	0.02	0.02	—	0.02	—	105	105	< 0.005	< 0.005	—	105
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.04	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	185	185	0.01	0.01	0.69	188

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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.4	16.4	< 0.005	< 0.005	0.03	16.7
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	—	2.72	2.72	< 0.005	< 0.005	< 0.005	2.76
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. Building Construction (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	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	0.32	0.26	2.45	3.06	0.01	0.10	—	0.10	0.09	—	0.09	—	563	563	0.02	< 0.005	—	565
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	0.06	0.05	0.45	0.56	< 0.005	0.02	—	0.02	0.02	—	0.02	—	93.2	93.2	< 0.005	< 0.005	—	93.5
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.38	0.25	4.71	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	835	835	0.04	0.03	3.11	848
Vendor	0.05	0.03	1.25	0.43	0.01	0.01	0.27	0.29	0.01	0.08	0.09	—	1,009	1,009	0.02	0.15	2.77	1,057
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	0.38	0.35	0.34	3.74	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	754	754	0.02	0.03	0.08	764
Vendor	0.05	0.03	1.34	0.44	0.01	0.01	0.27	0.29	0.01	0.08	0.09	—	1,010	1,010	0.02	0.15	0.07	1,055
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	0.08	0.07	0.90	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	182	182	< 0.005	0.01	0.31	184
Vendor	0.01	0.01	0.31	0.10	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	237	237	< 0.005	0.04	0.28	248
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	0.01	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.1	30.1	< 0.005	< 0.005	0.05	30.5
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.3	39.3	< 0.005	0.01	0.05	41.0
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

3.8. Building Construction (2025) - Mitigated

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	0.32	0.26	2.45	3.06	0.01	0.10	—	0.10	0.09	—	0.09	—	563	563	0.02	< 0.005	—	565
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	0.06	0.05	0.45	0.56	< 0.005	0.02	—	0.02	0.02	—	0.02	—	93.2	93.2	< 0.005	< 0.005	—	93.5
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.38	0.25	4.71	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	835	835	0.04	0.03	3.11	848
Vendor	0.05	0.03	1.25	0.43	0.01	0.01	0.27	0.29	0.01	0.08	0.09	—	1,009	1,009	0.02	0.15	2.77	1,057
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	0.38	0.35	0.34	3.74	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	754	754	0.02	0.03	0.08	764
Vendor	0.05	0.03	1.34	0.44	0.01	0.01	0.27	0.29	0.01	0.08	0.09	—	1,010	1,010	0.02	0.15	0.07	1,055
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	0.08	0.07	0.90	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	182	182	< 0.005	0.01	0.31	184
Vendor	0.01	0.01	0.31	0.10	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	237	237	< 0.005	0.04	0.28	248
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	0.01	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.1	30.1	< 0.005	< 0.005	0.05	30.5
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.3	39.3	< 0.005	0.01	0.05	41.0

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

3.9. Building Construction (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
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	0.91	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
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 Equipm	0.17	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
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	0.38	0.35	0.23	4.35	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	817	817	0.02	0.03	2.80	829
Vendor	0.05	0.03	1.20	0.40	0.01	0.01	0.27	0.29	0.01	0.08	0.09	—	991	991	0.02	0.15	2.43	1,038
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	0.36	0.33	0.29	3.44	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	739	739	0.02	0.03	0.07	749
Vendor	0.05	0.03	1.28	0.42	0.01	0.01	0.27	0.29	0.01	0.08	0.09	—	992	992	0.02	0.15	0.06	1,037
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	0.26	0.23	0.18	2.52	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	541	541	0.01	0.02	0.87	549
Vendor	0.04	0.02	0.89	0.29	0.01	0.01	0.19	0.20	0.01	0.05	0.06	—	708	708	0.01	0.11	0.75	741
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	0.05	0.04	0.03	0.46	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	89.6	89.6	< 0.005	< 0.005	0.14	90.9
Vendor	0.01	< 0.005	0.16	0.05	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	117	117	< 0.005	0.02	0.12	123
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

3.10. Building Construction (2026) - Mitigated

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	1.28	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
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	0.91	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
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	0.17	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
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	0.38	0.35	0.23	4.35	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	817	817	0.02	0.03	2.80	829
Vendor	0.05	0.03	1.20	0.40	0.01	0.01	0.27	0.29	0.01	0.08	0.09	—	991	991	0.02	0.15	2.43	1,038
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	0.36	0.33	0.29	3.44	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	739	739	0.02	0.03	0.07	749
Vendor	0.05	0.03	1.28	0.42	0.01	0.01	0.27	0.29	0.01	0.08	0.09	—	992	992	0.02	0.15	0.06	1,037
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	0.26	0.23	0.18	2.52	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	541	541	0.01	0.02	0.87	549
Vendor	0.04	0.02	0.89	0.29	0.01	0.01	0.19	0.20	0.01	0.05	0.06	—	708	708	0.01	0.11	0.75	741
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	0.05	0.04	0.03	0.46	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	89.6	89.6	< 0.005	< 0.005	0.14	90.9
Vendor	0.01	< 0.005	0.16	0.05	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	117	117	< 0.005	0.02	0.12	123
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

3.11. Building Construction (2027) - 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	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	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	0.07	0.62	0.86	< 0.005	0.02	—	0.02	0.02	—	0.02	—	159	159	0.01	< 0.005	—	160
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	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.4	26.4	< 0.005	< 0.005	—	26.5
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.31	0.26	3.18	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	727	727	0.02	0.03	0.07	737
Vendor	0.05	0.03	1.22	0.40	0.01	0.01	0.27	0.29	0.01	0.08	0.09	—	971	971	0.02	0.15	0.06	1,016
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	0.02	0.02	0.02	0.22	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.6	49.6	< 0.005	< 0.005	0.07	50.3
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	64.6	64.6	< 0.005	0.01	0.06	67.6
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	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.21	8.21	< 0.005	< 0.005	0.01	8.33
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.01	11.2
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

3.12. Building Construction (2027) - Mitigated

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	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	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	0.07	0.62	0.86	< 0.005	0.02	—	0.02	0.02	—	0.02	—	159	159	0.01	< 0.005	—	160
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-Roa Equipment	0.01	0.01	0.11	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.4	26.4	< 0.005	< 0.005	—	26.5
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.31	0.26	3.18	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	727	727	0.02	0.03	0.07	737
Vendor	0.05	0.03	1.22	0.40	0.01	0.01	0.27	0.29	0.01	0.08	0.09	—	971	971	0.02	0.15	0.06	1,016
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	0.02	0.02	0.02	0.22	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.6	49.6	< 0.005	< 0.005	0.07	50.3
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	64.6	64.6	< 0.005	0.01	0.06	67.6
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	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.21	8.21	< 0.005	< 0.005	0.01	8.33
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.01	11.2
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

3.13. Paving (2027) - 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	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.09	2.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.02	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	0.04	0.53	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	121	121	< 0.005	0.01	0.01	123

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	—	6.79	6.79	< 0.005	< 0.005	0.01	6.89
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	—	1.12	1.12	< 0.005	< 0.005	< 0.005	1.14
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

3.14. Paving (2027) - Mitigated

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	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.09	2.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.05	0.04	0.38	0.55	< 0.005	0.02	—	0.02	0.02	—	0.02	—	82.8	82.8	< 0.005	< 0.005	—	83.1
Paving	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.02	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	0.04	0.53	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	121	121	< 0.005	0.01	0.01	123
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	—	6.79	6.79	< 0.005	< 0.005	0.01	6.89
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	—	1.12	1.12	< 0.005	< 0.005	< 0.005	1.14
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

3.15. Architectural Coating (2027) - 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	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	60.1	60.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	60.1	60.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01	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

Architect Coatings	3.29	3.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.60	0.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.07	0.07	0.04	0.81	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	161	161	< 0.005	0.01	0.50	163
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.64	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	145	145	< 0.005	0.01	0.01	147
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	—	8.17	8.17	< 0.005	< 0.005	0.01	8.29
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	—	1.35	1.35	< 0.005	< 0.005	< 0.005	1.37
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

3.16. Architectural Coating (2027) - Mitigated

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	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	60.1	60.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	60.1	60.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01	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	3.29	3.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.60	0.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.07	0.07	0.04	0.81	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	161	161	< 0.005	0.01	0.50	163
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.64	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	145	145	< 0.005	0.01	0.01	147
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	—	8.17	8.17	< 0.005	< 0.005	0.01	8.29
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	—	1.35	1.35	< 0.005	< 0.005	< 0.005	1.37
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

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Wareho Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,205	1,205	0.19	0.02	—	1,217
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	127	127	0.02	< 0.005	—	128
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,332	1,332	0.22	0.03	—	1,345
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,205	1,205	0.19	0.02	—	1,217
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	127	127	0.02	< 0.005	—	128
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,332	1,332	0.22	0.03	—	1,345
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	199	199	0.03	< 0.005	—	201
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	21.1	21.1	< 0.005	< 0.005	—	21.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	221	221	0.04	< 0.005	—	223

4.2.2. Electricity Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,205	1,205	0.19	0.02	—	1,217
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	127	127	0.02	< 0.005	—	128
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,332	1,332	0.22	0.03	—	1,345
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,205	1,205	0.19	0.02	—	1,217
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	127	127	0.02	< 0.005	—	128
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,332	1,332	0.22	0.03	—	1,345

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	199	199	0.03	< 0.005	—	201
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	21.1	21.1	< 0.005	< 0.005	—	21.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	221	221	0.04	< 0.005	—	223

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.02	0.31	0.26	< 0.005	0.02	—	0.02	0.02	—	0.02	—	368	368	0.03	< 0.005	—	369
General Office Building	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	101	101	0.01	< 0.005	—	101
Other Asphalt Surfaces	0.00	0.00	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	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	468	468	0.04	< 0.005	—	470
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrig Warehouse-No Rail	0.03	0.02	0.31	0.26	< 0.005	0.02	—	0.02	0.02	—	0.02	—	368	368	0.03	< 0.005	—	369
General Office Building	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	101	101	0.01	< 0.005	—	101
Other Asphalt Surfaces	0.00	0.00	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	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	468	468	0.04	< 0.005	—	470
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	60.9	60.9	0.01	< 0.005	—	61.1
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.7	16.7	< 0.005	< 0.005	—	16.7
Other Asphalt Surfaces	0.00	0.00	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	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	77.5	77.5	0.01	< 0.005	—	77.8

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.02	0.31	0.26	< 0.005	0.02	—	0.02	0.02	—	0.02	—	368	368	0.03	< 0.005	—	369

