

Draft Environmental Impact Report
237 Industrial Center Project



City of San Jose

June 2017

**NOTICE OF AVAILABILITY OF
A DRAFT ENVIRONMENTAL IMPACT REPORT (EIR)
AND PUBLIC COMMENT PERIOD**

A Draft Environmental Impact Report (DEIR) for the 237 Industrial Center. The project site, approximately 64.5 acres, is primarily fallow farmland with two single-family houses, a mobile home, and farm-related accessory structures located near the southern portion of the site. The site is currently supported by well water and a septic tank system. The project includes two development options. Option 1 proposes approximately 1.2 million square feet of light industrial development and Option 2 proposes a 436,880 square foot data center (49.5 megawatts) with a PG&E substation to provide the electrical needs for the data center on approximately 26.5 acres of the site and approximately 728,000 square feet of light industrial development. The project (both development options) would require rezoning from A(PD) – Agricultural Planned Development to LI Light Industrial. **Location:** The 64.5-acre project site is located north of Highway 237 between Zanker Road and Coyote Creek in the City of San José. APN: 015-31-054.

Council District: 4

File Nos.: C15-054 and SP16-053.

The proposed project will have potentially significant environmental effects with regard to air quality, biological, cultural agricultural, hazardous materials, transportation, and cumulative transportation resources. The California Environmental Quality Act (CEQA) requires this notice to disclose whether any listed toxic sites are present at the project location. The project location is contained in the Cortese List of toxic sites.

The Draft EIR and documents referenced in the Draft EIR are available for review online at the City of San José's "Active EIRs" website at www.sanjoseca.gov/activeeirs and are also available at the following locations:

Department of Planning, Building,
and Code Enforcement
200 East Santa Clara St., 3rd Floor
San José, CA 95113
(408) 535-3555

Dr. MLK Jr. Main Library
150 E. San Fernando St.,
San José, CA 95112
(408) 277-4822

Alviso Branch Library
5050 N. 1st Street
San José, CA 95002
(408) 263-3626

The public review period for this Draft EIR begins on **June 1st, 2017 and ends on July 17th, 2017**. Written comments must be received at the Planning Department by **5:00 p.m. on July 17th, 2017**, in order to be addressed as part of the formal EIR review process. Comments and questions should be referred to Kieulan Pham in the Department of Planning, Building and Code Enforcement at 408-535-3844, via e-mail: Kieulan.Pham@sanjoseca.gov, or by regular mail at the mailing address listed for the Department of Planning, Building, and Code Enforcement, above (send to the attention of Kieulan Pham). For the official record, please your written comment letter and reference File Nos. C15-054 and SP16-053.

Following the close of the public review period, the Director of Planning, Building, and Code Enforcement will prepare a Final Environmental Impact Report that will include responses to comments received during the review period. At least ten days prior to the public hearing on the EIR, the City's responses to comments received during the public review period will be available for review and will be sent to those who have commented in writing on the EIR during the public review period.

Harry Freitas, Director
Planning, Building and Code Enforcement


Deputy

Date

5/26/17

PREFACE

This document has been prepared by the City of San José as the Lead Agency in conformance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. This Environmental Impact Report (EIR) provides program-level environmental review for the proposed 237 Industrial Center Project. The purpose of an EIR is clarified in Sections 15121, 15146, and 15151 of CEQA:

§15121. Informational Document.

- (a) An EIR is an informational document, which will inform public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR, along with other information which may be presented to the agency.
- (b) While the information in the EIR does not control the agency's ultimate discretion on the project, the agency must respond to each significant effect identified in the EIR by making findings under Section 15091 and if necessary by making a statement of overriding considerations.

§15146. Degree of Specificity. The degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.

- (a) An EIR on a construction project will necessarily be more detailed in the specific effects of a project than will an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.
- (b) An EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or local general plan should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction project that might follow.

§15151. Standards for Adequacy of an EIR. An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently considers environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good-faith effort at full disclosure.

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- Appendix A: Notice of Preparation and Comments Received
- Appendix B: Air Quality Assessment
- Appendix C: Technical Biological Report (Project Site)
- Appendix D: Potential Outfall Project Biological Resources Report
- Appendix E: Tree Inventory
- Appendix F: Historic Report
- Appendix H: Geotechnical Investigation Report
- Appendix I: Phase I Environmental Site Assessment
- Appendix J: Shallow Soil Assessment
- Appendix K: Traffic Impact Analysis
- Appendix L: Water Supply Assessment

SUMMARY

The project includes two development options. Option 1 proposes approximately 1.2 million square feet of light industrial development. Option 2 proposes a 436,880 square foot data center (49.5 megawatts) with a PG&E substation to provide the electrical needs for the data center on approximately 26.5 acres of the site. The data center is considered to be Phase 1 of this development option, which also includes approximately 728,000 square feet of light industrial development (no additional data center uses) on the remaining 38 acres of the site. The light industrial land uses proposed as part of Option 2 would be similar to those proposed under the Option 1 project option in terms of uses and density.

The following is a summary of the significant impacts and mitigation measures addressed within this EIR. The project description and full discussion of impacts and mitigation measures can be found in of this EIR.

Significant Impacts	Mitigation Measures
Air Quality	
<p>Impact AQ-1: The proposed project would result in a significant impact related to the production of NOx during generator testing.</p>	<p>MM AQ-1.1: Prior to issuance of a building permit, the project applicant shall submit a generator operations plan to the Building Division staff and ensure that generator operations for or maintenance and testing purposes shall be limited so that the combined operation of all 24 engines does not exceed 360 hours in any consecutive 12-month period and the average load factor does not exceed 30 percent during testing.</p> <p>MM AQ-1.2: The operator of the data center shall retain records as required by the Bay Area Air Quality Management District (BAAQMD) as a condition of the Permit to Operate that includes: 1) date and times of all reliability-related testing, and 2) engine load during the testing.</p> <p>MM AQ-1.3: Prior to issuance of any building permit, the project applicant shall submit the records noted above in MM AQ-1.2 as part of the operator’s Permit to Operate conditions, to BAAQMD for approval.</p> <p>MM AQ-1.4: Prior to approval of any project-specific light industrial development on the project site (e.g., plan development permit or equivalent), excluding the data center use, the Project applicant shall submit a Transportation</p>

Significant Impacts	Mitigation Measures
Air Quality	
	<p>Demand Management (TDM) Plan to the satisfaction of the Transportation Manager of the Department of Public Works and the PBCE Supervising Environmental Planner.</p> <p>The TDM Plan shall contain the following components or equivalent measures to result in a 10% reduction in weekday mobile emissions:</p> <ul style="list-style-type: none"> <li>• Eco Pass, Clipper Card, or equivalent for all employees, providing free rides on Santa Clara County’s local transit agency, the Santa Clara Valley Transportation Authority (VTA) 25% Transit Subsidy for transit agencies other than the VTA, including Caltrain, ACE, Capitol Corridor, and BART; <li>• Free “Last Mile” Shuttles to local train systems (e.g. Caltrain, Amtrak, ACE) and VTA Light Rail Transit; <li>• Internal Carpool Matching Program utilizing zip code matching; <li>• Personalized Commute Assistance offered by a Commute Coordinator; <li>• Preferred parking for Carpools and Vanpools located near entrances to every building; <li>• Bicycle Lockers and/or Bicycle Racks near entrances to every building; <li>• Showers for cyclists and pedestrians, offering clean towel service, complimentary toiletries, hair dryers, and ironing boards; and <li>• Support Citywide Car Share programs. <p>Less than Significant Impact with Mitigation</p>

Significant Impacts	Mitigation Measures
Agricultural Resources	
<p>Impact AGR-1: The proposed project would result in the loss of land designated as Prime Farmland.</p>	<p>As discussed in the Envision San José 2040 General Plan FPEIR, there are no feasible mitigation measures available to reduce the loss of agricultural land within areas previously planned and designated for development within the City’s Urban Growth Boundary. The General Plan FPEIR concluded that the loss of agricultural land in the City is significant and unavoidable.</p> <p>Significant and Unavoidable Impact</p>
Biological Resources	
<p>Impact BIO-1: Construction activities could result in significant impacts to nesting migratory and other protected bird species.</p>	<p>MM BIO-1.1: If initial site disturbance activities, including tree, shrub, or vegetation removal, are to occur during the breeding season February 1st to August 31st inclusive, a qualified biologist shall conduct pre-construction surveys for nesting migratory birds onsite and within 250 feet (for raptors) of the site, where accessible. The survey shall occur within 14 days of the onset of ground disturbance if disturbances are to commence between February 1st and June 30th and within 30 days prior to the onset of ground disturbance between July 1st and August 31st. If a nesting migratory bird were to be detected, an appropriate construction-free buffer shall be established in consultation with the California Department of Fish and Wildlife (CDFW). The actual size of the buffer, which shall be determined by the project biologist, would depend on species, topography, and type of activity that would occur in the vicinity of the nest. The project buffer would be monitored periodically by the project biologist to ensure compliance. After the nest is completed, as determined by the biologist, the buffer would no longer be required.</p> <p>MM BIO-1.2: The Santa Clara Valley Habitat Plan (SCVHP) identifies the project site to be within 250 feet of potentially suitable tricolored blackbird nesting habitat occurring along Coyote Creek. The project applicant shall</p>

Significant Impacts	Mitigation Measures
Biological Resources	
	<p>conduct surveys for tricolored blackbirds within 250 feet of this habitat, where visual access is possible, prior to start of construction following protocols in Condition 17 in Chapter 6 of the SCVHP. Such protocols include:</p> <ul style="list-style-type: none"> • Prior to any ground disturbance, a qualified biologist shall complete a background assessment to determine if there has been nesting at the site or near the site in the past five years. This includes checking the California Natural Diversity Database (CNDDDB), contacting local experts, and looking for evidence of historical nesting (i.e., old nests). • If nesting in the past five years is not evident, the qualified biologist shall conduct a preconstruction survey in areas identified in the habitat survey as supporting potential tricolored blackbird nesting habitat. Surveys shall be made at the appropriate times of year when nesting use is expected to occur, and shall document the presence or absence of nesting colonies of tricolored blackbird. Surveys shall conclude no more than two calendar days prior to construction, per Condition 17 of Chapter 6 in the SCVHP. • Should a nesting colony of tricolored blackbirds be located, a 250-foot construction-free buffer shall be established from the edge of all hydric vegetation associated with the nest site and the buffer shall be avoided, and the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) shall be notified immediately. • If construction occurs in the project area during the nesting season and when the 250-foot buffer is in place around active nesting habitat, a qualified biologist shall conduct periodic monitoring of the site to ensure the

Significant Impacts	Mitigation Measures
Biological Resources	
	<p>250-foot buffer is enforced. The biologist shall have the authority to increase the buffer size if needed based on tricolored blackbird behavior at the active nesting area.</p> <ul style="list-style-type: none"> • If active tricolored blackbird nesting occurs within 250 feet of the project site and off-site utility alignment areas and construction occurs during the active nesting period resulting in the need for a buffer, the qualified biologist shall conduct training for construction personnel in avoidance procedures, buffer zones, and safety protocols to ensure no impacts to the nest. <p style="text-align: center;">Less than Significant Impact with Mitigation</p>
<p>Impact BIO-2: Any actions related to site development that result in the mortality of burrowing owls shall constitute a violation of the Federal Migratory Bird Treaty Act and provisions of the California Fish and Game Code. Therefore, the mortality of burrowing owls would be a significant impact under CEQA.</p>	<p>MM BIO-2.1: To mitigate impacts to occupied burrowing owl habitat, the project applicant shall pay the burrowing owl fee as specified in the SCVHP for each acre of occupied burrowing owl nesting habitat impacted as a result of project buildout. Fees shall also be required from the loss of foraging habitat on the agricultural fields on-site (approximately 60 acres; Zone B fees) and annual grassland off-site (approximately 31.5 acres; Zone A fees).</p> <p>MM BIO-2.2: The project applicant shall conduct preconstruction surveys to ascertain whether or not burrowing owls occupy burrows on the site and along the utility alignments off-site prior to construction. The preconstruction surveys shall be performed by a qualified biologist and shall consist of a minimum of two surveys, with the first survey no more than 14 days prior to initial construction activities (i.e. vegetation removal, grading, excavation, etc.) and the second survey conducted no more than 2 days prior to initial construction activities. If no burrowing owls or fresh sign of burrowing owls are observed during preconstruction surveys, construction may continue. However, if a burrowing owl is observed during these surveys, occupied burrows shall be identified by</p>