General Office Building	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	101	101	0.01	< 0.005	—	101
Other Asphalt Surfaces	0.00	0.00	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	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	468	468	0.04	< 0.005	—	470
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.02	0.31	0.26	< 0.005	0.02	—	0.02	0.02	—	0.02	—	368	368	0.03	< 0.005	—	369
General Office Building	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	101	101	0.01	< 0.005	—	101
Other Asphalt Surfaces	0.00	0.00	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	0.04	0.02	0.39	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	468	468	0.04	< 0.005	—	470
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	60.9	60.9	0.01	< 0.005	—	61.1
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.7	16.7	< 0.005	< 0.005	—	16.7
Other Asphalt Surfaces	0.00	0.00	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	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	77.5	77.5	0.01	< 0.005	—	77.8

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	4.71	4.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.33	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.68	1.55	0.08	9.46	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.9	38.9	< 0.005	< 0.005	—	39.0
Total	6.72	6.59	0.08	9.46	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.9	38.9	< 0.005	< 0.005	—	39.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	4.71	4.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.33	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	5.04	5.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	0.86	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.15	0.14	0.01	0.85	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.18	3.18	< 0.005	< 0.005	—	3.19
Total	1.07	1.06	0.01	0.85	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.18	3.18	< 0.005	< 0.005	—	3.19

4.3.2. Mitigated

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	4.71	4.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.33	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.68	1.55	0.08	9.46	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.9	38.9	< 0.005	< 0.005	—	39.0
Total	6.72	6.59	0.08	9.46	< 0.005	0.02	—	0.02	0.01	—	0.01	—	38.9	38.9	< 0.005	< 0.005	—	39.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer	4.71	4.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.33	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	5.04	5.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.86	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.15	0.14	0.01	0.85	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.18	3.18	< 0.005	< 0.005	—	3.19
Total	1.07	1.06	0.01	0.85	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.18	3.18	< 0.005	< 0.005	—	3.19

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	91.5	87.0	179	9.40	0.22	—	481

General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.70	3.52	7.22	0.38	0.01	—	19.4
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	95.3	90.6	186	9.78	0.23	—	500
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	91.5	87.0	179	9.40	0.22	—	481
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.70	3.52	7.22	0.38	0.01	—	19.4
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	95.3	90.6	186	9.78	0.23	—	500
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	15.2	14.4	29.6	1.56	0.04	—	79.6
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.61	0.58	1.20	0.06	< 0.005	—	3.22
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	15.8	15.0	30.8	1.62	0.04	—	82.8

4.4.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	91.5	87.0	179	9.40	0.22	—	481
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.70	3.52	7.22	0.38	0.01	—	19.4
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	95.3	90.6	186	9.78	0.23	—	500
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	91.5	87.0	179	9.40	0.22	—	481
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.70	3.52	7.22	0.38	0.01	—	19.4
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	95.3	90.6	186	9.78	0.23	—	500
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	15.2	14.4	29.6	1.56	0.04	—	79.6
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.61	0.58	1.20	0.06	< 0.005	—	3.22
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	15.8	15.0	30.8	1.62	0.04	—	82.8

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	366
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.45	0.00	5.45	0.54	0.00	—	19.1
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	110	0.00	110	11.0	0.00	—	385
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	366
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.45	0.00	5.45	0.54	0.00	—	19.1
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	110	0.00	110	11.0	0.00	—	385
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	17.3	0.00	17.3	1.73	0.00	—	60.6
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.90	0.00	0.90	0.09	0.00	—	3.16
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.2	0.00	18.2	1.82	0.00	—	63.8

4.5.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	366

General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.45	0.00	5.45	0.54	0.00	—	19.1
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	110	0.00	110	11.0	0.00	—	385
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	105	0.00	105	10.5	0.00	—	366
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.45	0.00	5.45	0.54	0.00	—	19.1
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	110	0.00	110	11.0	0.00	—	385
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	17.3	0.00	17.3	1.73	0.00	—	60.6
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.90	0.00	0.90	0.09	0.00	—	3.16
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.2	0.00	18.2	1.82	0.00	—	63.8

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,506	5,506
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,506	5,506
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,506	5,506
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,506	5,506
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	912	912

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	912	912

4.6.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,506	5,506
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,506	5,506
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,506	5,506
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5,506	5,506
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Wareho Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	912	912
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	912	912

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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
Demolition	Demolition	6/1/2025	6/29/2025	5.00	20.0	—
Site Preparation	Site Preparation	6/30/2025	7/14/2025	5.00	10.0	—
Grading	Grading	7/15/2025	9/2/2025	5.00	35.0	—
Building Construction	Building Construction	9/3/2025	2/3/2027	5.00	370	—
Paving	Paving	2/4/2027	3/4/2027	5.00	20.0	—
Architectural Coating	Architectural Coating	3/5/2027	4/2/2027	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
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

Building Construction	Tractors/Loaders/Back	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	11.5	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	90.3	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	35.6	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT

Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	18.1	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	11.5	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT

Building Construction	—	—	—	—
Building Construction	Worker	90.3	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	35.6	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	18.1	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	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)
Architectural Coating	0.00	0.00	326,199	108,733	41,629

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Ton of Debris)	Material Exported (Ton of Debris)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	20,000	—
Site Preparation	0.00	0.00	15.0	0.00	—
Grading	0.00	0.00	105	0.00	—
Paving	0.00	0.00	0.00	0.00	15.9

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
Unrefrigerated Warehouse-No Rail	0.00	0%
General Office Building	0.00	0%
Other Asphalt Surfaces	15.9	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
2027	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
Total all Land Uses	382	382	382	139,430	5,425	5,425	5,425	1,980,125

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	382	382	382	139,430	5,425	5,425	5,425	1,980,125

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

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	326,199	108,733	41,629

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

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)
Unrefrigerated Warehouse-No Rail	2,155,732	204	0.0330	0.0040	1,147,590
General Office Building	227,565	204	0.0330	0.0040	313,893
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.11.2. Mitigated

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)
Unrefrigerated Warehouse-No Rail	2,155,732	204	0.0330	0.0040	1,147,590
General Office Building	227,565	204	0.0330	0.0040	313,893
Other Asphalt Surfaces	0.00	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)
Unrefrigerated Warehouse-No Rail	47,774,631	0.00
General Office Building	1,932,499	0.00
Other Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	47,774,631	0.00
General Office Building	1,932,499	0.00

Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	194	—
General Office Building	10.1	—
Other Asphalt Surfaces	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	194	—
General Office Building	10.1	—
Other Asphalt Surfaces	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
Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	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

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

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

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

5.18.1.2. Mitigated

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

5.18.1.2. Mitigated

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)

5.18.2.2. Mitigated

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	21.4	annual days of extreme heat
Extreme Precipitation	0.95	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	21.1	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	1	0	0	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	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	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	1	1	1	2
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	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

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	60.9

AQ-PM	31.6
AQ-DPM	43.4
Drinking Water	52.8
Lead Risk Housing	2.00
Pesticides	76.8
Toxic Releases	24.6
Traffic	69.8
Effect Indicators	—
CleanUp Sites	20.5
Groundwater	90.9
Haz Waste Facilities/Generators	88.2
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	38.8
Cardio-vascular	73.9
Low Birth Weights	51.8
Socioeconomic Factor Indicators	—
Education	32.2
Housing	13.1
Linguistic	39.8
Poverty	10.9
Unemployment	39.2

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	74.83639163
Employed	47.8121391
Median HI	—
Education	—
Bachelor's or higher	55.60118055
High school enrollment	26.62645964
Preschool enrollment	40.40805851
Transportation	—
Auto Access	81.29090209
Active commuting	36.22481714
Social	—
2-parent households	64.72475298
Voting	66.31592455
Neighborhood	—
Alcohol availability	90.27332221
Park access	51.80290004
Retail density	7.327088413
Supermarket access	28.5255999
Tree canopy	47.95329142
Housing	—
Homeownership	80.99576543
Housing habitability	92.24945464
Low-inc homeowner severe housing cost burden	86.9626588
Low-inc renter severe housing cost burden	79.71256256
Uncrowded housing	69.47260362
Health Outcomes	—
Insured adults	66.05928397
Arthritis	86.1

Asthma ER Admissions	51.6
High Blood Pressure	59.0
Cancer (excluding skin)	71.8
Asthma	65.7
Coronary Heart Disease	90.3
Chronic Obstructive Pulmonary Disease	86.1
Diagnosed Diabetes	79.4
Life Expectancy at Birth	59.9
Cognitively Disabled	66.4
Physically Disabled	93.4
Heart Attack ER Admissions	15.0
Mental Health Not Good	64.8
Chronic Kidney Disease	85.5
Obesity	59.8
Pedestrian Injuries	44.0
Physical Health Not Good	76.2
Stroke	88.3
Health Risk Behaviors	—
Binge Drinking	38.6
Current Smoker	56.8
No Leisure Time for Physical Activity	54.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	39.2
Elderly	81.9
English Speaking	58.2
Foreign-born	64.0

Outdoor Workers	48.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	33.7
Traffic Density	70.0
Traffic Access	0.0
Other Indices	—
Hardship	46.2
Other Decision Support	—
2016 Voting	49.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	43.0
Healthy Places Index Score for Project Location (b)	72.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
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
Land Use	Total acreage of 20.92 acres for Development Area.
Operations: Fleet Mix	Adjusted fleet mix to match Traffic study: 35.0785% heavy-duty trucks (HHD); remainder as light duty vehicles (LDA).

Source: EMFAC2021 (v1.0.1) Emission Rates
Region Type: County
Region: San Joaquin
Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC202x Categories
Units: miles/day for CVMT and EVMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed, kWh/mile for Energy Consumption, gallon/mile for Fuel Consumption. PHEV calculated based on total VMT.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Total VMT	**PM10_RUNEX**
San Joaquin	2022	T7 Tractor Class 8	Aggregate	10	Diesel	1683.346604	**0.014003507**
San Joaquin	2022	T7 Tractor Class 8	Aggregate	55	Diesel	20401.71991	**0.02163113**

Mobile Truck Emissions

On-site Pickup, Loading, and Return for Storage

pounds per gram: 0.002205

hours per day: 24

Line Source Volume #1:

Assumptions:	Factor:		Source:
1. Total travel distance per truck trip (one-day):	0.5	miles	As measured by Google Maps (conservative estimate)
2. # of trucks trips per day:	134	trips	Fehr & Peers, 2022
3. PM10 Mobile Emissions Factor:	**0.014003507**	g/mile	EMFAC2021
(San Joaquin County, 10 MPH, Year 2022, T7 Tractor Class 8)			

Therefore:

Total daily PM10 mobile emissions generated by the project along this line volume source:

0.938234969	**g/day-all vehicles**	
0.002068452	lbs/day-all vehicles	
0.754984826	**lbs/year-all vehicles**	0.743716

Max Hr Emissions

12.00 Peak hour truck trips (Fehr & Peers, 2022)

0.084021042	**g/hr-all vehicles**
0.000185234	**lbs/hr-all vehicles**

4.798116

0.000735

Mobile Truck Emissions

Off-site (0.25 miles distance)

pounds per gram: 0.002205

hours per day: 24

Line Source Volume #1:

Assumptions:	Factor:		Source:
1. Total travel distance per truck trip (one-day):	0.25	miles	As measured by Google Maps (conservative estimate)
2. # of trucks trips per day:	134	trips	Fehr & Peers, 2022
3. PM10 Mobile Emissions Factor:	**0.02163113**	g/mile	EMFAC2021
(San Joaquin County, 55 MPH, Year 2022, T7 Tractor Class 8)			

Therefore:

Total daily PM10 mobile emissions generated by the project along this line volume source:

0.724642855	**g/day-all vehicles**	
0.001597562	lbs/day-all vehicles	
0.583110178	**lbs/year-all vehicles**	0.574407

Max Hr Emissions

12.00 Peak hour truck trips (Fehr & Peers, 2022)

0.06489339	**g/hr-all vehicles**
0.000143065	**lbs/hr-all vehicles**

Truck Idling Emission Rates

Idling Emission Rates taken from tables 3.2-41 and 42, of the EMFAC2014 Volume III - Technical Documentation Guidebook:
http://www.arb.ca.gov/msei/downloads/emfac2014/emfac2014-vol3-technical-documentation-052015.pdf

pounds per gram: 0.00220462

Idling Emissions:

Table 3.2-40: Revised HHD Diesel Truck Low Idle Emission Rates (after 2009)	PM10	**0.001**	g/hr-truck	
Table 3.2-41: High Idle Emissions Rates for Summer (2009 and later)	PM10	**0.003**	g/hr-truck	Note: the following calculation uses an average of the summer and
Table 3.2-42: High Idle Emissions Rates for Winter (2009 and later)	PM10	**0.004**	g/hr-truck	winter high idle emissions rates for the emission factor calcs.

0.000291667	g/5 minutes-truck	Note: Trucks are equiped with 5-min auto shutoff.
0.000291667	g/day-truck	
24	hours in day	
67	# of trucks/day	Source: Fehr & Peers, 2022
2	Idle Points per truck/day	Note: Assumption

Therefore:

0.039083333	g/day-all trucks
14.26541667	g/year-all trucks
0.031449823	lbs/year-all trucks
0.030980423	

Max Hr Emissions

12.00 Peak hour truck trips (Fehr & Peers, 2022)

0.0070000	**g/hr-all vehicles**
0.0000154	**lbs/hr-all vehicles**

Construction - DPM Exhaust Emissions

pounds per ton: 2000

Note: DPM Exhaust Emissions taken from CalEEMod

CalEEMod - Maximum Annual Construction Emissions

Exhaust PM2.5 tons/year (total)		**Exhaust PM2.5 pounds/year**	
0.12		240	
Total		Amoritized over 70 Years	
		3.428571429	**lbs/year**
		0.000391	**lbs/hour**

Name

Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in gray areas.		
Author or updater	Matthew Cegielski	*Last Update*	December 1, 2022
Facility:			
ID#:			
Project #:			
Unit and Process#	1-0 p1		
Operating Hours hr/yr	8,760.00		

Receptor Proximity and Proximity Factors		Cancer Score	Chronic Score	Acute Score	Max Score
0< R<100	**1.000**	1.11E+01	1.64E-02	0.00E+00	1.11E+01
100≤R<250	**0.250**	2.77E+00	4.11E-03	0.00E+00	2.77E+00
250≤R<500	**0.040**	4.43E-01	6.57E-04	0.00E+00	4.43E-01
500≤R<1000	**0.011**	1.22E-01	1.81E-04	0.00E+00	1.22E-01
1000≤R<1500	**0.003**	3.33E-02	4.93E-05	0.00E+00	3.33E-02
1500≤R<2000	**0.002**	2.22E-02	3.29E-05	0.00E+00	2.22E-02
2000<R	**0.001**	1.11E-02	1.64E-05	0.00E+00	1.11E-02

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Diesel engine exhaust, particulate matter (Diesel PM)	9901

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

1-0 p1

Substance	CAS#	MW Correction	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Corrected Annual Emissions (lbs/yr)	Corrected Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	**9901**	**1.0000**	4.798	7.35E-04	4.80E+00	7.35E-04	5.48E-04	1.11E+01	1.64E-02	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
							Totals	**1.11E+01**	**1.64E-02**	**0.00E+00**

Receptor Proximity and Proximity Factors		1-0 p1 Max Score	1-0 p1 Max Score	1-0 p1 Max Score	1-0 p1 Max Score	Total Max Score
0< R<100	**1.000**	1.11E+01	0.00E+00	0.00E+00	0.00E+00	1.11E+01
100≤R<250	**0.250**	2.77E+00	0.00E+00	0.00E+00	0.00E+00	2.77E+00
250≤R<500	**0.040**	4.43E-01	0.00E+00	0.00E+00	0.00E+00	4.43E-01
500≤R<1000	**0.011**	1.22E-01	0.00E+00	0.00E+00	0.00E+00	1.22E-01
1000≤R<1500	**0.003**	3.33E-02	0.00E+00	0.00E+00	0.00E+00	3.33E-02
1500≤R<2000	**0.002**	2.22E-02	0.00E+00	0.00E+00	0.00E+00	2.22E-02
2000<R	**0.001**	1.11E-02	0.00E+00	0.00E+00	0.00E+00	1.11E-02

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: County
Region: San Joaquin
Calendar Year: 2023, 2025
Season: Annual
Vehicle Classification: EMFAC202x 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