Significant Impacts	Mitigation Measures
Biological Resources	
	<p>the monitoring biologist and a buffer shall be established, as described below:</p> <ul style="list-style-type: none"> • If an active nest is found, a qualified biologist shall establish a 250-foot non-disturbance buffer around all nest sites. If the biologist determines that the nest is vacant, the non-disturbance buffer zone may be removed, in accordance with measures described in the SCVHP. The biologist shall supervise hand excavation of the burrow to prevent reoccupation only after receiving approval from the wildlife agencies (CDFW and USFWS) in accordance with Chapter 6, Condition 15 of the SCVHP. • For permission to encroach within 250 feet of such burrows during the nesting season (February 1st through August 31st), an Avoidance, Minimization, and Monitoring Plan (AMMP) shall be prepared and approved by the City and the wildlife agencies prior to such encroachment in accordance with Chapter 6 of the SCVHP. <p>MM BIO-2.3: Should a burrowing owl be located during the non-breeding season (September through January), a 250-foot buffer shall be established and construction activities shall not be allowed within the 250-foot buffer of the active burrow(s) used by any burrowing owl unless the following avoidance measures are adhered to:</p> <ul style="list-style-type: none"> - A qualified biologist shall monitor the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction). - The same qualified biologist shall monitor the owls during construction. If the biologist determines there is a change in owl nesting and foraging behavior as a result of construction activities, these activities shall

Significant Impacts	Mitigation Measures
Biological Resources	
	<p>cease within the 250-foot buffer.</p> <ul style="list-style-type: none"> - If the owls are gone from the burrows for at least one week, the project applicant may request approval from the habitat agency to excavate all usable burrows within the construction area to prevent owls from reoccupying the site. After all usable burrows are excavated, the buffer zone shall be removed and construction may continue; <p>MM BIO-2.4: In the event the voluntary relocation of site burrowing owls does not occur (defined as owls having vacated the site for 10 or more consecutive days), the project applicant can request permission to engage in passive relocation during the non-breeding season through the standard SCVHP application process (Section 6.8 of the SCVHP).</p> <p>If passive relocation is granted, additional measures may be required by the Habitat Agency.</p> <p>If the owls voluntarily vacate the site for 10 or more consecutive days, as documented by a qualified biologist, the project applicant could seek permission from the Santa Clara Valley Habitat Agency to have the qualified biologist take measures to collapse vacated and other suitable burrows to ensure that owls do not recolonize the site, in accordance with the SCVHP.</p> <p>Less than Significant Impact with Mitigation</p>
<p>Impact BIO-3: The project would cause permanent impacts to riparian vegetation and seasonal wetlands as a result of installation of the potential stormwater outfall at Coyote Creek and project construction in the southwest corner of the site.</p>	<p>MM BIO-3.1: Prior to the start of any grading or other soil disturbing activities, the project applicant shall be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) consistent with the City’s NDPEs C3 provisions.</p> <p>MM BIO-3.2: A qualified biological monitor shall visit the project site daily during outfall</p>

Significant Impacts	Mitigation Measures
Biological Resources	
	<p>construction to verify that these measures are being fully implemented and are effective.</p> <p>MM BIO-3.3: Removal of riparian vegetation and/or trees for the potential installation of the outfall shall be limited to the minimum extent required.</p> <p>MM BIO-3.4: The project applicant shall ensure that all seed mixtures used for revegetation of the impacted riparian habitat of Coyote Creek shall be native or sterile non-native species only. No invasive non-native plant species shall be used for revegetation.</p> <p>MM BIO-3.5: The project applicant shall comply with all requirements of the CDFW, U.S. Army Corps of Engineers (USACE), and Regional Water Quality Control Board (RWQCB) permits required for the construction of the outfall, including any additional mitigation measures and all monitoring requirements.</p> <p>Less than Significant Impact with Mitigation</p>
<p>Impact BIO-4: Construction activities on-site could result in significant impacts to trees that may be retained.</p>	<p>MM BIO-4.1: The project applicant, in consultation with a certified arborist or biologist, shall submit a Tree Protection Plan (TPP) to the Supervising Environmental Planner of the Department of Planning, Building, and Code Enforcement for trees to be preserved. The TPP shall include, but is not limited to:</p> <ul style="list-style-type: none"> • Number of trees and location of trees to be protected • Final landscaping proposal • Tree Protection Zone (TPZ) • Size and location of TPZ • Specific recommendation and suggestions or recommendation for each TPZ if applicable • Maintenance methodology for tree protection zones during the entire demolition and construction period

Significant Impacts	Mitigation Measures
Biological Resources	
	<ul style="list-style-type: none"> • Irrigated schedule • Pruning schedule for preserved trees, if applicable • Herbicides and other products recommended to be used on preserved trees <p>Less than Significant Impact with Mitigation</p>
Cultural Resources	
<p>Impact CUL-1: Construction of the proposed project could result in significant impacts to subsurface cultural resources should they be located on-site.</p>	<p>MM CUL-1.1: Prior to the issuance of any grading permit, the project applicant shall be required to complete subsurface testing to determine the extent of possible resources on-site. Subsurface testing shall be completed by a qualified archaeologist. Based on the findings of the subsurface testing, an archaeological resources treatment plan shall be prepared by a qualified archaeologist and submitted to PBCE Supervising Environmental Planner and Historic Preservation Officer for approval prior to the issuance of grading permits.</p> <p>MM CUL-1.2: The project applicant shall implement the approved treatment plan prior to the issuance of grading permits. The approved treatment plan shall utilize data recovery methods to reduce impacts on subsurface resources.</p> <p>MM CUL-1.3: All prehistoric and historic-era features identified during exploration shall be evaluated by a qualified archaeologist based on the California Register of Historical Resources criteria consistent with the archaeological treatment plan. After completion of the field work, all artifacts shall be cataloged and the appropriate forms shall be completed and filed with the Northwest Information Center of the California Archaeological Inventory at Sonoma State University by the qualified archaeologist in coordination with the PBCE Supervising Environmental Planner and Historic Preservation Officer prior to issuance of occupancy permits (temporary or final).</p>

Significant Impacts	Mitigation Measures
Cultural Resources	
	<p>MM CUL-1.4: In the event that prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped, the Director of PBCE shall be notified, and a qualified archaeologist shall examine the find. The archaeologist shall evaluate the find(s) to determine if they meet the definition of a historical or archaeological resource and make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits. If the finds do not meet the definition of a historical or archaeological resources, no further study or protection is necessary prior to project implementation. If the find(s) does meet the definition of a historical or archaeological resource, then it shall be avoided by project activities. If avoidance is not feasible, adverse effects to such resources shall be mitigated in accordance with the recommendations of the archaeologist. Recommendations shall include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery would be submitted to the Director of PBCE and the Northwest Information Center.</p> <p>The project applicant shall ensure that construction personnel does not collect or move any cultural material, and shall ensure that any fill soils that may be used for construction purposes do not contain any archaeological materials.</p> <p>MM CUL-1.5: In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped. The Santa Clara County Coroner shall be notified immediately and shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the identification. Once the NAHC identifies the</p>

Significant Impacts	Mitigation Measures
Cultural Resources	
	<p>most likely descendants (MLD), the descendants shall make recommendations regarding proper burial (including the treatment of grave goods), which shall be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.</p> <p>The archaeologist shall recover scientifically-valuable information, as appropriate and in accordance with the recommendations of the MLD. A report of findings documenting any data recovery shall be submitted to the Director of PBCE and the Northwest Information Center.</p> <p>Less than Significant Impact with Mitigation</p>
Greenhouse Gas Emissions	
<p>Development of light industrial development on-site after 2020 could contribute to the previously identified significant GHG emission impacts resulting from implementation of the planned development considered in the Envision San José 2040 General Plan.</p>	<p>The project would implement feasible energy efficiency measures to minimize impacts and would not result in any new or greater impacts than were previously identified in the Envision San José 2040 Supplemental FPEIR. The impact would be significant and unavoidable as disclosed in the Envision San José 2040 Supplemental FPEIR.</p> <p>Significant Unavoidable Impact</p>
Hazards and Hazardous Materials	
<p>Impact HAZ-1: Implementation of the proposed project could release pesticide chemicals from on-site soils into the environment, and expose construction workers to residual agricultural soil contamination.</p>	<p>MM HAZ-1.1: A Site Management Plan (SMP) shall be prepared and implemented (as outlined below) and any contaminated soils found in concentrations above established thresholds shall be removed and disposed of according to California Hazardous Waste Regulations or the contaminated portions of the site shall be capped beneath the planned development under the regulatory oversight of the Santa Clara County Department of Environmental Health (SCCDEH) or State Department of Toxic Substances Control (DTSC). The contaminated soil removed from the site shall be hauled off-site and disposed of at a licensed hazardous materials disposal site.</p>

Significant Impacts	Mitigation Measures
Hazards and Hazardous Materials	
	<p>Components of the SMP shall include, but shall not be limited to:</p> <ul style="list-style-type: none"> • A detailed discussion of the site background; • Preparation of a Health and Safety Plan by an industrial hygienist; • Notification procedures if previously undiscovered significantly impacted soil or free fuel product is encountered during construction; • On-site soil reuse guidelines based on the California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region’s reuse policy; • Sampling and laboratory analyses of excess soil requiring disposal at an appropriate off-site waste disposal facility; • Soil stockpiling protocols; and • Protocols to manage ground-water that may be encountered during trenching and/or subsurface excavation activities. <p>MM HAZ-1.2: All contractors and subcontractors at the project site shall develop a Health and Safety Plan (HSP) specific to their scope of work and based upon the known environmental conditions for the site. The HSP shall be approved by the PBCE Supervising Environmental Planner and Environmental Services Department (ESD) and implemented under the direction of a Site Safety and Health Officer. The HSP shall include, but shall not be limited to, the following elements, as applicable:</p> <ul style="list-style-type: none"> • Provisions for personal protection and monitoring exposure to construction workers; • Procedures to be undertaken in the event that contamination is identified above action levels or previously unknown contamination is discovered;

Significant Impacts	Mitigation Measures
Hazards and Hazardous Materials	
	<ul style="list-style-type: none"> • Procedures for the safe storage, stockpiling, and disposal of contaminated soils; • Provisions for the on-site management and/or treatment of contaminated groundwater during extraction or dewatering activities; and • Emergency procedures and responsible personnel. <p>The SMP shall be submitted to SCCDEH, DTSC, or equivalent regulatory agency for review and approval. Copies of the approved SMP shall be provided to the PBCE Supervising Environmental Planner and Environmental Services Department (ESD) prior to issuance of grading permits.</p> <p>Less than Significant Impact with Mitigation</p>
Transportation	
<p>Impact TRAN-1: Implementation of the proposed project would have a significant impact on the Zanker Road/Montague Expressway and Oakland Road/Montague Expressway intersections under existing plus project conditions. The City has determined that impacts related to this option do not require mitigation.</p>	<p>The City has determined that impacts related to this option do not require mitigation.</p> <p>No Mitigation Required</p>
<p>Impact TRAN-2: Implementation of the proposed project would have a significant impact on the mixed-flow lanes of seven directional freeway segments and HOV lanes of three directional freeway segments. Phase 1 of Option 2 (data center construction only) would not result in this impact.</p>	<p>There are no feasible mitigation measures available to reduce project impacts on local freeway study segments to a less than significant level as it is beyond the capacity of any one project to acquire right-of-way and add lanes to a state freeway. Furthermore, no comprehensive project to increase freeway capacity on either SR 237 or I-880 has been developed by Caltrans or VTA, so there is no identified improvement projects in which to pay fair share fees. Transportation demand management measures, if implemented, would reduce these impacts but not to a less than significant level. Therefore, the project's</p>

Significant Impacts	Mitigation Measures
Transportation	
	<p>impacts to freeway segments would be significant and unavoidable. Phase 1 of Option 2 (data center only) would not result in this impact.</p> <p>Significant Unavoidable Impact</p>
Cumulative Transportation	
<p>Impact TRAN(C)-1: The proposed project would have a cumulatively considerable contribution to two intersections. The data center alone would not result in these impacts.</p>	<p>MM TRAN(C)-1.1: The LOS at the Zanker Road/SR 237(N) intersection would be improved over background conditions with the addition of a second southbound through lane. This improvement would reduce the average delay to LOS B in the PM Peak Hour.</p> <p>Less Than Significant with Mitigation</p>

SUMMARY OF ALTERNATIVES

The California Environmental Quality Act (CEQA) requires that an EIR identify alternatives to the proposed project. The CEQA Guidelines specify that the EIR should identify alternatives that “will feasibly attain most of the basic objectives of the project but will avoid or substantially lessen any of the significant effects of the project.” The purpose of the alternatives section is to determine whether there are alternatives of design, scope, or location that will substantially lessen the significant impacts, even if those alternatives “impede to some degree the attainment of project objectives,” or are more costly. [CEQA Guidelines Section 15126.6(b)]

In order to comply with CEQA, it is important to identify alternatives that reduce the significant impacts that are anticipated to occur if the project is implemented and to try to meet as many of the project’s objectives as possible. The CEQA Guidelines emphasize a common sense approach. The alternatives should be reasonable, “foster informed decision-making and public participation,” and must focus on alternatives that avoid or substantially lessen the significant impacts. The stated objectives of the project proponent are to:

Pursuant to CEQA Guidelines Section 15124, the EIR must identify the objectives sought by the proposed project. The project applicant has stated the following objectives:

1. Support the community values outlined in the Envision San José 2040 General Plan, including, among others, the Innovative Economy goals by providing key infrastructure improvements driving today’s businesses, and Quality Education and Services by significantly increasing property tax revenue to local agencies.
2. Support the implementation of the Alviso Master Plan vision for the project site as well as the “Focused Growth” Major Strategy from the Envision San José 2040 Plan, including a focus on economic growth, fiscal sustainability, and environmental sustainability.
3. Allow for the construction and operations of a data center of approximately 440,000 square feet that will house computer servers, supporting equipment, and associated office uses in an environmentally controlled structure with redundant subsystems systems (cooling, power, network links, storage, fire suppression, etc.) The data center shall be located near a reliable large power source, and emergency response access, and being located such that it can be protected, to the maximum extent feasible, from security threats, natural disasters, and similar events.
4. Provide operational electric power to the proposed data center via an electric substation, and provide other utility infrastructure to serve the project (as well as other planned growth in the vicinity consistent with the City’s infrastructure planning and partnership objectives), including water, storm drainage, sanitary sewer, electric, natural gas, and telecommunications, as well as new roadway infrastructure.
5. Support San José’s stated job creation objectives by allowing for the construction of up to 1.2 million square feet of new light industrial uses that are compatible with nearby land uses, which would then further stimulate economic activity and employment generation.

6. Develop a light industrial campus that is well-designed per industry standards and properly integrates the planned uses and related improvements including, among others, parking, loading docks, vehicle access, and bicycle and pedestrian connections.
7. Develop a light industrial campus that is well-designed per industry standards and properly integrates light industrial uses, data center uses, parking, loading docks, vehicle access, and bicycle and pedestrian connections.
8. Incorporate, as feasible, environmentally sustainable features into the project, such as appropriate bird-friendly building design components, and the creation of an environmental buffer zone along Coyote Creek consistent with the City's Riparian Corridor Policy setback of 100 feet.
9. Meet the growing demand for light industrial uses, which may include a data center to support the region's growing businesses and work force population in support of Envision San José 2040 General Plan's Major Strategy #4, which calls for development supporting San José's growth as a center of innovation.
10. Construct new on- and off-site infrastructure improvements, including water, storm water, sanitary sewer, electric, natural gas, and telecom facilities to allow the proposed development as well as the implementation of the San José-Santa Clara Regional Wastewater Facility Master Plan which created economic development areas west of the project site. (Separate environmental review was completed for the Master Plan by the City of San José in late 2013.)

The project would result in the following significant and unavoidable impacts:

1. Implementation of the proposed project would result in the development of 64.5 acres of land designated as Prime Farmland. Same significant unavoidable impact identified in the Envision San José Final Supplemental PEIR.
2. Implementation of the data center/light industrial development option would result in the development of new land uses after the year 2020, resulting in unmitigated GHG emissions impacts. Same significant unavoidable impact identified in the Envision San José Final Supplemental PEIR.
3. Implementation of the project would have a cumulatively considerable contribution to the Zanker Road/Tasman Drive intersection. Same significant unavoidable impact identified in the North San José Development Policy FEIR.

The alternatives analysis in the EIR focuses on alternatives that would reduce or avoid these impacts, which are primarily caused by the scale of the proposed development. An alternative location is not discussed in this analysis because the project applicant does not own other properties that could be used as alternative sites. In addition, impacts to traffic congestion on SR 237 and I-880, which is one of the project's significant and unavoidable impacts, would likely occur at any alternative location in the vicinity of the site. Similarly, greenhouse gas impacts would occur as a result of the project wherever it is proposed in the City. The project site is designated as Prime Farmland, as are other properties in the northernmost portions of San José that are large enough to accommodate the project. The project site is located in an area of other heavy industrial uses and is of sufficient size to

accommodate the proposed project. It is also located away from sensitive receptors and is flat topographically. Therefore, a location alternative is infeasible and was not evaluated further.

The following options were evaluated as alternatives to the proposed project:

- No Project – No Development
- No Project – Existing Zoning
- Reduced Scale – Data Center Only
- Reduced Scale – Light Industrial Only
- Reduced Development – Data Center and Reduced Light Industrial Development

NO PROJECT – NO DEVELOPMENT ALTERNATIVE

The CEQA Guidelines stipulate that an EIR specifically include a “No Project” alternative. The purpose of including a No Project alternative is to allow decision-makers to compare the impacts of approving the project with the impacts of not approving the project. The Guidelines specifically advise that the No Project alternative is “what would be reasonably expected to occur in the foreseeable future if the project is not approved, based on current plans and consistent with available infrastructure and community services.” [Section 15126.6(e)(2)] The Guidelines emphasize that an EIR should take a practical approach, and not “...create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment [Section 15126.6(e)(3)(B)].”

Since the approximately 64.5-acre project site is currently vacant with minimal development, including two residences, a mobile home, and farm-related accessory structures, the No Project - No Development Alternative would be the continued use of the site in this manner. The project site is, however, currently designated *Light Industrial* in the City’s General Plan.

Comparison of Environmental Impacts: The No Project - No Development Alternative would avoid the proposed project’s environmental impacts. The No Project - No Development Alternative would avoid conversion of Prime Farmland to non-agricultural uses. In addition, traffic and GHG emissions would not be generated in excess of what is currently generated by the low-intensity uses on-site. Since no demolition or construction would take place on the project site, no new environmental impacts would occur.

Feasibility of the No Project – No Development Alternative: Implementation of the No Project - No Development Alternative would occur if the proposed project is not approved, which is feasible. However, the existing development on-site is inconsistent with the General Plan land use designation of the site. The project site is designated for development in the City’s General Plan as well as the Alviso Master Plan. It is expected that the site will eventually be developed with light industrial uses at some point in the future.

Relationship to Project Objectives: The No Project - No Development Alternative would not meet any of the project objectives.

NO PROJECT – EXISTING ZONING ALTERNATIVE

The No Project - Existing Plans Redevelopment Alternative assumes that the proposed project is not approved, but that another future project is built consistent with existing plans and policies. According to the Alviso Master Plan and the General Plan, the site has a land use designation of *LI – Light Industrial*, which allows for a maximum FAR of 1.5 (1-3 stories).

The project site was originally part of the USDataport project which included the LECEF, as well as up to approximately 2.3 million square feet of data center communication facility uses in warehouse-style buildings on the original 174-acre site. Building heights of up to 100 feet are allowed by the existing *A(PD)* zoning. The existing *A(PD)* zoning designation of the site could be implemented; however, it is expected rezoning would be required due to the fact that some of the previously approved development has been constructed, thus requiring a new site plan to take into account building locations, access, and site circulation. However, it can be reasonably expected that in the foreseeable future, based on the current General Plan and zoning designations on the site, a light industrial development would ultimately be constructed on-site.

This alternative assumes development on the project site similar to the currently proposed project, which is consistent with the General Plan designation for the site. The uses, however, would primarily be data center related. The proposed conforming zoning of *Light Industrial* is consistent with the General Plan; however, a Special Use Permit (SUP) is required for the currently proposed data center.

Comparison of Environmental Impacts: Development on the site consistent with the existing *A(PD)* zoning, which are data center related, would increase traffic at local intersections and on freeways; however, because the uses would be mostly data center related, they would be less than the proposed project. The traffic report prepared for the USDataport project is no longer current, however, trip generation for the USDataport project was significantly less than that of the proposed project (both Option 1 and Option 2). Thus, this Alternative would generate less traffic and the significant unavoidable impacts at freeway segments and impacts at the intersections on Montague Expressway would not occur.

The No Project - Existing Zoning Alternative would result in the same significant unavoidable impacts related to the loss of Prime Farmland as the currently proposed project and as described in the Envision San José 2040 General Plan FPEIR. The existing zoning of the site allows the construction of light industrial uses, primarily data center related. It was estimated at the time of the preparation of the USDataport EIR that approximately 89 emergency back-up generators would be required. Therefore, the proposed project, which includes 24 emergency back-up generators would generate less greenhouse gas emissions when compared to the project allowed under the current *A(PD)* zoning.

Greenhouse gas emissions impacts would be significant unavoidable with either the proposed project or the No Project – Existing Zoning Alternative. As with the currently proposed project, the No Project - Existing Zoning Alternative would have significant NOx impacts. Mitigation measures would be implemented similar to those required of Option 2, and significant unavoidable impacts would not be anticipated.

This Alternative would result in comparable impacts to trees, riparian habitat (if the outfall to Coyote Creek is constructed), burrowing owls, and tree-nesting birds and raptors. Mitigation measures requiring pre-construction surveys during nesting season as well as tree protection measures would be incorporated to reduce significant impacts. Participation in the Santa Clara Valley Habitat Conservation Plan, including the implementation of required conditions, would reduce impacts to a less than significant level. The No Project - Existing Zoning Alternative would result in soil disturbance, thereby resulting in potential hazardous materials impacts related to agricultural pesticides. Mitigation would still be required similar to the proposed project.

Feasibility of the No Project – No Development Alternative: Implementation of this Alternative would be feasible in terms of consistency with the existing land use designations for the site, the goals of the City of San José for this region, and with the surrounding land uses. However, it is expected that rezoning would be required due to the fact that some of the previously proposed development was already constructed and new access points, building locations, and circulation plans may be required.

Relationship to Project Objectives: The No Project - Existing Zoning Alternative would meet most of the project objectives, including constructing a data center. However, rezoning to accommodate the currently configured site and additional infrastructure or different infrastructure components could be required.