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	Trips	Fuel Consumption	MPG	
San Joaquin	2023	All Other Buses	Aggregate	Aggregate	Diesel	63.39460475	3393.93922	564.2119822	0.391421545	**8.670803**	
San Joaquin	2023	LDA	Aggregate	Aggregate	Gasoline	246367.0682	9973102.47	1138235.391	349.3216614	**28.54991**	
San Joaquin	2023	LDA	Aggregate	Aggregate	Diesel	705.734891	23139.8254	3023.214022	0.543997543	**42.53664**	
San Joaquin	2023	LDT1	Aggregate	Aggregate	Gasoline	22016.87719	727225.714	95173.38769	30.52486616	**23.82404**	
San Joaquin	2023	LDT1	Aggregate	Aggregate	Diesel	6.309776167	72.3140659	18.53577151	0.002954101	**24.47922**	
San Joaquin	2023	LDT2	Aggregate	Aggregate	Gasoline	99986.64004	4006976.31	463638.6569	174.3583341	**22.98127**	
San Joaquin	2023	LDT2	Aggregate	Aggregate	Diesel	269.0353638	11767.7731	1277.639106	0.369317903	**31.86353**	
San Joaquin	2023	LHD1	Aggregate	Aggregate	Gasoline	9831.305478	343356.563	146471.803	37.0137846	**9.276451**	
San Joaquin	2023	LHD1	Aggregate	Aggregate	Diesel	8858.793592	311287.78	111432.479	19.67413691	**15.82218**	
San Joaquin	2023	LHD2	Aggregate	Aggregate	Gasoline	1172.202392	40932.8123	17464.06906	4.90823024	**8.339628**	
San Joaquin	2023	LHD2	Aggregate	Aggregate	Diesel	3130.564849	115648.086	39378.56755	8.863291415	**13.04798**	
San Joaquin	2023	MCY	Aggregate	Aggregate	Gasoline	12111.77426	65765.9483	24223.54852	1.643730409	**40.01018**	
San Joaquin	2023	MDV	Aggregate	Aggregate	Gasoline	94539.47242	3309649.73	427287.8869	178.486066	**18.5429**	
San Joaquin	2023	MDV	Aggregate	Aggregate	Diesel	1386.649679	54072.4946	6485.715736	2.267270858	**23.84916**	
San Joaquin	2023	MH	Aggregate	Aggregate	Gasoline	1507.494843	13134.1796	150.8097841	2.977418428	**4.411264**	
San Joaquin	2023	MH	Aggregate	Aggregate	Diesel	642.7961913	5646.6428	64.27961913	0.600452961	**9.403972**	
San Joaquin	2023	Motor Coach	Aggregate	Aggregate	Diesel	17.50069597	2493.47591	402.1659934	0.455354651	**5.475899**	
San Joaquin	2023	OBUS	Aggregate	Aggregate	Gasoline	184.2186442	8143.5346	3685.846633	1.733278965	**4.69834**	
San Joaquin	2023	PTO	Aggregate	Aggregate	Diesel	0	19769.5175	0	4.013121008	**4.92622**	
San Joaquin	2023	SBUS	Aggregate	Aggregate	Gasoline	127.6658449	7011.40481	510.6633795	0.69096273	**10.1473**	
San Joaquin	2023	SBUS	Aggregate	Aggregate	Diesel	488.0661519	10999.7571	7067.197879	1.346323697	**8.170217**	
San Joaquin	2023	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	10.21525791	684.779876	234.7466267	0.077405114	**8.846701**	
San Joaquin	2023	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	13.70885779	939.491781	315.0295519	0.106056052	**8.858446**	
San Joaquin	2023	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	43.24157557	2453.39435	993.6914066	0.273109788	**8.98318**	
San Joaquin	2023	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	74.64743229	15398.8197	1715.397994	1.609252898	**9.568925**	**MHD**
San Joaquin	2023	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	243.75384	8276.65194	3478.367297	1.005561316	**8.230877**	**8.579141**
San Joaquin	2023	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	156.2432876	5383.85911	2229.591714	0.657027122	**8.194272**	
San Joaquin	2023	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	682.6025228	23363.9411	9740.738001	2.839033489	**8.229541**	
San Joaquin	2023	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	122.4768589	6703.21055	1747.744776	0.802391793	**8.354037**	
San Joaquin	2023	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	449.8451938	18399.4289	5200.21044	2.166542487	**8.492531**	
San Joaquin	2023	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	1174.570894	51943.6226	13578.03953	6.096265009	**8.520565**	
San Joaquin	2023	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	912.5417949	38573.6428	10548.98315	4.50612298	**8.560273**	
San Joaquin	2023	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	553.092214	25667.2012	6393.745994	2.950154535	**8.70029**	
San Joaquin	2023	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	10.69132111	510.925844	123.591672	0.060247854	**8.480399**	
San Joaquin	2023	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	696.5366058	42802.4924	8051.963163	4.748833943	**9.013264**	
San Joaquin	2023	T6 OOS Class 4	Aggregate	Aggregate	Diesel	5.905142679	392.334655	135.7001788	0.044317954	**8.852725**	
San Joaquin	2023	T6 OOS Class 5	Aggregate	Aggregate	Diesel	7.890998517	538.212595	181.3351459	0.060737656	**8.861267**	
San Joaquin	2023	T6 OOS Class 6	Aggregate	Aggregate	Diesel	24.97157764	1406.36491	573.8468541	0.156409596	**8.991551**	
San Joaquin	2023	T6 OOS Class 7	Aggregate	Aggregate	Diesel	40.57354344	10226.0217	932.3800283	1.062980063	**9.620144**	
San Joaquin	2023	T6 Public Class 4	Aggregate	Aggregate	Diesel	32.09216486	1056.60486	164.6328057	0.140824099	**7.503012**	
San Joaquin	2023	T6 Public Class 5	Aggregate	Aggregate	Diesel	76.27568061	2776.64108	391.2942415	0.361173048	**7.687841**	
San Joaquin	2023	T6 Public Class 6	Aggregate	Aggregate	Diesel	126.4582156	4446.297	648.7306462	0.576020372	**7.718993**	
San Joaquin	2023	T6 Public Class 7	Aggregate	Aggregate	Diesel	152.7305258	6768.06936	783.5075973	0.883776286	**7.658125**	
San Joaquin	2023	T6 Utility Class 5	Aggregate	Aggregate	Diesel	33.47606031	1364.93307	428.493572	0.154770907	**8.819055**	
San Joaquin	2023	T6 Utility Class 6	Aggregate	Aggregate	Diesel	6.356456131	257.430851	81.36263848	0.029104667	**8.845002**	
San Joaquin	2023	T6 Utility Class 7	Aggregate	Aggregate	Diesel	7.230830053	358.500092	92.55462468	0.040337535	**8.887506**	
San Joaquin	2023	T6TS	Aggregate	Aggregate	Gasoline	560.525111	27400.6685	11214.98642	5.873758607	**4.664929**	
San Joaquin	2023	T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	1500.771839	308143.872	34487.73687	51.00604804	**6.04132**	**HHD**
San Joaquin	2023	T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	1343.474448	364734.036	30873.04281	59.83110996	**6.09606**	**5.596459**
San Joaquin	2023	T7 NOOS Class 8	Aggregate	Aggregate	Diesel	562.3598205	132501.396	12923.02868	21.97566159	**6.029461**	
San Joaquin	2023	T7 Other Port Class 8	Aggregate	Aggregate	Diesel	28.6781176	5381.65764	469.174004	0.90785985	**5.927851**	
San Joaquin	2023	T7 POAK Class 8	Aggregate	Aggregate	Diesel	131.1211785	13188.0173	2145.142481	2.26470624	**5.823279**	
San Joaquin	2023	T7 POLA Class 8	Aggregate	Aggregate	Diesel	139.588006	18353.09	2283.659779	3.154875131	**5.817374**	
San Joaquin	2023	T7 Public Class 8	Aggregate	Aggregate	Diesel	387.066761	16533.9411	1985.652484	3.205449572	**5.158072**	
San Joaquin	2023	T7 Single Concrete/Transit Mix Class 8	Aggregate	Aggregate	Diesel	118.1878034	8595.90453	1113.329108	1.467125303	**5.859012**	
San Joaquin	2023	T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	486.5561857	30707.0394	4583.359269	5.327318734	**5.76407**	
San Joaquin	2023	T7 Single Other Class 8	Aggregate	Aggregate	Diesel	1040.735731	57042.4876	9803.730584	9.736964144	**5.858344**	
San Joaquin	2023	T7 SWCV Class 8	Aggregate	Aggregate	Diesel	175.044521	11346.9523	805.2047965	4.507153801	**2.517543**	
San Joaquin	2023	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	2638.276559	211937.817	38334.1584	34.91925222	**6.069369**	
San Joaquin	2023	T7 Utility Class 8	Aggregate	Aggregate	Diesel	23.22093261	1080.67322	297.2279374	0.186573576	**5.792209**	
San Joaquin	2023	T7IS	Aggregate	Aggregate	Gasoline	2.419215607	60.0081934	48.40366587	0.018776223	**3.195967**	
San Joaquin	2023	UBUS	Aggregate	Aggregate	Gasoline	49.369827	3719.55506	197.479308	0.791708132	**4.698139**	
San Joaquin	2023	UBUS	Aggregate	Aggregate	Diesel	78.33872382	5427.523	313.3548953	0.602229331	**9.012386**	
San Joaquin	2025	All Other Buses	Aggregate	Aggregate	Diesel	67.92171408	3454.27959	604.5032553	0.395338932	**8.737514**	
San Joaquin	2025	LDA	Aggregate	Aggregate	Gasoline	247812.193	10065418.7	1143376.643	340.6379829	**29.54873**	
San Joaquin	2025	LDA	Aggregate	Aggregate	Diesel	620.8563183	19917.7375	2643.071074	0.459921869	**43.30678**	
San Joaquin	2025	LDT1	Aggregate	Aggregate	Gasoline	20969.62889	704503.526	90823.61908	28.55436416	**24.67236**	
San Joaquin	2025	LDT1	Aggregate	Aggregate	Diesel	5.057977491	54.7985719	14.33247387	0.002232746	**24.54313**	
San Joaquin	2025	LDT2	Aggregate	Aggregate	Gasoline	105887.2734	4297523.94	491668.9279	179.0193905	**24.00591**	
San Joaquin	2025	LDT2	Aggregate	Aggregate	Diesel	305.5941154	13558.4186	1463.961841	0.410704288	**33.01261**	
San Joaquin	2025	LHD1	Aggregate	Aggregate	Gasoline	9450.489324	335570.018	140798.2097	34.90157426	**9.614753**	
San Joaquin	2025	LHD1	Aggregate	Aggregate	Diesel	8447.684296	292201.982	106261.2413	18.38163512	**15.89641**	
San Joaquin	2025	LHD2	Aggregate	Aggregate	Gasoline	1129.168714	39496.2437	16822.93138	4.600897482	**8.584465**	
San Joaquin	2025	LHD2	Aggregate	Aggregate	Diesel	3098.911716	112092.227	38980.41096	8.493201579	**13.19788**	
San Joaquin	2025	MCY	Aggregate	Aggregate	Gasoline	12009.69999	64631.0827	24019.39998	1.598967718	**40.42051**	
San Joaquin	2025	MDV	Aggregate	Aggregate	Gasoline	92446.53152	3253692.9	417141.1232	169.0306745	**19.24913**	
San Joaquin	2025	MDV	Aggregate	Aggregate	Diesel	1393.091492	51951.9772	6420.977754	2.139013823	**24.28782**	
San Joaquin	2025	MH	Aggregate	Aggregate	Gasoline	1345.73466	11738.0981	134.6272954	2.660033836	**4.412763**	
San Joaquin	2025	MH	Aggregate	Aggregate	Diesel	631.6240768	5453.24118	63.16240768	0.580283559	**9.397546**	
San Joaquin	2025	Motor Coach	Aggregate	Aggregate	Diesel	18.80772922	2514.51501	432.2016174	0.452917647	**5.551815**	
San Joaquin	2025	OBUS	Aggregate	Aggregate	Gasoline	170.8324994	7309.03024	3418.016649	1.52248184	**4.800734**	

San Joaquin	2025	PTO	Aggregate	Aggregate	Diesel	0	20105.4227	0	3.98427046	**5.046199**		
San Joaquin	2025	SBUS	Aggregate	Aggregate	Gasoline	131.6189784	7271.29468	526.4759134	0.71341232	**10.19228**		
San Joaquin	2025	SBUS	Aggregate	Aggregate	Diesel	490.2787139	10849.6548	7099.235777	1.320741795	**8.214819**	**MHD**	
San Joaquin	2025	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	10.57610418	697.742444	243.038874	0.077548733	**8.997471**	**8.711536**	
San Joaquin	2025	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	14.00551629	958.755772	321.8467643	0.106617779	**8.992457**		
San Joaquin	2025	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	47.29566683	2488.35531	1086.854424	0.272426579	**9.13404**		
San Joaquin	2025	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	78.11014265	15772.0773	1794.971078	1.605687139	**9.822634**		
San Joaquin	2025	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	252.424868	8475.97193	3602.102866	1.019116289	**8.316982**		
San Joaquin	2025	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	162.4907366	5516.89416	2318.742812	0.666350411	**8.279269**		
San Joaquin	2025	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	708.1406495	23932.0747	10105.16707	2.87788442	**8.315857**		
San Joaquin	2025	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	127.2799027	6929.15534	1816.284212	0.825964977	**8.389164**		
San Joaquin	2025	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	457.3843802	18839.146	5287.363435	2.200026822	**8.563144**		
San Joaquin	2025	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	1233.945904	53254.2945	14264.41465	6.208167542	**8.578102**		
San Joaquin	2025	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	939.5521797	39531.7219	10861.2232	4.582174014	**8.627285**		
San Joaquin	2025	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	601.2468734	26326.7381	6950.413857	3.002944814	**8.766974**		
San Joaquin	2025	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	11.09411194	521.271565	128.2479341	0.060836197	**8.568444**		
San Joaquin	2025	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	742.8431118	44239.5012	8587.266373	4.878765067	**9.067766**		
San Joaquin	2025	T6 OOS Class 4	Aggregate	Aggregate	Diesel	6.191325924	405.515484	142.2766697	0.044545776	**9.103343**		
San Joaquin	2025	T6 OOS Class 5	Aggregate	Aggregate	Diesel	8.158025029	556.294323	187.4714152	0.061223253	**9.086324**		
San Joaquin	2025	T6 OOS Class 6	Aggregate	Aggregate	Diesel	27.75525515	1453.61298	637.8157633	0.156720574	**9.275189**		
San Joaquin	2025	T6 OOS Class 7	Aggregate	Aggregate	Diesel	42.05361037	10569.5739	966.3919663	1.066856767	**9.90721**		
San Joaquin	2025	T6 Public Class 4	Aggregate	Aggregate	Diesel	30.96340517	1050.77782	158.8422685	0.137051326	**7.667039**		
San Joaquin	2025	T6 Public Class 5	Aggregate	Aggregate	Diesel	77.40598482	2785.90976	397.0927021	0.357713881	**7.788095**		
San Joaquin	2025	T6 Public Class 6	Aggregate	Aggregate	Diesel	124.4648645	4446.56253	638.5047549	0.566454177	**7.849819**		
San Joaquin	2025	T6 Public Class 7	Aggregate	Aggregate	Diesel	148.2002736	6742.4666	760.2674038	0.856702113	**7.870258**		
San Joaquin	2025	T6 Utility Class 5	Aggregate	Aggregate	Diesel	33.80713566	1371.26265	432.7313364	0.154052822	**8.90125**		
San Joaquin	2025	T6 Utility Class 6	Aggregate	Aggregate	Diesel	6.404694197	258.753793	81.98008572	0.028984726	**8.927246**		
San Joaquin	2025	T6 Utility Class 7	Aggregate	Aggregate	Diesel	7.233394318	359.399463	92.58744727	0.039964166	**8.993043**		
San Joaquin	2025	T6TS	Aggregate	Aggregate	Gasoline	531.0756316	27321.54	10625.76124	5.695995374	**4.796623**	**HHD**	
San Joaquin	2025	T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	1559.383676	317454.145	35834.63687	51.17555421	**6.203238**	**5.689878**	
San Joaquin	2025	T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	1399.986354	379791.503	32171.68641	59.50406302	**6.382615**		
San Joaquin	2025	T7 NOOS Class 8	Aggregate	Aggregate	Diesel	592.9033383	137971.507	13624.91871	22.13949036	**6.231919**		
San Joaquin	2025	T7 Other Port Class 8	Aggregate	Aggregate	Diesel	31.09466321	5773.39367	508.7086901	0.965450648	**5.979999**		
San Joaquin	2025	T7 POAK Class 8	Aggregate	Aggregate	Diesel	137.4284865	13680.6366	2248.330039	2.333991731	**5.861476**		
San Joaquin	2025	T7 POLA Class 8	Aggregate	Aggregate	Diesel	157.478818	19849.822	2576.353462	3.419583803	**5.804748**		
San Joaquin	2025	T7 Public Class 8	Aggregate	Aggregate	Diesel	386.4284577	16615.451	1982.377988	3.157962941	**5.261446**		
San Joaquin	2025	T7 Single Concrete/Transit Mix Class 8	Aggregate	Aggregate	Diesel	121.0999578	8533.43151	1140.761603	1.428680336	**5.972947**		
San Joaquin	2025	T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	518.3758674	30855.2217	4883.100671	5.328325632	**5.790791**		
San Joaquin	2025	T7 Single Other Class 8	Aggregate	Aggregate	Diesel	1163.187559	58572.1124	10957.22681	9.897066107	**5.918129**		
San Joaquin	2025	T7 SWCV Class 8	Aggregate	Aggregate	Diesel	167.5568448	10862.3368	770.7614863	4.227120943	**2.569677**		
San Joaquin	2025	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	2947.082282	219605.844	42821.10556	35.73125002	**6.146044**		
San Joaquin	2025	T7 Utility Class 8	Aggregate	Aggregate	Diesel	24.5522509	1096.54573	314.2688115	0.187591616	**5.845388**		
San Joaquin	2025	T7IS	Aggregate	Aggregate	Gasoline	1.372290651	54.2951776	27.45679134	0.014900233	**3.643915**		
San Joaquin	2025	UBUS	Aggregate	Aggregate	Gasoline	50.67993554	3818.16315	202.7197421	0.812722391	**4.697992**		
San Joaquin	2025	UBUS	Aggregate	Aggregate	Diesel	73.34639924	4977.17265	293.3855969	0.526331001	**9.456355**		

On-road Mobile (Operational) Energy Usage

Unmitigated:

Step 1:

Therefore:

Average Daily VMT:

5,425	Source: CalEEMod

Step 2: Given:

Fleet Mix (CalEEMod Output)

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
64.92%							35.08%					

And:

Gasoline MPG Factors for each Vehicle Class - Year 2025 (EMFAC2021 Output)

LDA	LDT1	LDT2	MDV	MCY	MH
29.549	24.672	24.006	19.249	40.421	4.413

Diesel MPG Factors for each Vehicle Class - Year 2025 (EMFAC2021 Output)

LHD1	LHD2	MHD	HHD	OBUS	UBUS	SBUS
15.896	13.198	8.712	5.690	4.801	9.456	8.215

Therefore:

Weighted Average MPG Factors

Gasoline: **29.5** Diesel: **5.7**

Step 3: **Therefore:**

119	**daily gallons of gasoline**	**334**	**daily gallons of diesel**

or

43,505	**annual gallons of gasoline**	**122,076**	**annual gallons of diesel**

Off-road Mobile (Construction) Energy Usage

Note: For the sake of simplicity, and as a conservative estimation, it was assumed that all off-road vehicles use diesel fuel as an energy source.

Given Factor:	**579.3**	**metric tons**	**CO2**	**(provided in CalEEMod Output File)**
Conversion Factor:	2204.6262	pounds	per metric ton	
Intermediate Result:	**1,277,184**	**pounds**	**CO2**	
Conversion Factor:	22.38	pounds	CO2 per 1 gallon of diesel fuel	Source: U.S. EIA, 2016
Final Result:	**57,068**	**gallons**	**diesel fuel**	http://www.eia.gov/tools/faqs/faq.cfm?id=307&t=11

Mitigated Onsite Scenario	Total CO2 (MT/yr) (provided in CalEEMod Output File)
Demolition (2025)	31.2
Site Preparation (2025)	24.1
Grading (2025)	105
Building Construction (2025)	94
Building Construction (2026)	284
Building Construction (2027)	27
Paving (2027)	13.8
Architectural Coating (2027)	1.22

On-road Mobile (Construction) Energy Usage - Demolition

Note: Year 2021 MPG factors were derived for construction-releated energy consumption (for the sake of a conservative estimate).

Step 1:

Total Daily Worker Trips (CalEEMod Output)

15

Total Hauling Trips (CalEEMod Output)

12

Worker Trip Length (miles) (CalEEMod Output)

11.9

Hauling Trip Length (miles) (CalEEMod Output)

20

Therefore:

Average Worker Daily VMT:

179

Average Vendor Daily VMT:

230

Step 2:

Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

Fleet Mix for Workers (Conservative Estimate)

MHD	HHD
0%	100%

And:

Gasoline MPG Factors for each Vehicle Class (EMFAC2021 Output) - Year 2023

LDA	LDT1	LDT2
28.55	23.82	22.98

Diesel:

MHD	HHD
8.58	5.60

Therefore:

Weighted Average Worker MPG Factor

26.0

Weighted Average Hauling (Diesel) MPG Factor

5.6

Step 3:

Therefore:

6.9 Worker daily gallons of gasoline

Step 4:

20 **# of Days (CalEEMod Output)**

Therefore:

Result: **137** **Total gallons of gasoline**

Therefore:

41 **Total gallons of diesel**

On-road Mobile (Construction) Energy Usage - Site Preparation

Note: Year 2021 MPG factors were derived for construction-releated energy consumption (for the sake of a conservative estimate).

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

18

Worker Trip Length (miles) (CalEEMod Output)

11.9

Therefore:

Average Worker Daily VMT:

208

Step 2: Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (EMFAC2021 Output) - Year 2023

LDA	LDT1	LDT2
28.55	23.82	22.98

Therefore:

Weighted Average Worker MPG Factor

26.0

Step 3: **Therefore:**

8.0 **Worker daily gallons of gasoline**

Step 4:

10	**# of Days (CalEEMod Output)**

Therefore:

Result:

80	**Total gallons of gasoline**

On-road Mobile (Construction) Energy Usage - Grading

Note: Year 2021 MPG factors were derived for construction-releated energy consumption (for the sake of a conservative estimate).

Step 1:

Total Daily Worker Trips (CalEEMod Output)

20

Total Hauling Trips (CalEEMod Output)

-

Worker Trip Length (miles) (CalEEMod Output)

11.9

Hauling Trip Length (miles) (CalEEMod Output)

20

Therefore:

Average Worker Daily VMT:

238

Average Vendor Daily VMT:

-

Step 2: Given:

Assumed Fleet Mix for Workers

LDA	LDT1	LDT2
0.5	0.25	0.25

(Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

Fleet Mix for Workers (Conservative Estimate)

MHD	HHD
0%	100%

And:

Gasoline MPG Factors for each Vehicle Class (EMFAC2021 Output) - Year 2023

LDA	LDT1	LDT2
28.55	23.82	22.98

Diesel:

MHD	HHD
8.58	5.60

Therefore:

Weighted Average Worker MPG Factor

26.0

Weighted Average Hauling (Diesel) MPG Factor

5.6

Step 3: **Therefore:**

9.2 Worker daily gallons of gasoline

Step 4: 35 **# of Days (CalEEMod Output)**

Therefore:

Result: **321** **Total gallons of gasoline**

Therefore:

- **Total gallons of diesel**

On-road Mobile (Construction) Energy Usage - Building Construction

Note: Year 2021 MPG factors were derived for construction-releated energy consumption (for the sake of a conservative estimate).

Step 1:

Total Daily Worker Trips (CalEEMod Output)

90

Total Daily Vendor Trips (CalEEMod Output)

36

Worker Trip Length (miles) (CalEEMod Output)

11.9

Vendor Trip Length (miles) (CalEEMod Output)

9.1

Therefore:

Average Worker Daily VMT:

1,075

Average Vendor Daily VMT:

324

Step 2:

Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

Fleet Mix for Workers (CalEEMod Output)

MHD	HHD
100%	0%

Assumed Fleet Mix for Vendors

And:

MPG Factors for each Vehicle Class (from EMFAC2021) - Year 2023

Gasoline:

LDA	LDT1	LDT2
28.55	23.82	22.98

Diesel:

MHD	HHD
8.58	5.60

Therefore:

Weighted Average Worker (Gasoline) MPG Factor

26.0

Weighted Average Vendor (Diesel) MPG Factor

8.6

Step 3:

Therefore:

41 **Worker daily gallons of gasoline**

Therefore:

38 **Vendor daily gallons of diesel**

Step 4:

370 **# of Days (CalEEMod Output)**

Therefore:

15,306 **Total gallons of gasoline**

Therefore:

13,972 **Total gallons of diesel**

On-road Mobile (Construction) Energy Usage - Paving

Note: Year 2021 MPG factors were derived for construction-releated energy consumption (for the sake of a conservative estimate).