REDUCED SCALE – DATA CENTER ONLY ALTERNATIVE

The Reduced Scale - Data Center Only Alternative would result in the development of a data center on the northern portion of the 64.5-acre site without any additional light industrial uses. Under Option 2, the project proposes a 436,880 square foot data center with a PG&E substation on approximately 26.5 acres of the site. Under the Reduced Scale Data Center Only Alternative, the size of the data center is not anticipated to be larger than what is proposed and some of the roadways and the extension of utilities to the site would still be required. It is assumed that the laydown area (approximately 10 acres) would be utilized for approximately 10 years and ultimately left in its current state.

Comparison of Environmental Impacts: Development of the site with the Reduced Scale - Data Center Only Alternative would generate no more than 433 daily traffic trips, with 39 trips in the AM Peak Hour and 40 trips in the PM Peak Hour (refer to Table 3.13-7). Because this Alternative would generate no more than 40 peak hour trips, construction of the data center would not result in any significant freeway segments and/or intersection impacts. Similar to the proposed project, development of a Reduced Scale - Data Center Only project would result in the conversion of Prime Farmland to a non-agricultural use. This Alternative would result in a significant and unavoidable impact as stated in the General Plan EIR. However, if the remainder of the site (ultimately 38 acres) is left in its current state, this portion of the site would remain as Important Farmland until another use is proposed.

Because the data center is proposed to be constructed and operational by 2020 and vehicle trips related to this Alternative are relatively small, the greenhouse gas emission impacts would be less than significant. In addition, this Alternative is consistent with the San José General Plan and with the City of San José GHG Reduction Strategy; therefore, a significant unavoidable impact would not

occur. As with the currently-proposed project, the Reduced Scale - Data Center Only Alternative would have significant NOx impacts to sensitive receptors related to the testing of emergency generators. Mitigation measures would be implemented similar to those required of Option 2, and significant impacts would not be anticipated.

This Alternative would result in fewer impacts to biological resources, as less land would be affected. However, the construction of a 26.5-acre data center and use of approximately 10 acres as a laydown area for equipment staging for up to 10 years could disturb wildlife species and adversely affect trees to be preserved, the construction of the outfall may still be required. Mitigation measures requiring pre-construction surveys during nesting season as well as tree protection measures would be required to reduce significant impacts. The Reduced Scale - Data Center Only Alternative would result in soil disturbance, thereby resulting in potential hazardous materials impacts related to agricultural pesticides, although the amount of land affected would be less. Mitigation would still be required similar to the proposed project.

Feasibility of the No Project – No Development Alternative: Implementation of this Alternative would be feasible in terms of the goals of the City of San José and the vision of the Alviso Master Plan for this region.

Relationship to Project Objectives: This Alternative would meet most of the objectives, with the exception of those related to job creation and economic growth. The provision of additional light industrial uses on the remainder of the site (ultimately 38 acres) would enhance the economic potential of the site by increasing property taxes, economic activity, and employment generation. The development of the entire site is consistent with General Plan policies related to Innovative Economy as well as the Alviso Master Plan and RWF Plant Master Plan.

REDUCED SCALE – LIGHT INDUSTRIAL ONLY ALTERNATIVE

In an effort to avoid or reduce significant impacts resulting from the proposed project, this alternative evaluates a Reduced Scale - Light Industrial Only Alternative. To reduce traffic impacts to a less than significant level at the intersections of North First Street/Montague Expressway and Zanker Road/Montague Expressway and impacts to freeways, Option 1 of the project (1.2 million square feet of light industrial uses) would need to be reduced by 90 percent.¹ This equates to approximately 120,000 square feet of light industrial uses on the 64.5 acre site. To reduce freeway impacts only, the project would need to be reduced by 85 percent or approximately 180,000 square feet. At one story in height, that would be approximately 2.75 and 4.1 acres of light industrial development, respectively.

Comparison of Environmental Impacts: Under Option 1 (1.2 million square feet of light industrial development), the proposed project would result in an unacceptable LOS at the Zanker Road/Montague Expressway and Oakland Road/Montague Expressway intersections during at least one peak hour. Significant unavoidable impacts to freeway segments on SR 237 and I-880 would also occur. Reducing the project to 120,000 square feet of light industrial development would avoid both intersection and freeway impacts. A light industrial project of no more than 180,000 square feet would avoid significant unavoidable impacts to the local freeway segments. The Reduced Scale -

¹ Personal communication, Robert Del Rio, Hexagon Transportation Consultants, May 15, 2017.

Light Industrial Only Alternative would result in the conversion of up to 4.1 acres of Prime Farmland to a non-agricultural use, when compared to 64.5 acres that would be converted with the proposed project. While significantly less land would be converted, there would still be a loss of Prime Farmland, which would be a significant unavoidable impact. This impact was previously identified in the General Plan FPEIR. Development under this Alternative (up to approximately 4.1 acres of light industrial development) would be consistent with the City's General Plan and would not result in greater GHG emissions impacts than those evaluated for the site in the General Plan FPEIR.

This Alternative would be constructed by 2020 and would conform to the City's GHG Reduction Strategy; therefore GHG emissions impacts would be less than significant. This Alternative would avoid a significant unavoidable impact associated with the currently proposed project. The primary emissions from this Alternative would be from traffic (employees and vendor delivery trips) associated with daily operations. If the light industrial development was reduced to the levels described above under transportation impacts, significant air quality impacts would not be anticipated.

This Alternative would result in some impacts to trees to be preserved on-site and tree-nesting birds and raptors. Impacts to burrowing owls would be significantly reduced as less land area would be affected. The outfall to Coyote Creek may or may not be required with such a reduced footprint of development. Percolation on-site may be sufficient to accommodate stormwater on-site. Mitigation measures requiring pre-construction surveys during the nesting season as well as tree protection measures would be incorporated to reduce significant impacts. Conditions of the SCVHP would still be required; however, at a significantly reduced level. Impacts would remain less than significant with the implementation of identified mitigation measures. The Reduced Scale - Light Industrial Only Alternative would result in less soil disturbance, thereby resulting in a reduced potential for hazardous materials impacts related to agricultural pesticides. Mitigation would still be required similar to the proposed project.

Feasibility of the No Project – No Development Alternative: Because this Alternative would need to be reduced by approximately 85 – 90 percent to avoid both traffic and freeway impacts, it would be physically feasible, but economically infeasible to implement this Alternative. The extension of utilities to the site would still be required, which would be cost prohibitive given the size of the Alternative.

Relationship to Project Objectives: This Alternative would not meet most of the objectives of the proposed project. A data center would not be constructed and the amount of light industrial space provided would not achieve the economic strategies of the General Plan. The Reduced Development - Light Industrial Only Alternative would only provide up to approximately 180,000 square feet of light industrial space and would not be able to accommodate as many new jobs, compared to full project implementation. The project area would remain underutilized and would not meet project objectives to the extent of the entire proposed development.

REDUCED DEVELOPMENT – DATA CENTER AND REDUCED LIGHT INDUSTRIAL DEVELOPMENT ALTERNATIVE

In an effort to avoid or reduce significant impacts resulting from the proposed project, a reduced scale alternative that includes the proposed 436,880 square foot data center and less light industrial development was evaluated. As with the Reduced Scale – Light Industrial Development Only Alternative, the amount of light industrial development would have to be significantly reduced to avoid traffic impacts to freeways and at the intersections of North First Street/Montague Expressway and Zanker Road/Montague Expressway. It has been determined that the light industrial portion of Option 2 of the project (data center and light industrial uses) would need to be reduced by 85 percent to avoid intersection and freeway impacts and 80 percent to avoid only the freeway impacts.² This equates to approximately 109,200 square feet (85 percent reduction) or 145,600 square feet (80 percent reduction) of light industrial uses square on approximately 38 acres of the 64.5 acre site. At one story in height, that would be approximately 2.5 and 3.34 acres of light industrial development, respectively.

Comparison of Environmental Impacts: Under Option 2 of the proposed project, (a 436,880 square foot data center and 728,000 square feet of light industrial development), the proposed project would result in an unacceptable LOS at the Zanker Road/Montague Expressway and Oakland Road/Montague Expressway intersections during at least one peak hour. Significant unavoidable impacts to freeway segments on SR 237 and I-880 would also occur. Reducing the project to a 436,880 square foot data center and 109,200 square feet of light industrial development would avoid both intersection and freeway impacts. A light industrial project of no more than 145,600 square feet would avoid significant unavoidable impacts to the local freeway segments.

The Reduced Scale – Data Center and Light Industrial Alternative would result in the conversion of up to 29.84 (26.5 acres for the data center and 3.34 acres for the light industrial uses) of Prime Farmland to a non-agricultural use, when compared to 64.5 acres that would be converted with the proposed project. While significantly less land would be converted, there would still be a loss of Prime Farmland, which would be a significant unavoidable impact. This impact was previously identified in the General Plan FPEIR.

Development under this Alternative (up to approximately 29.84 acres of data center and light industrial development) would be consistent with the City's General Plan and would not result in greater GHG emissions impacts than those evaluated for the site in the General Plan FPEIR. As with Option 2 of the proposed project, it is anticipated that the data center portion of the project would be constructed by 2020 and would conform to the City's GHG Reduction Strategy; however, the light industrial portion may not be. Therefore, GHG emissions impacts would continue to be significant unavoidable and this Alternative would not avoid a significant unavoidable impact associated with the currently proposed project. The primary emissions from this Alternative would be from traffic (employees and vendor delivery trips) associated with daily operations. If the light industrial development was reduced to the levels described above under transportation impacts, significant air quality impacts would not be anticipated.

² Personal communication, Robert Del Rio, Hexagon Transportation Consultants, May 24, 2017.

This Alternative would result in some impacts to trees to be preserved on-site and tree-nesting birds and raptors. Impacts to burrowing owls would be reduced as less land area would be affected. The outfall to Coyote Creek may or may not be required with such a reduced footprint of development. Percolation on-site may be sufficient to accommodate stormwater on-site. Mitigation measures requiring pre-construction surveys during the nesting season as well as tree protection measures would be incorporated to reduce significant impacts. Conditions of the SCVHP would still be required; however, at a reduced level. Impacts would remain less than significant with the implementation of identified mitigation measures. The Reduced Scale - Light Industrial Alternative would result in less soil disturbance, thereby resulting in a reduced potential for hazardous materials impacts related to agricultural pesticides. Mitigation would still be required similar to the proposed project.

Feasibility of the No Project – No Development Alternative: This Alternative would reduce the light industrial portion of the project by approximately 80 - 85 percent to avoid both traffic and freeway impacts; however, the data center, at its proposed size would be constructed. Therefore, this Alternative would be feasible in terms of the goals of the City of San José and the vision of the Alviso Master Plan for this region.

Relationship to Project Objectives: This Alternative would meet most of the objectives, with the exception of those related to job creation and economic growth. Reducing the amount of light industrial development would reduce the economic potential of the site including property tax revenues, economic activity, and employment generation. The Reduced Development-Light Industrial Alternative would only provide up to approximately 145,600 square feet of light industrial space and would not be able to accommodate as many new jobs, compared to full project implementation. The project area would remain underutilized and would not meet project objectives to the extent of the entire proposed development.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines state that an EIR shall identify an environmentally superior alternative. Based on the above discussion, the environmentally superior alternative to the proposed project is the No Project Alternative because all of the component's significant environmental impacts would be avoided. However, Section 15126.6(e)(2) states that "if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."

As seen in Table 9.0-1 (refer to *Section 9.0, Environmentally Superior Alternative*), none of the project alternatives avoid all significant environmental impacts. Any development on land would result in a significant and unavoidable impact to the loss of land designated as Prime Farmland. In addition, any construction on-site would result in soil disturbance, thereby resulting in potential hazardous materials impacts related to agricultural pesticides. Development that would affect trees to be retained would be required to conform to the City's Tree Ordinance and implement mitigation measures to avoid impacts to nesting raptors and migratory birds. Impacts to burrowing owls and riparian habitat would also occur.

The Reduced Scale - Data Center Only and Reduced Scale - Light Industrial Only Development Alternatives would generate significantly fewer traffic trips compared to both project options and

impacts to freeways and intersections would not occur. Both Alternatives would likely be developed and operational prior to 2020 and, therefore, would result in a less than significant impact related to GHG emissions. As seen in Table 3.2-5: Operational Emissions for the Project (refer to *Section 3.2, Air Quality*), the Data Center would not result in ROG, PM_{2.5}, and PM₁₀ emissions above established BAAQMD thresholds; however, the operation and maintenance of the data center generators would produce NO_x emissions over the established thresholds. If the size of the light industrial development was reduced, the light industrial development would not result in ROG, NO_x, PM_{2.5}, and PM₁₀ emissions above established BAAQMD thresholds. As a result, the Reduced Scale - Light Industrial Development Only Alternative would be the environmentally superior alternative to the proposed project.

KNOWN AREAS OF CONTROVERSY

Pursuant to Section 15123(b)(2) of the state CEQA Guidelines, an EIR shall identify areas of controversy known to the lead agency including issues raised by agencies and the public. The Notice of Preparation (NOP) for the *237 Industrial Center Project* circulated on May 27, 2016. Key issues raised by residents of the City of San José, public agencies, and members of the community include:

- Impacts to special status species at Coyote Creek
- Impacts to migratory and resident bird species
- Construction impacts to the Coyote Creek Riparian Corridor
- Impacts to the bird population from increase human activity
- Impacts to animal movement and connectivity
- Traffic/Freeway Impacts
- Air Quality Impacts

SECTION 1.0 INTRODUCTION

1.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The City of San José, as the Lead Agency, has prepared this Draft Environmental Impact Report (EIR) for the proposed project in compliance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

As described in CEQA Guidelines Section 15121(a), an EIR is an informational document that assesses potential environmental impacts of a proposed project, as well as identifies mitigation measures and alternatives to the proposed project that could reduce or avoid adverse environmental impacts (CEQA Guidelines 15121(a)). As the CEQA Lead Agency for this project, the City of San José is required to consider the information in the EIR along with any other available information in deciding whether to approve the project. The basic requirements for an EIR include discussions of the environmental setting, environmental impacts, mitigation measures, cumulative impacts, alternatives, and growth-inducing impacts. It is not the intent of an EIR to recommend either approval or denial of a project. The environmental impacts associated with the proposed project are primarily related to air quality and biological resources. These issues are discussed in Sections 3.2 and 3.3 of this EIR, respectively.

1.2 EIR PROCESS

1.2.1 Notice of Preparation and Scoping

In accordance with Sections 15063 and 15082 of the CEQA Guidelines, the City prepared a Notice of Preparation (NOP) for this EIR. The NOP was circulated to local, state, and federal agencies on May 20, 2016. The standard 30-day comment period concluded on June 27, 2016. The NOP provided a general description of the proposed project and identified possible environmental impacts that could result from implementation of the project. The City of San José also held a public scoping meeting on June 9, 2016 to discuss the project and solicit public input as to the scope and contents of this EIR. The meeting was held at Hyatt House San José/Silicon Valley, 75 Headquarters Drive, San José, CA 95134. Appendix A of this EIR includes the NOP and comments received on the NOP.

1.2.2 Draft EIR Public Review and Comment Period

Publication of this Draft EIR will mark the beginning of a 45-day public review and comment period. During this period, the Draft EIR will be available to local, state, and federal agencies and to interested organizations and individuals for review. Notice of this Draft EIR will be sent directly to every agency, person, and organization that commented on the NOP. Written comments concerning the environmental review contained in this Draft EIR during the 45-day public review period should be sent to:

City of San José Department of Planning, Building and Code Enforcement (PBCE)
Kieulan Pham, Environmental Project Manager
200 East Santa Clara Street, 3rd Floor Tower
San José CA 95113-1905
Phone: (408) 535-3844
E-mail: Kieulan.pham@sanjoseca.gov

1.3 FINAL EIR/RESPONSES TO COMMENTS

Following the conclusion of the 45-day public review period, the City will prepare a Final EIR in conformance with CEQA Guidelines Section 15132. The Final EIR will consist of:

- Revisions to the Draft EIR text, as necessary;
- List of individuals and agencies commenting on the DEIR; and
- Responses to comments received on the DEIR, in accordance with CEQA Guidelines (Section 15088);
- Copies of letters received on the DEIR.

Section 15091(a) of the CEQA Guidelines stipulates that no public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings. If the Lead Agency approves a project despite it resulting in significant adverse environmental impacts that cannot be mitigated to a less than significant level, the agency must state the reasons for its action in writing. This Statement of Overriding Considerations must be included in the record of project approval.

1.3.1 Notice of Determination

If the project is approved, the City will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15094(g)).

1.4 PUBLIC PARTICIPATION IN ENVIRONMENTAL REVIEW

The City of San José, as required by CEQA, encourages public participation in the environmental review process. Opportunities for comments by public agencies and the public include responding to the Notice of Preparation (NOP) of the Draft EIR, written comments on this Draft EIR, and presentation of written or verbal comments at future public hearings.

In accordance with Section 15082 of the CEQA Guidelines, in August 2015 a NOP was circulated to the public and responsible agencies for input regarding the analysis in this EIR. A scoping meeting was held on August 25, 2015 to provide an opportunity for members of the community to comment on the project and contents of the EIR. This EIR addresses those issues which were raised by the public and responsible agencies in response to the NOP and at the scoping meeting. The NOP and the public responses to the NOP are presented in Appendix A of this EIR.

Future public participation opportunities, in addition to submitting written comments on the Draft EIR, will include San José Planning Commission and City Council hearings. Comments on the project may be sent to the San José Environmental Project Manager (Kieulan Pham) at any time. Written comments can be sent to Kieulanpham@sanjoseca.gov or to the following address: 200 East Santa Clara Street, 3rd Floor, San José, California, 95113 Attn: Kieulan Pham.

1.5 ORGANIZATION OF THE DRAFT EIR

The Draft EIR is organized into the following sections:

- **Summary:** Provides a summary of the project, the impacts that would result from its implementation, mitigation measures recommended to reduce, eliminate, or avoid significant impacts, and project alternatives.
- **Chapter 1, Introduction and Purpose:** Discusses the overall purpose of the Draft EIR, provides a summary of the project and the CEQA process, and summarizes the organization of the Draft EIR.
- **Chapter 2, Project Description:** Provides a description of the project site, the proposed site development, project details and objectives, and the required discretionary approvals.
- **Chapter 3, Environmental Setting, Impacts, and Mitigation:** Describes the existing conditions and regulatory requirements, analyzes the project’s environmental impacts, provides mitigation measures (if needed) for each environmental resource area, analyzes cumulative impacts, and contains significance conclusions.
- **Chapter 4, Cumulative Impacts:** Evaluates impacts that may result from the approval of past, present, and reasonably foreseeable future projects, in conjunction with the proposed project.
- **Chapter 5, Growth-Inducing Impacts:** Evaluates whether the project could cause additional growth beyond that which is proposed by the project applicant.
- **Chapter 6, Significant and Irreversible Environmental Changes:** Details the effects of the project on nonrenewable resources and the potential for the project to cause irreversible damage to the environment.
- **Chapter 7, Significant and Unavoidable Impacts:** Provides a brief summary of the impacts that were found to be significant and unavoidable in the analysis in Chapter 3.
- **Chapter 8, Alternatives:** Evaluates four alternatives to the project in addition to the No Project-No Development Alternative and the No Project-Existing Zoning Alternative, and explains why various other alternatives that were considered were not carried forward for detailed evaluation.
- **Chapter 9, Environmentally Superior Alternative:** Contains a table summary of the project alternatives table and identifies which alternative is the environmentally superior alternative.
- **Chapter 10, References:** Contains a complete list of all documents and references used as the basis for the environmental impact analysis.
- **Chapter 11, Lead Agency and List of Preparers:** Contains a list of the Lead Agency staff members and consultants who assisted in preparation of the Draft EIR.

1.6 REFERENCE AVAILABILITY

This EIR and all documents referenced in it are available for public review at the Department of Planning, Building, and Code Enforcement (PBCE), located at 200 East Santa Clara Street, San José, California, 95113 on weekdays during normal business hours. In addition, the EIR can be viewed on the City of San José’s website in the “Active EIRs” page:

<http://www.sanjoseca.gov/index.aspx?NID=2434>

SECTION 2.0 PROJECT INFORMATION AND DESCRIPTION

2.1 PROJECT DESCRIPTION

2.1.1 Background Information

The 64.5-acre project site is comprised of one parcel (APN 015-31-054) located north of Highway 237 between Zanker Road and Coyote Creek in the City of San José, as shown on Figures 2.0-1, 2.0-2, and 2.0-3. The project also includes the extension of utilities and roadways onto the project site, primarily on property held by the City of San José west of the site (APNs 15-31-028, -044, -050, -061, -062, and -063). The areas of off-site disturbance for both utilities and roadways are shown on Figures 2.0-4 and 2.0-5 and described in Section 2.1.4, below. These off-site areas were evaluated in this EIR in terms of potential impacts to biological and sub-surface cultural resources as described in Sections 3.3 and 3.4, of this DEIR respectively.

The project site is designated *Light Industrial* under the adopted Envision San José 2040 General Plan and is zoned A(PD) for the previously approved 174.4-acre US Dataport project on this site and adjacent property that was never built. That project included up to 2.23 million square feet of low intensity industrial uses consisting of communications facilities in warehouse style buildings, landscaping, and an access driveway. It also included an energy center, which ultimately became the Los Esteros Critical Energy Facility (LECEF) in the central portion of the original site. The project site is located within the Alviso Master Plan area and is identified as *Light Industrial* in the land use plan.

The project site is primarily fallow farmland with two single-family houses, a mobile home, and farm-related accessory structures located near the southern end of the site. The site is currently supported by well water and a septic tank system. The site is accessed by Alviso-Milpitas Road, which runs along the southern boundary of the site. Alviso Milpitas Road connects to Ranch Drive on the east side of Coyote Creek in Milpitas and to Zanker Road west of the site in San Jose. The site is adjacent to the western bank of Coyote Creek, and east of the LECEF and an existing PG&E substation north of the LECEF, as shown on Figure 2.0-4.