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

15

Worker Trip Length (miles) (CalEEMod Output)

11.9

Therefore:

Average Worker Daily VMT:

179

Step 2: Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (EMFAC2021 Output) - Year 2023

LDA	LDT1	LDT2
28.55	23.82	22.98

Therefore:

Weighted Average Worker MPG Factor

26.0

Step 3: **Therefore:**

6.9 Worker daily gallons of gasoline

Step 4: 20 **# of Days (CalEEMod Output)**

Therefore:

Result: **137** **Total gallons of gasoline**

On-road Mobile (Construction) Energy Usage - Architectural Coating

Note: Year 2021 MPG factors were derived for construction-releated energy consumption (for the sake of a conservative estimate).

Step 1: **Total Daily Worker Trips (CalEEMod Output)**

18

Worker Trip Length (miles) (CalEEMod Output)

11.9

Therefore:

Average Worker Daily VMT:

215

Step 2: Given:

Assumed Fleet Mix for Workers (Percentage mix is provided on Appendix A: Calculation Details for CalEEMOD p. 15)

LDA	LDT1	LDT2
0.5	0.25	0.25

And:

Gasoline MPG Factors for each Vehicle Class (EMFAC2021 Output) - Year 2023

LDA	LDT1	LDT2
28.55	23.82	22.98

Therefore:

Weighted Average Worker MPG Factor

26.0

Step 3: **Therefore:**

8.3 Worker daily gallons of gasoline

Step 4:

20	**# of Days (CalEEMod Output)**

Therefore:

Result:

166	**Total gallons of gasoline**

APPENDIX C

VMT Memorandum

Kimley»Horn

MEMORANDUM

From: Frederik Venter, PE and Colin Ogilvie | Kimley-Horn and Associates

To: Ben Ritchie | DeNovo Planning Group

Date: November 12, 2024

Re: **16286 West Schulte Road Warehouse - CEQA Transportation Analysis**

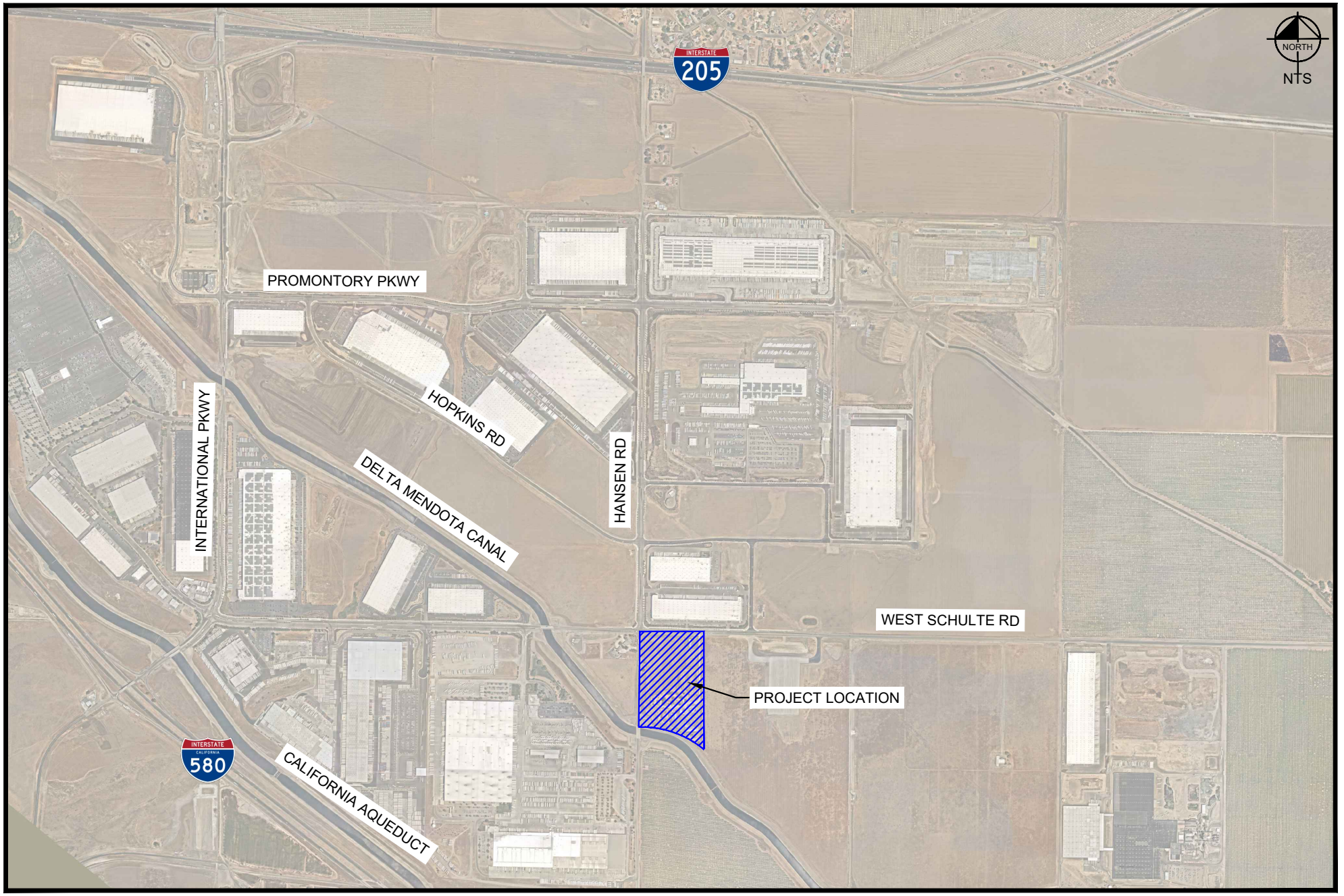
Introduction

The 16286 West Schulte Road development (the "Project") is located at 16286 West Schulte Road in San Joaquin County bound by West Schulte Road to the north, Hansen Road to the west, and the Delta Mendota Canal to the south. The site currently includes 20.92 acres that includes three single family homes and six ancillary structures under Assessor's Parcel Number (APN) 209-230-250. **Figure 1** provides a Project vicinity map.

The 16286 West Schulte Road development has two alternatives:

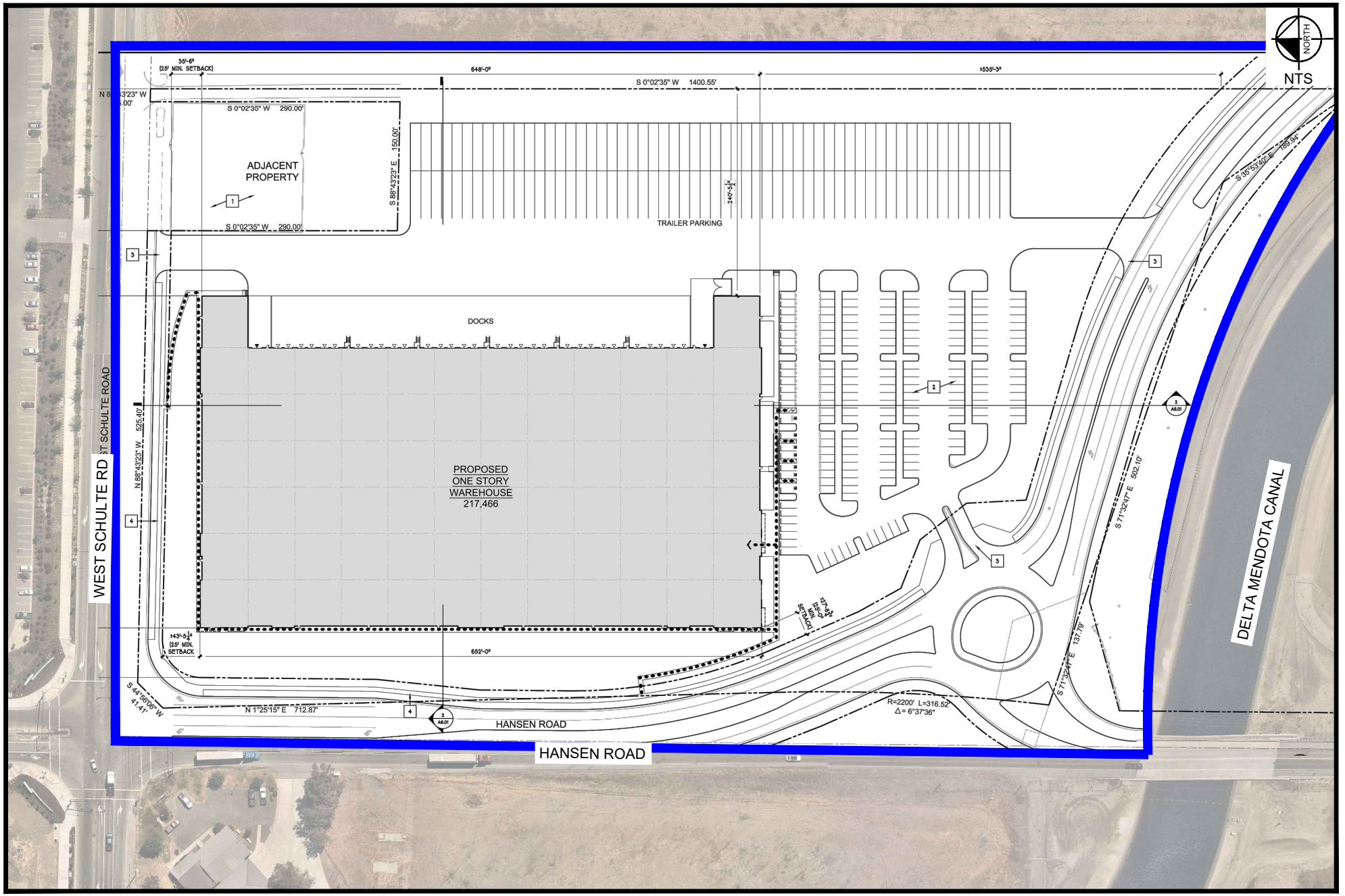
- Alternative 1
  - Development of a single-story 217,466-square foot (sf), warehouse
  - 206 vehicle parking spaces
  - 116 trailer parking stalls
  - Access would be via two full movement locations along the future Hansen Road extension along the Delta-Mendota Canal and a right-in, right-out access on Schulte Road
- Alternative 2
  - Development of a truck and trailer parking lot with 344 parking spaces
  - Parking would be leased to current warehouses that need additional capacity for site operations
  - It is anticipated that this site would be exclusively used for trucks as all stalls provided are for truck and trailer parking only
  - Access would be from one location at the proposed new roundabout at Hansen Road and Hansen Road extension (to the east)

The layout of Alternative 1 and Alternative 2 is shown in **Figure 2** and **Figure 3**, respectively. As part of the Project, the existing parcel would be annexed into the City of Tracy. The Hansen Road extension is not planned to be constructed east of the Project on opening day.