2.1.2 Proposed Development

The project includes the rezoning of the project site to *Light Industrial*, consistent with the General Plan land use designation of the site. The project includes two light industrial development options:

- Light industrial development option (Option 1): This option proposes approximately 1.2 million square feet of light industrial development, consistent with all of the requirements for the light industrial zoning district; and
- Data center/light industrial development option (Option 2): This option proposes a 436,880 square foot data center (49.5 megawatts) with a PG&E substation to provide the electrical needs for the data center on approximately 26.5 acres of the northern portion of the site. The data center is considered to be Phase 1 of this development option, which also includes approximately 728,000 square feet of light industrial development (no additional data center uses) on the remaining 38 acres of the site. This option requires a Special Use Permit (SUP) in the *Light Industrial* zoning district for the data center component of the project. The light



32

REGIONAL MAP

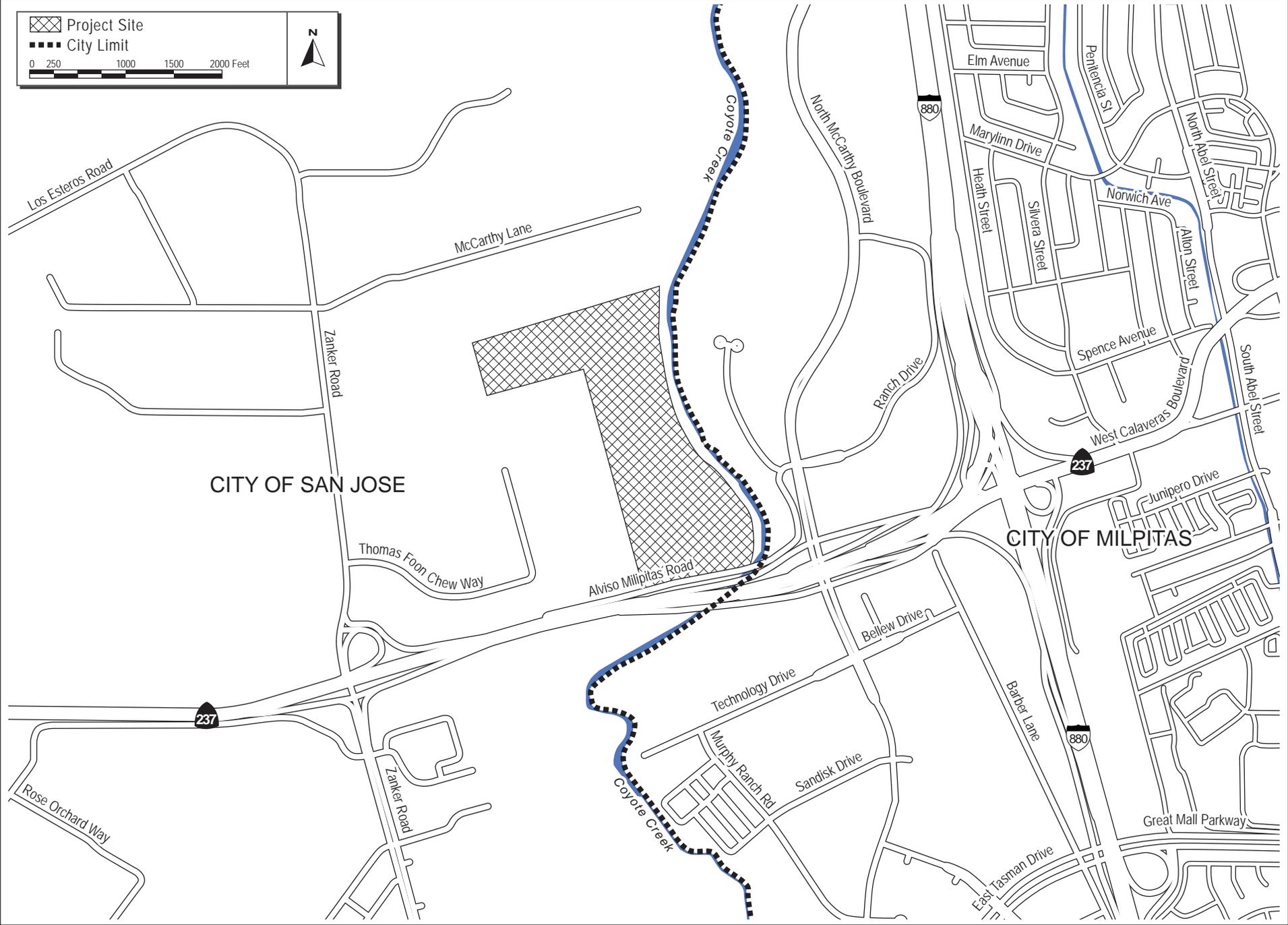
FIGURE 2.0-1


 Project Site

 City Limit

 0 250 1000 1500 2000 Feet

 N



VICINITY MAP

FIGURE 2.0-2



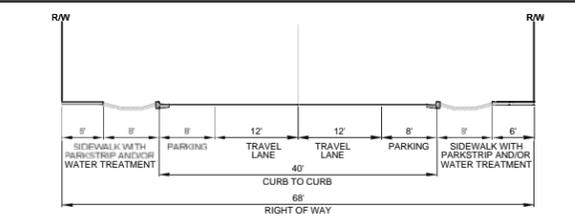
- PROJECT BOUNDARY
- POTENTIAL AREA OF DISTURBANCE
- PROPOSED SANITARY SEWER
- PROPOSED STORM DRAIN
- PROPOSED POTABLE WATER
- PROPOSED RECLAIMED WATER
- PROPOSED GAS
- PROPOSED FIBER OPTIC

NOTE: NEW PUBLIC ROADS MAY CONTAIN ANY COMBINATION OF STORM DRAIN, SANITARY SEWER, ELECTRIC, GAS, FIBER OPTIC, OR OTHER UTILITIES AS REQUIRED FOR THE PROPOSED PROJECT.

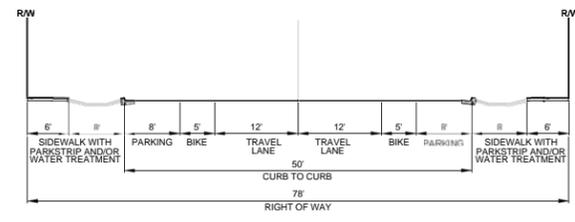
SOURCE: HMM Engineers

OFF-SITE UTILITIES IMPROVEMENTS

FIGURE 2.0-4



68' STREET RIGHT OF WAY SECTION



78' STREET RIGHT OF WAY SECTION



Roadway Required for Phase 1 of Option 2 (Data Center Project)

Project Site

SOURCE: HMM Engineers, April 21, 2016.

ROADWAY IMPROVEMENTS

FIGURE 2.0-5

industrial land uses proposed as part of Option 2 would be similar to those proposed under the Option 1 project option in terms of uses and density, consistent with the light industrial zoning district.

2.1.3 General Plan and Zoning Designations

2.1.3.1 *2040 San José General Plan*

The *Light Industrial* General Plan designation allows for a range of light industrial uses and excludes uses with unmitigated hazardous or nuisance effects. Warehousing, wholesaling, and light manufacturing are examples of typical uses in this designation. *Light Industrial* designated properties may also contain service establishments that serve only employees of businesses located in the immediate industrial area. Office and higher-end industrial uses, such as research and development, are discouraged in order to preserve the scarce, lower cost land resources that are available for companies with limited operating history (start-up companies) or lower cost industrial operations. The maximum FAR is 1.5 with buildings from one to three stories.

Because of the limited supply of land available for industrial suppliers/services firms in the City, Land Use Policies in the Envision San José 2040 General Plan (General Plan) restrict land use changes on sites designated Light Industrial.

Alviso Master Plan

The project site is also identified *Light Industrial* under the Alviso Master Plan. Consistent with the General Plan, under the Alviso Master Plan this designation allows a wide variety of industrial uses, excluding any uses with unmitigated hazardous or nuisance effects. Examples of typical uses are warehousing, wholesaling, light manufacturing, and industrial supplier/service businesses (i.e., businesses which provide needed services or supplies to other businesses). As approved in the 2001 General Plan Amendment for a 140-acre site located north of Highway 237 and approximately 2,000 feet east of Zanker Road, including the project site (GP 01-T-05), buildings heights of up to 100 feet are allowed on the property. Development must also comply with the City's Riparian Corridor Policy Study which requires 100-foot setbacks from nearby waterways and precludes buildings, outdoor storage, parking and other paved areas, and ornamental landscaping within the setback zone.

Only low intensity uses (i.e., those with low employment densities) are allowed in the Light Industrial area located near Coyote Creek. Appropriate screening and landscaping is required in light industrial areas. Uses adjacent to the marshland and Coyote Creek need to be environmentally sensitive by minimizing both point and non-point source pollution and other potential adverse impacts.

2.1.3.2 *Zoning*

The project site is currently zoned *A(PD)*, and would be rezoned to *LI – Light Industrial* consistent with the General Plan designation. All requirements of the Light Industrial zoning district related to setbacks, parking, lighting, landscaping, and performance standards would be implemented.

A Special Use Permit (SUP) would be required to allow the construction of a data center on approximately 26.5 acres of the site (Option 2). The existing zoning on the site allows building

heights up to 100 feet. This height allowance would be maintained for the data center option of the proposed project.

2.1.4 Regional Wastewater Facility Master Plan

The San José-Santa Clara Regional Wastewater Facility (RWF), which is jointly owned and operated by San José and Santa Clara, serves San José, Santa Clara, Campbell, Los Gatos, Monte Sereno, Cupertino, Milpitas, Saratoga, and parts of Sunnyvale, Los Altos, and unincorporated Santa Clara County. The General Plans for these communities include policies and/or objectives related to the adequate provision of wastewater treatment and sanitary sewer services.

In November 2013, the RWF Master Plan was updated to include a number of technical improvements and changes to the allowed land uses on some the RWF's 2,684 acres, as shown on Figure 2.0-6. The RWF Master Plan shows development potential on lands located west of the project site and the extension of roadways over City held lands to facilitate the future development of these lands. The proposed project includes the extension of roadways and utilities to serve both the project site and City held lands, south of the site and east of Zanker Road.

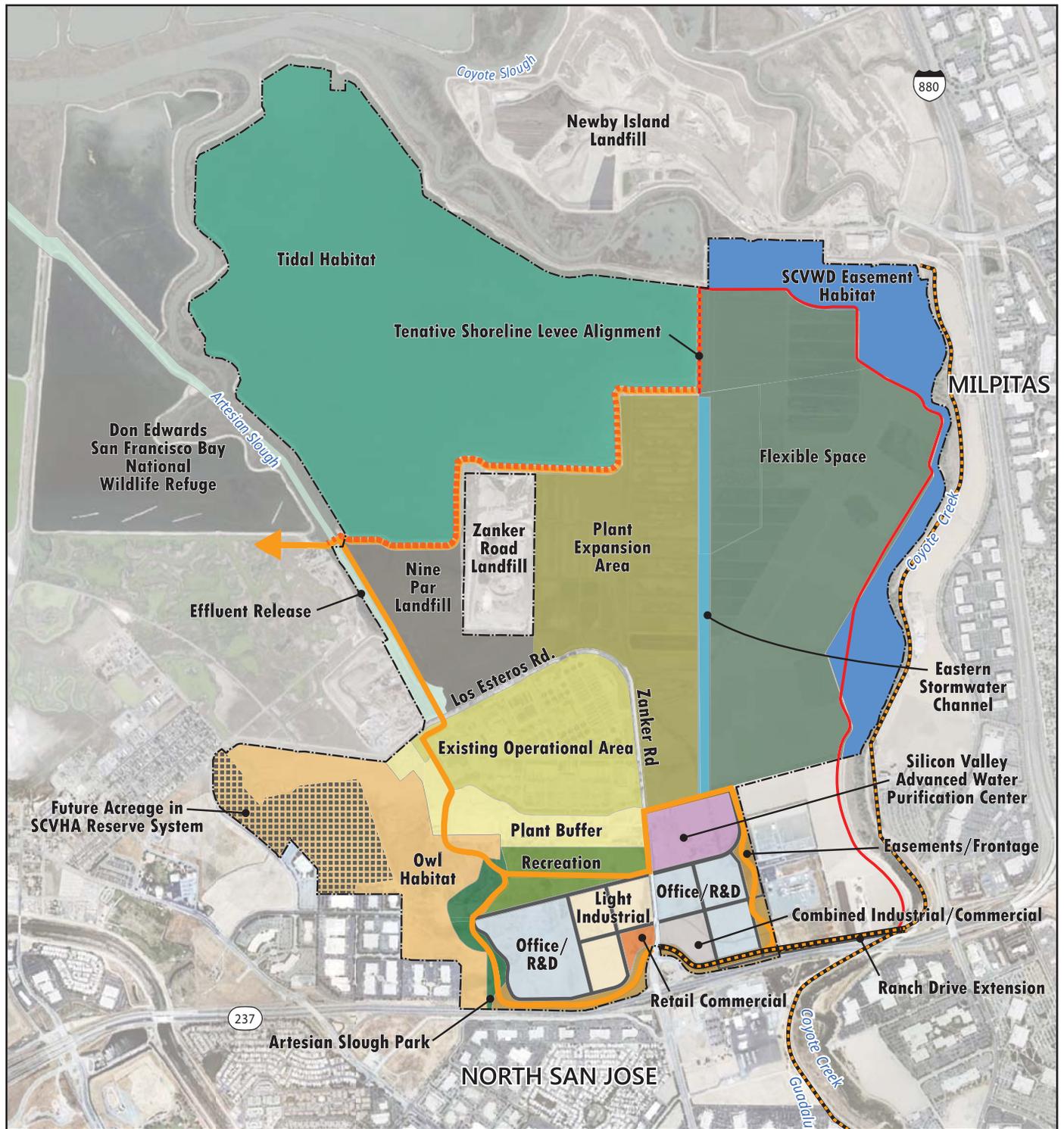
The Treatment Plant Advisory Committee (TPAC) was formed in 1959 to advise the San José and Santa Clara City Councils on RWF operation, maintenance, repair, and improvements, as well as administration of related programs and policies. The proposed project, which includes the extension of utilities on City held lands to serve the site and future RWF land development, would be reviewed by TPAC at one of their regularly scheduled meetings. The project is consistent with the General Plans of the City of San José and Santa Clara, and the RWF Master Plan.