Kimley»Horn

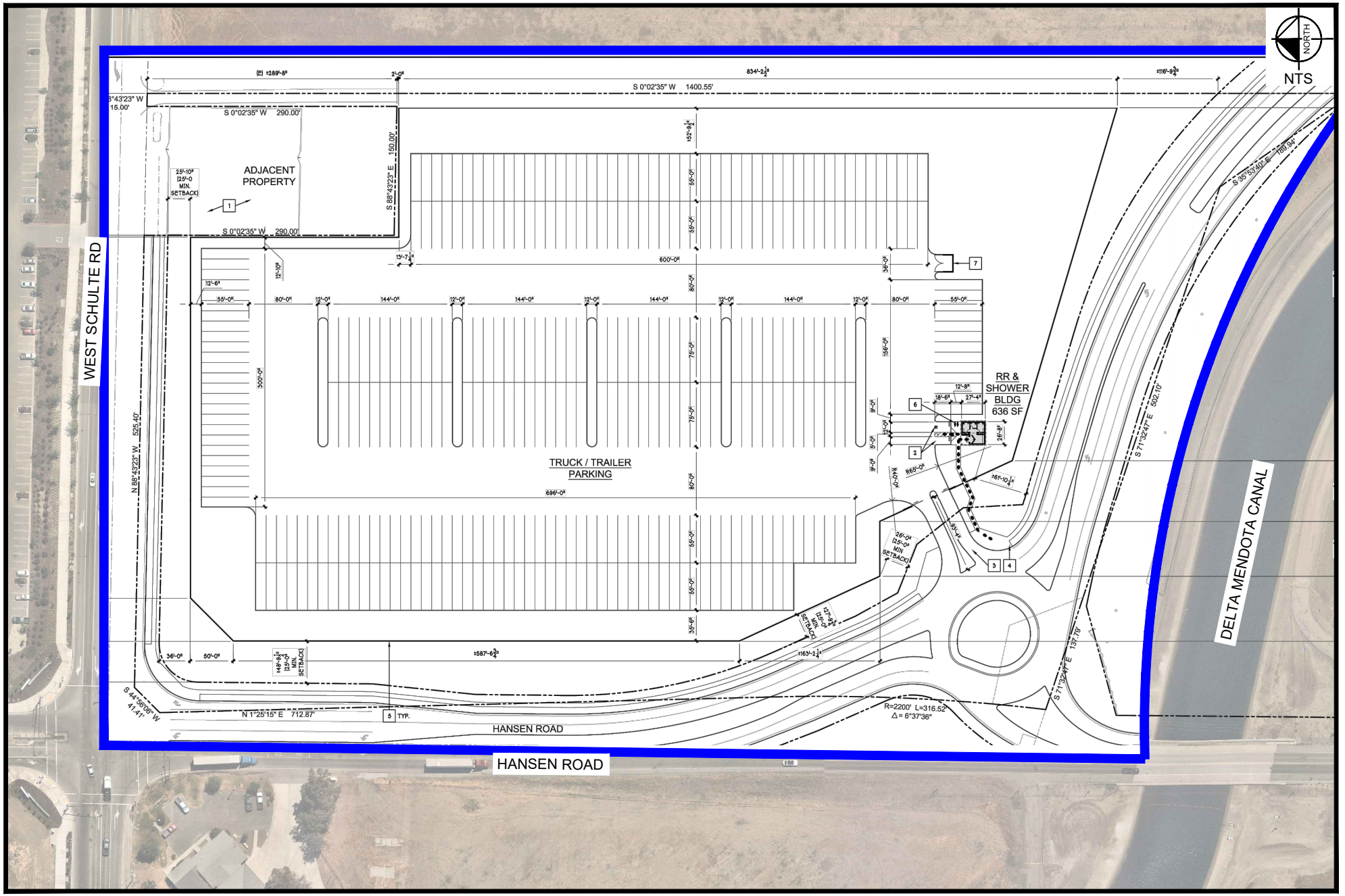
Figure 1
Project Vicinity Map



Kimley»Horn

Figure 2

Alternative 1: Warehouse



Kimley»Horn

Figure 3
Alternative 2: Truck Parking Lot

Kimley»Horn

Trip Generation

Trip generation for the proposed Project was calculated using the data provided by the City of Tracy and supplemental data from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition (2021)*.

Alternative 1: Warehouse

For Alternative 1, the City of Tracy Industrial (Other) rates from the City of Tracy *Transportation Master Plan* (TMP) were utilized for trip generation with supplemental data provided by the Institute of Traffic Engineers (ITE) "Trip Generation Manual," 11th Edition. The following land use code (LUC) best represented the Project's proposed land use and was utilized to determine daily trip generation, AM/PM peak hour inbound/outbound splits, and truck/passenger car splits:

- LUC 150 – Warehousing

The proposed Project is anticipated to generate a total of 382 weekday daily trips, 37 weekday AM peak hour trips (28 IN / 9 OUT), and 72 weekday PM peak hour trips (20 IN / 52 OUT). **Table 1** provides the estimated trip generation.

Table 1: Alternative 1 Trip Generation

Land Uses	Project Size	Daily[2]	AM Peak Hour				PM Peak Hour			
			Total Peak Hour	In	/	Out	Total Peak Hour	In	/	Out
Trip Generation Rates										
City of Tracy (Other)[1]	- ksf	-	0.17	77%	/	23%	0.33	28%	/	72%
Trips Generated										
Building 1	**217.466 ksf**	**382**	**37**	**28**	**/**	**9**	**72**	**20**	**/**	**52**
	Passenger Cars[2]	*248*	*33*	*25*	/	*8*	*60*	*17*	/	*43*
	Trucks[2]	*134*	*4*	*3*	/	*1*	*12*	*3*	/	*9*

NOTES

1. City of Tracy TMP rates are used for AM and PM peak hour rates. Institute of Transportation Engineers (ITE), "Trip Generation Manual," 11th Edition, LU 150 – Warehouse is used for Daily trip rate and AM/PM peak hour distribution percentages.
2. Daily trips utilize the following ITE equation for LU 150: T = 1.58(X) + 38.29
3. Passenger car and truck percentages are estimated based on the ITE "Trip Generation Manual," 11th Edition for LU 150.

Alternative 2: Truck Parking Lot

Trip generation for Alternative 2, the truck parking lot, is not provided in this memorandum, because it was not required to complete the Transportation, Air Quality or Noise CEQA analyses.

Vehicle Miles Traveled (VMT) Analysis

Introduction

In 2018, the California state legislature, in approving Senate Bill (SB) 743, directed the Office of Planning and Research (OPR) to develop guidelines for assessing transportation impacts based on vehicle miles traveled, or VMT. In response to SB 743, CEQA and its implementing guidelines (CEQA Guidelines) were significantly amended regarding the methods by which lead agencies are to evaluate a Project's transportation impacts. As described in California Code of Regulations Section 15064.3(a):

Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a Project. Other relevant considerations may include the effects of the Project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a Project's effect on automobile delay shall not constitute a significant environmental impact.

OPR and the California Code of Regulations use "automobile travel" as a basis for VMT, which means that trucks are excluded from VMT analysis.

This section of the Guidelines continues to set forth the criteria for analyzing transportation impacts. Currently, the City is studying their own thresholds, but none have been adopted.

In 2013, SB 743 was signed into law by California Governor Jerry Brown with a goal of reducing Greenhouse Gas (GHG) emissions, promoting the development of infill land use Projects and multimodal transportation networks, and to promote a diversity of land uses within developments. One significant outcome resulting from this statue is the removal of automobile delay and congestion, commonly known as level of service (LOS), as a basis for determining significant transportation impacts under the California Environmental Quality Act (CEQA).

OPR has documented recommended analysis guidelines for SB 743 in its *Technical Advisory on Evaluating Transportation Impacts in CEQA* (2018) which provides for Vehicle Miles Traveled (VMT) as the principal measure to replace LOS for determining significant transportation impacts. VMT is a measure of total vehicular travel that accounts for the number of vehicle trips and the length of those trips. OPR selected VMT, in part, because jurisdictions are already familiar with this metric. VMT is already used in CEQA to study other potential impacts such as GHG, air quality, and energy impacts and is used in planning for regional Sustainable Communities Strategies (SCS).

VMT also allows for an analysis of a Project's impact throughout the jurisdiction rather than only in the vicinity of the proposed Project allowing for a better understanding of the full extent of a Project's transportation-related impact. It should be noted that SB 743 still allows the City of Tracy to use LOS for other planning purposes outside the scope of CEQA.

Understanding how the local roadway network functions from an engineering standpoint is still critical to local land use agencies to monitor traffic flow, identify safety issues, establish fees and manage congestion. However, for the purposes of evaluating environmental impacts under CEQA, the new regulations have removed congestion from the range of required subjects analyzed within CEQA documents.

VMT Findings

Per the City's Draft VMT Policy, a VMT analysis was conducted for the proposed Project for automobile (employee) trips only. The purpose of the VMT analysis was to measure the transportation impact of the new development and provide recommended mitigation measures.

Alternative 1: Warehousing

For the surrounding industrial land use area, the City's draft threshold is 9.4 VMT per employee. This threshold is based on existing VMT for countywide employment, reduced by 15% per SB 743 guidelines and the CEQA guidelines. The proposed warehouse was evaluated using the City of Tracy Draft VMT Policy Calculator. The purpose of the tool is to calculate VMT for a land use project to determine whether there is a significant transportation impact based on VMT and to determine the effects of various mitigation options. The evaluation tool estimated that the proposed Project would generate 25 VMT per employee. Per OPR guidance, the VMT analysis excludes truck trips. As a result, the proposed Project would exceed the threshold by 166%.

Per the City's Draft VMT Policy threshold, which is consistent with SB 743 guidelines, the proposed Project's potential increase in VMT would result in a significant transportation impact. For projects that would cause a VMT impact, VMT reduction strategies such as introducing Transportation Demand Management (TDM), or additional multimodal infrastructure can, according to research literature and case studies, be used to potentially mitigate the VMT impact. **Table 2** lists the potential TDM measures that could partially mitigate the proposed Project's VMT impact and, also, shows the estimated maximum TDM reduction that each strategy could achieve.