2.2 DEVELOPMENT OPTIONS

2.2.1 Light Industrial Development Option (Option 1)

The light industrial development option (Option 1) would include up to seven two-story light industrial buildings with a maximum height of 45 feet and a floor area ratio (FAR) of approximately 0.43, as shown on Figures 2.0-7 and 2.0-8. The buildings would range between 306,656 gross square feet (Building #2) and 490,040 gross square feet (Building #6). Approximately 2,621 parking spaces would be provided in surface lots surrounding the buildings. Types of uses could include warehousing, wholesaling, light industrial manufacturing, and associated service establishments.

The proposed structures would include up to 108 truck loading docks; however, as shown on Figure 2.0-7, they would not be located adjacent to the riparian corridor of Coyote Creek.

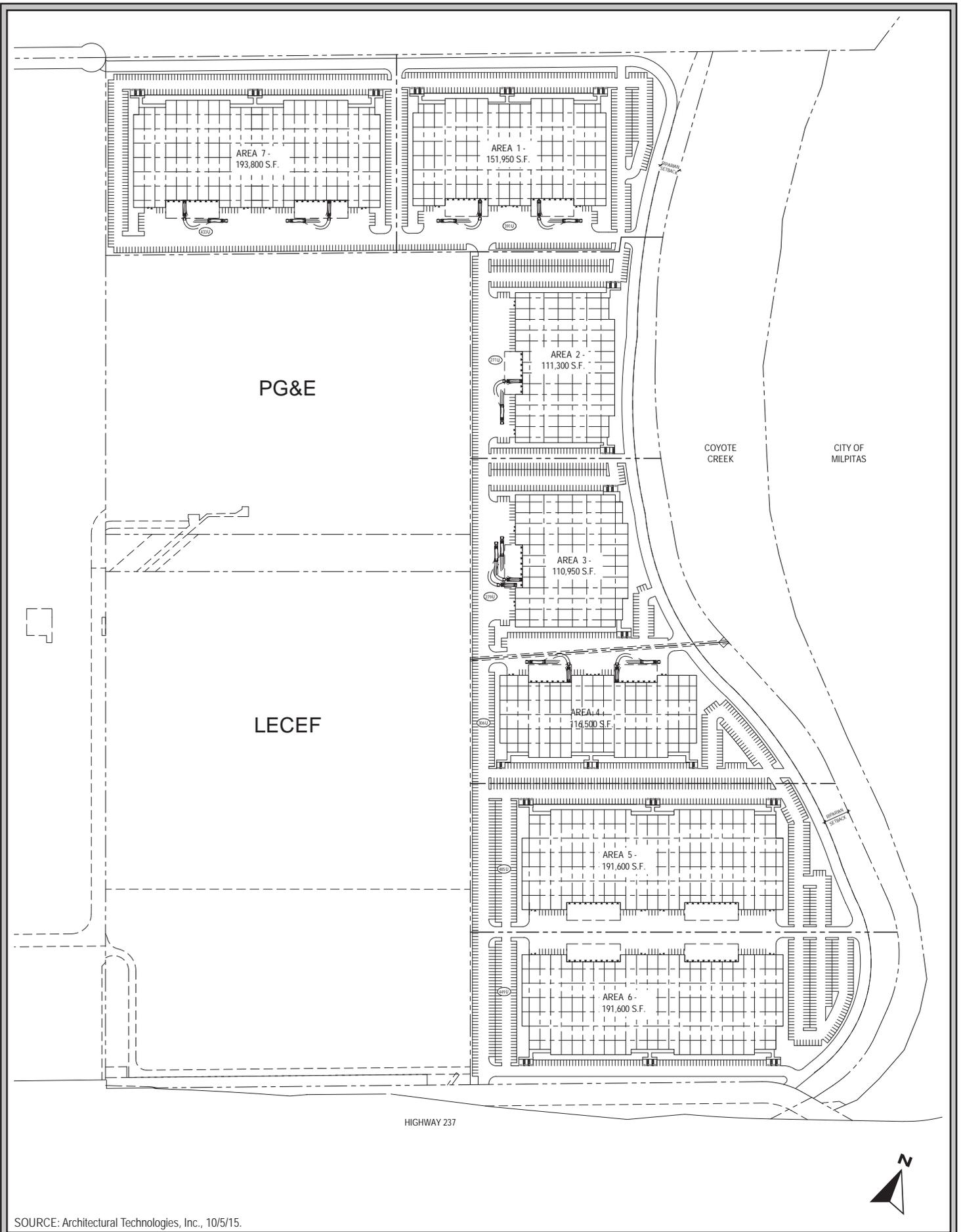


Legend

- | | |
|---------------------------------|----------------------------|
| --- Project Boundary | --- Existing Trail |
| — Existing Levee | — Proposed Trail |
| - - - Tentative Shoreline Levee | — Proposed Boardwalk Trail |

Updated June 9, 2016





SOURCE: Architectural Technologies, Inc., 10/5/15.

LIGHT INDUSTRIAL SITE PLAN

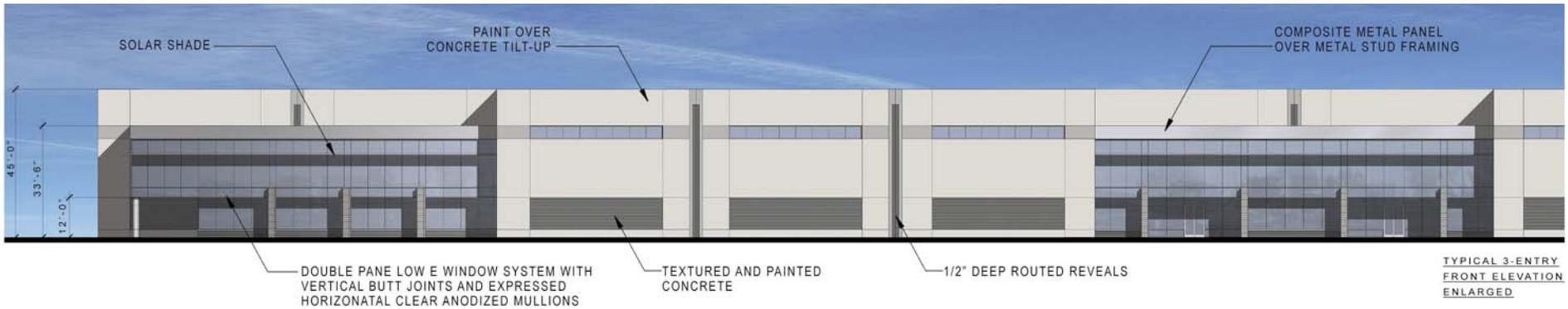
FIGURE 2.0-7



TYPICAL 2-ENTRY FRONT ELEVATION



TYPICAL 2-ENTRY SIDE ELEVATION



TYPICAL 3-ENTRY FRONT ELEVATION ENLARGED



TYPICAL 3-ENTRY SIDE ELEVATION

SOURCE: Architectural Technologies, Inc. 10/19/15.

2.2.2 Data Center/Light Industrial Option (Option 2)

The data center/light industrial development option (Option 2) would include four main buildings for the Phase 1 data center uses on 26.5 acres of the 64.5-acre site, as shown on Figure 2.0-9. Project elevations and an architect's rendering are shown on Figure 2.0-10. The largest building is Building B which is approximately 284,900 square feet and up to 100 feet tall. The remaining three buildings would be a maximum of 55 feet tall. Each of these contain data center equipment, computers, and servers.

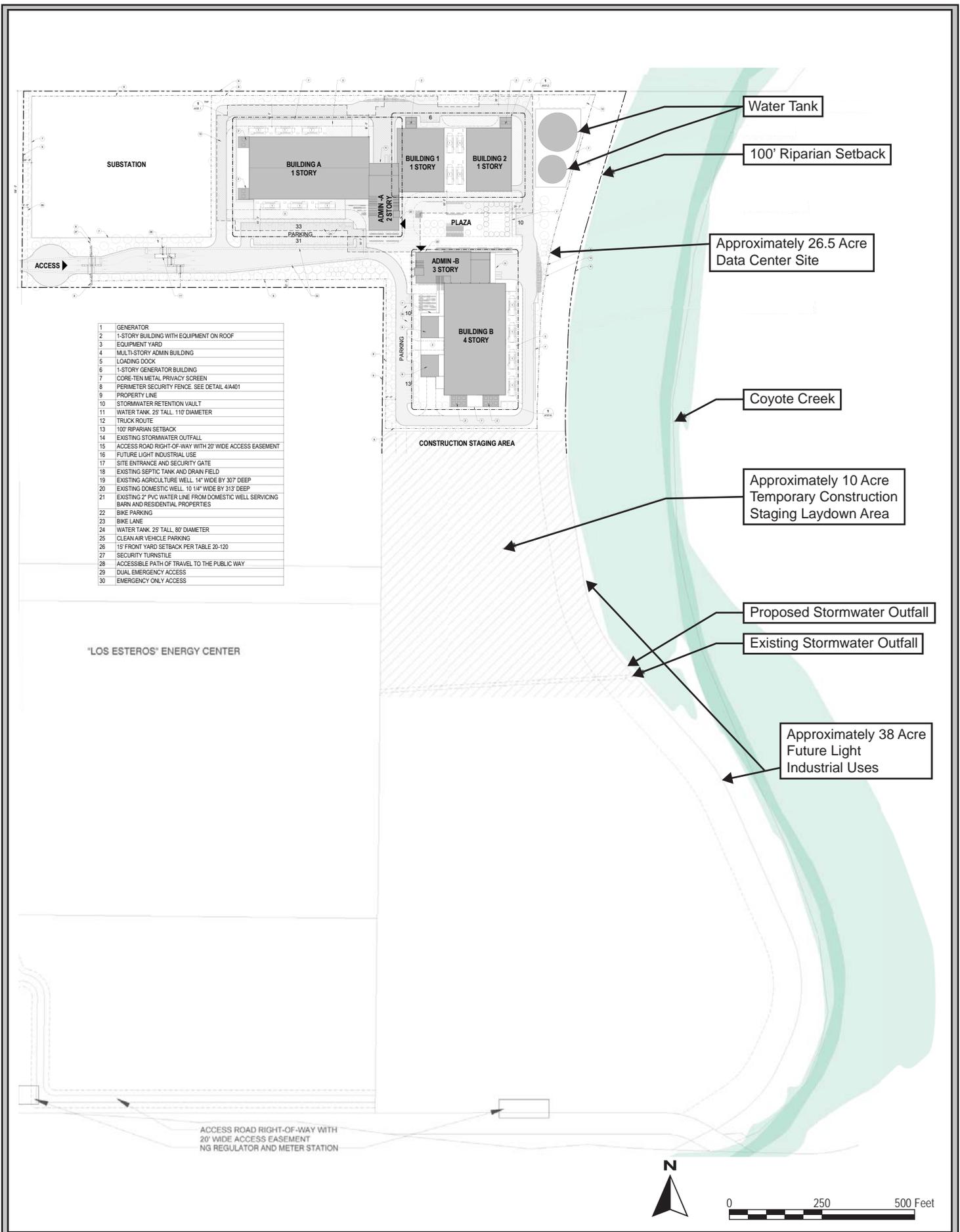
The data center use includes cooling towers (700 kW/cell with 20 cells/10 packs) and 24, 2,000 kW emergency diesel generators (Caterpillar 3516C) to provide power to the data center uses should there be an electrical power outage. The generators would use diesel-fueled engines that meet U.S. EPA Tier 2 emission standards. The diesel would be stored underneath each generator in above ground belly tanks.