In addition to the opportunity to mitigate, to the extent feasible, the proposed Project's VMT impacts via implementation of a TDM program, the City also has a Draft VMT Banking Fee Program through which, once adopted, would provide an alternative method to mitigate, to the extent feasible, Project VMT impacts. The VMT Mitigation Banking Fee Program is a programmatic approach to respond to the need for feasible VMT mitigation programs. Programmatic approaches that rely on collectively funding larger Projects allow a Project to provide an amount of mitigation commensurate with its respective impact, include only a single payment without the complexity of ongoing management issues that often occur in connection with TDM programs, and do not require ongoing mitigation monitoring. Programmatic approaches can also provide a public benefit in terms of funding transportation improvements that would not otherwise be constructed, resulting in improvements to congestion, a reduction in greenhouse gas (GHG) emissions, increased transportation choices, and additional opportunities for active transportation.

The California Air Pollution Control Officers Association (CAPCOA) states that for suburban communities, such as Tracy, a feasible reduction of 15 percent could be achieved. The City, in its discretion, has elected to utilize this 15 percent threshold as the feasible amount by which the proposed Project would need to mitigate. In other words, each relevant applicant would need to reduce its VMT that would otherwise occur in connection with implementation of the relevant individual development proposal by 15 percent (as compared to what would occur without mitigation).

The City's Draft VMT Mitigation Banking Fee Program calculates the cost per one (1) VMT reduction as $633.11. However, the VMT Mitigation Banking Fee Program has not yet been finalized and adopted; accordingly, the applicable fee would be the amount provided for under the Mitigation Banking Fee Program adopted by the City Council and effective at the time the applicant obtains building permits.

Since it is unknown if the Mitigation Banking Fee Program will be adopted at the time this Project applies for building permits, two VMT mitigation strategies are outlined below.

Option 1 – TDM Measures Plus VMT Mitigation Banking Fee

Option 1 includes a combination of TDM measures plus a VMT Mitigation Banking Fee for the Project to achieve 15% VMT reductions. The Applicant has chosen to implement TDM measures estimated to be equivalent to a 8% reduction in VMT for the Project. See **Table 2** for the proposed list of TDM measure under this option. Therefore, the Project shall mitigate the remaining 7% of VMT reductions via a VMT Banking Fee payment. The 7% VMT reduction required equates to 1.75 VMT per employee that needs to be mitigated. Per the City of Tracy Transportation Master Plan (TMP), it is estimated that industrial land uses have an employee-to-area ratio of 1 employee/1,000 square feet. Therefore, the Project is assumed to have 217 employees. The payment calculation is shown below with additional detail shown in **Table 3**. The total payment is $240,423.52.

*VMT Banking Fee = 217 employees * 1.75 VMT/employee * $633.11/VMT = $240,423.52*

Option 2 – TDM Measures Only

Alternatively, as a second option, if the draft VMT Mitigation Banking Fee Program is not adopted at the time a development is apply for permits, the development would be required to provide TDM measures that fully reduce the VMT by 15%. See **Table 2** for the proposed list of TDM measures under this option.

Alternative 2: Truck Parking Lot

Alternative 2 was reviewed for VMT analysis and was determined to be exempt, because the Project will be exclusively used by trucks, which are exempt from VMT analysis. The employees that would collect and park trailers would be located at nearby warehouses and would not be assumed to be based at the Project site.

Table 2 – TDM Measures

Transportation Demand Management Measure	Description	Max VMT Reduction	Option 1 TDM Measures[2]	Option 2 TDM Measures [3]	VMT Reduction Applied
Parking Strategies					
Reduce Parking Supply	**Reduce the number of available parking spots provided to employees.**	**1%**	**X**	**X**	**1%**
Unbundle Parking	Remove free parking at the site, and charge employees for parking. The higher the cost of parking, the higher the reduction.	1%			0%
Parking Cash-out	**Provide employees a choice of forgoing current parking for a cash payment to be determined by the employer. The higher the cash payment and eligible employees, the higher the reduction.**	**2%**		**X**	**2%**
Transit Strategies					
Transit Stops	Coordinate with local transit agency to provide bus stop near the site. Real time transportation information displays support on-the-go decision making to support sustainable trip making.	1%			0%
Implement Neighborhood Shuttle	Implement Project-operated or Project-sponsored neighborhood shuttle serving residents, employees, and visitors of the Project site	2%			0%
Transit Subsidies	Involves the subsidization of transit fare for residents and employees of the Project site. This strategy assumes transit service is already present in the Project area.	2%			0%
	Pays for employees to use local transit. This could either be a discounted ticket or a full-reimbursed transit ticket.				0%
Communication & Information Strategies					
Travel Behavior Change Program	**Involves the development of a travel behavior change program that targets individuals' attitudes, goals, and travel behaviors, educating participants on the impacts of their travel choices and the opportunities to alter their habits. Provide a web site that allows employees to research other modes of transportation for commuting. Employee-focused travel behavior change program that targets individuals' attitudes, goals, and travel behaviors, educating participants on the impacts of their travel choices and the opportunities to alter their habits. DIBS**	**1%**	**X**	**X**	**1%**
Promotions & Marketing	**Involves the use of marketing and promotional tools to educate and inform travelers about site-specific transportation options and the effects of their travel choices with passive educational and promotional materials. Marketing and public information campaign to promote awareness of TDM program with an on-site coordinator to monitor program. DIBS**	**1%**	**X**	**X**	**1%**
Commuting Strategies					
Employer Sponsored Vanpool or Shuttle	**Implementation of employer-sponsored employee vanpool or shuttle providing new opportunities for access to connect employees to the Project site.**	**2%**		**X**	**2%**
Emergency Ride Home (ERH) Program	**Provide an occasional subsidized ride to commuters who use alternative modes. Guaranteed ride home**	**1%**	**X**	**X**	**1%**

Table 2 – TDM Measures (Cont.)

Transportation Demand Management Measure	Description	Max VMT Reduction	Option 1 TDM Measures[2]	Option 2 TDM Measures [3]	VMT Reduction Applied
	for people if they need to go home in the middle of the day due to an emergency or stay late and need a ride at a time when transit service is not available. DIBS				
Telecommuting Alternative work schedule	Four-Ten work schedule results in 20% weekly VMT reduction, 10% trip reduction equals 15% VMT reduction	7%			0%
On-site Childcare	Provide on-site childcare to remove the need to drive a child to daycare at a separate location.	1%			0%
Shared Mobility Strategies					
Ride Share Program	**Increase vehicle occupancy by providing ride-share matching services, designating preferred parking for ride-share participants, designing adequate passenger loading/unloading and waiting areas for ride-share vehicles, and providing a website or message board to connect riders and coordinate rides. Need a point person for the business on-site**	**2%**		**X**	**2%**
Employee/Employer Car Share	Implement car sharing to allow people to have on-demand access to a vehicle, as-needed. This may include providing membership to an existing program located within 1/4 mile, contracting with a third-party vendor to extend membership-based service to an area, or implementing a Project-specific fleet that supports the residents and employees on -site.	**1%**			0%
	Provide an on-site car vehicle for employees to use for short trips. This allows for employees to run errands or travel for lunch.			**X**	**1%**
Designated Parking Spaces for Car Share Vehicles	**Reserved car share spaces closer to the building entrance.**	**1%**	**X**	**X**	**1%**
Bicycle Infrastructure Strategies					
Bike Share Program	Participate in a bike share program/On site bike share program	1%			0%
Implement/Improve On-street Bicycle Facility	**Implement or provides funding for improvements to corridors and crossings for bike networks identified within a one-half mile buffer area of the Project boundary, to support safe and comfortable bicycle travel.**	**1%**		**X**	**1%**
Include Bike Parking Per City Code	**Implement short and long-term bicycle parking to support safe and comfortable bicycle travel by providing parking facilities at destinations**	**1%**	**X**	**X**	**1%**
Include Secure Bike Parking and Showers	**Implement additional end-of-trip bicycle facilities to support safe and comfortable bicycle travel.**	**1%**		**X**	**1%**
Bicycle Repair Station / Services	**On-site bicycle repair tools and space to use them supports on-going use of bicycles for transportation.**	**1%**		**X**	**1%**
Neighborhood Enhancement Strategies					
Traffic Calming Improvements	Implement traffic calming improvements on streets and intersections throughout and around the Project site.	1%			0%

Table 2 – TDM Measures (Cont.)

Transportation Demand Management Measure	Description	Max VMT Reduction	Option 1 TDM Measures[2]	Option 2 TDM Measures[3]	VMT Reduction Applied
Pedestrian Network Improvements	**Implement pedestrian network improvements throughout and around the Project site that encourages people to walk.**	**2%**	**X**		**2%**
Miscellaneous Strategies					
Virtual Care Strategies for Hospitals	Implement options for virtual care for health services for hospitals.	2%			0%
On-Site Affordable Housing	Provide a percentage of on-site affordable housing for employees that is less than 100%.	1%			0%
Job Creation Land Use (e.g. Office)	Provide offices or other job creation land use. Applies to housing Projects.	3%			0%

Notes:

1. DIBS is a transportation program designed by the San Joaquin Council of Governments to incentivize carpooling or alternative modes of transportation. The website is located here: https://www.dibsmyway.com/
2. Minimum applied TDM measures are applicable with the Project paying its applicable VMT Mitigation Banking Program fee.
3. Maximum applied TDM measures are applicable if the Project does not pay its applicable VMT Mitigation Banking Program fee or if the VMT Mitigation Banking Program is not adopted at the time the Project applies for permits.

Table 3: VMT Banking Fee

City VMT Policy	
Industrial VMT/Employee Threshold	9.40
Maximum VMT Reduction	15%
VMT Mitigation Banking Fee	$633.11
Proposed Project Description	
Building Area (ksf[1])	217.4
Employees per ksf	1
Employees	217
Proposed Project VMT Screencheck	
VMT/Employee[2]	25
Total Employee VMT	5,425.0
VMT/Employee Compared to City Threshold	166%
VMT Reductions	
Via TDM[3]	8%
Via Mitigation Banking Fee	7%
Total	15%
VMT Mitigation Banking Fee	
Total Employee VMT Reduction via Mitigation Banking Fee	379.8
Total Employee VMT/EMP Reduction via Mitigation Banking Fee	1.75
Proposed Project Mitigation Banking Fee[4]	**$240,423.52**

Notes:

1. ksf = thousand square feet
2. . Based on the City of Tracy's map-based VMT screening for employment
3. See Table 3
4. Proposed Project Mitigation Banking Fee = City VMT Mitigation Banking Fee * Project Total Employee VMT Reduction