A new approximately 103,300 square foot PG&E electrical substation with a maximum allowable height of 100 feet would be constructed along the northern boundary of the project site, west of the proposed data center to provide operational electrical power to the data center. Approximately 103 parking spaces would be provided in two surface lots located adjacent to the main buildings of the data center. Parking spaces would be provided at the substation consistent with PG&E requirements. Three truck loading docks would be located on the data center site. The data center would be fenced with iron fencing.

Option 2 requires that approximately 10 acres of the site be utilized for a temporary (up to 10 years) construction staging laydown area, as shown on Figure 2.0-9. Ultimately this area, as well as the remainder of the site (a total of approximately 38 acres), would be developed with up to 728,000 square feet of light industrial uses similar to what is proposed in the light industrial development option (Option 1). Heights of the light industrial uses would not exceed 45 feet and an FAR of 0.43 is expected. Parking for these light industrial would be consistent with City code requirements pending final design of this portion of the site.

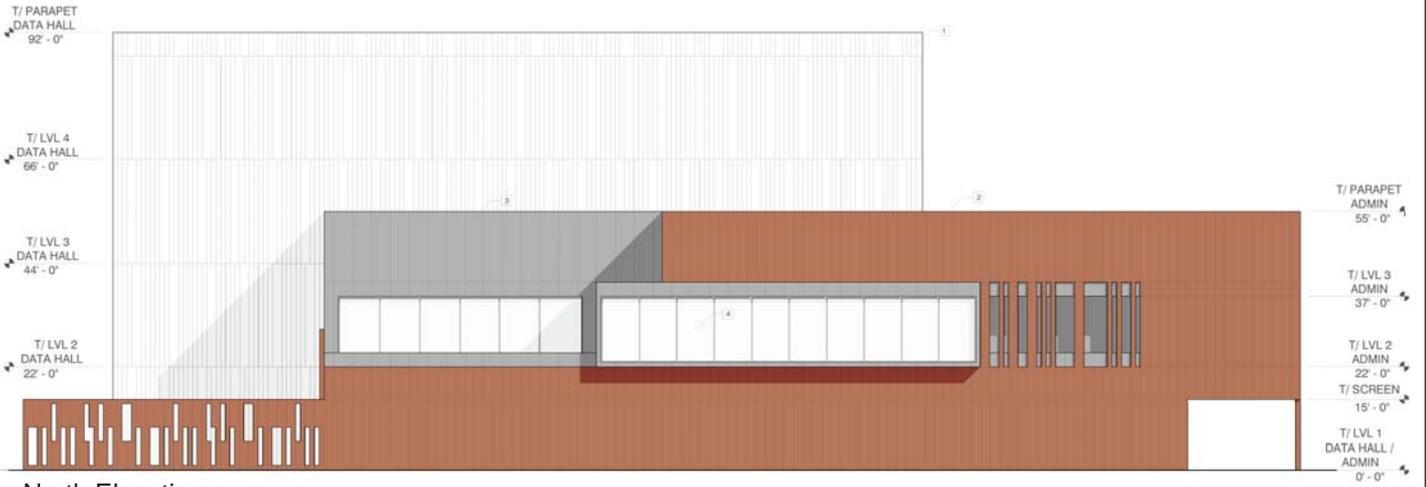
The data center also requires the installation of two 25-foot tall water storage tanks to be located in the northeastern portion of the site, as shown on Figure 2.0-9. The tanks would be approximately 110 feet and 80 feet in diameter and together, contain approximately 3.5 million gallons of water. The water would be used for backup to the recycled system source used to cool the facility and fire suppression, if necessary.

Both development options require the import of grading for positive drainage. Option 1 is anticipated to require the import of approximately 1,000 cubic yards of fill. Option 2 would require importing approximately 124,000 net new cubic yards of fill to be spread on the data center portion of the site. Both options also include a 100-foot riparian setback from Coyote Creek. The setback area would include landscaping consistent with the City's Riparian Corridor Policy Study and would be utilized for stormwater treatment. A small portion of the setback areas would be utilized for the potential construction of a stormwater outfall to Coyote Creek, as described in detail below.

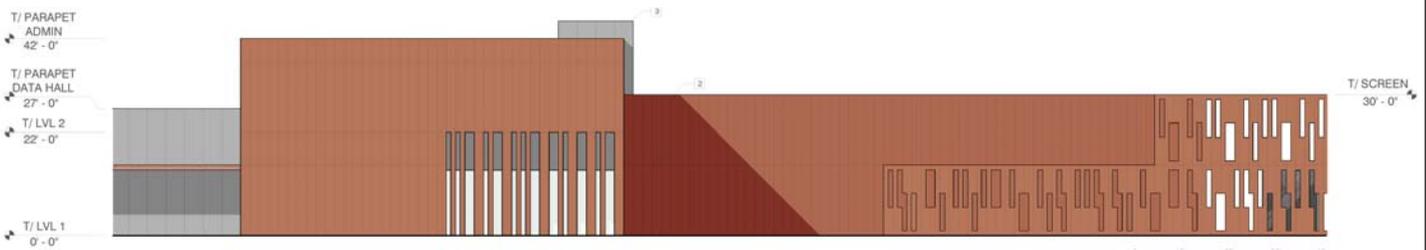


DATA CENTER SITE PLAN

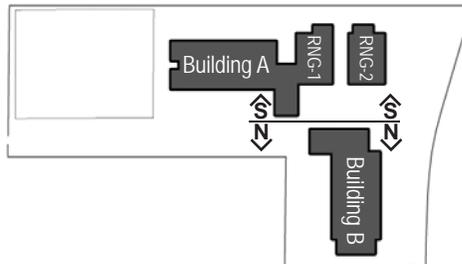
FIGURE 2.0-9



North Elevation



South Elevation



DATA CENTER ELEVATIONS AND RENDERING

FIGURE 2.0-10

2.2.3 Utility Improvements

There are very few existing utilities on-site; therefore, potable and reclaimed water, sanitary sewer, stormwater, electrical, natural gas, and telecom (fiber optics) facilities would be extended onto the site, as shown on Figure 2.0-4. Most of the extended utilities would be constructed within the rights-of-way of the future public streets proposed as part of the project.

This EIR evaluates the environmental impacts of extending utilities to the site as well as to the City of San José held lands located south of the site and east of Zanker Road. The development of these lands was included as part of the RWF Master Plan as shown on Figure 2.0-6 and assumed in the Envision San José 2040 General Plan. The program-level environmental impacts of development of these lands have been evaluated in the respective EIRs prepared for the RWF Master Plan and the Envision 2040 San José General Plan. These documents can be found on the City’s Department of PBCE’s “Completed EIRs” page under File Nos. PP11-043 and PP09-011, respectively, at <http://www.sanjoseca.gov/index.aspx?NID=2435>.

The project components below are included in both development options of the proposed project.

2.2.2.1 *Stormwater Conveyance and Biofiltration*

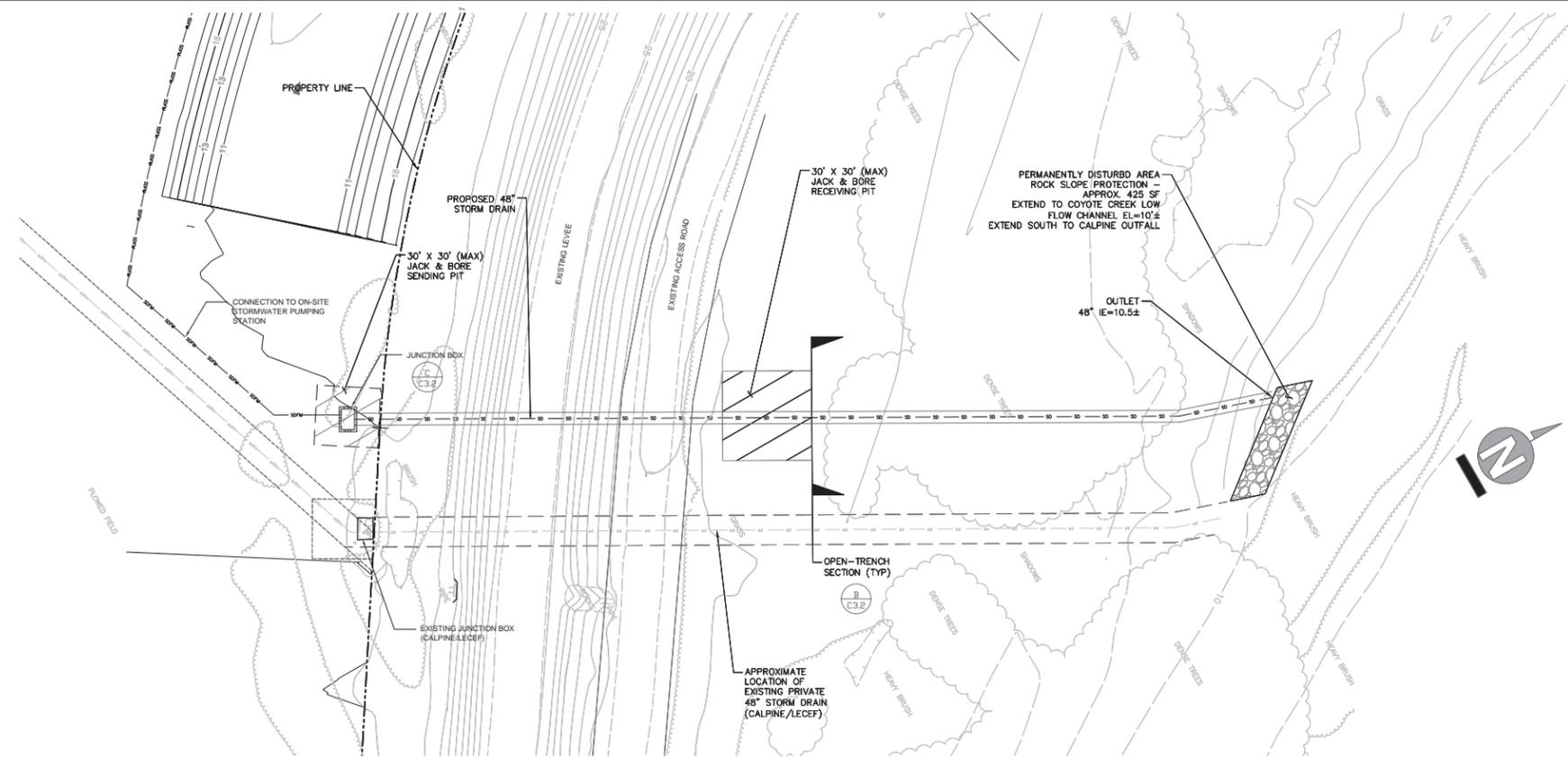
The proposed project (both options) includes two scenarios for the conveyance of stormwater during the 10-year rainfall event on the project site as well as from the City held properties located to the west of the site, east of Zanker Road.

The first scenario would be to construct a new stormwater outfall to Coyote Creek adjacent to the existing LECEF outfall approximately 1,800 feet downstream (north) of the SR 237 Bridge crossing, as shown on Figure 2.0-4. The new outfall (Figure 2.0-11) would require a new pipe be installed through the existing SCVWD levee located on the west side of the creek. The existing LECEF outfall cannot be utilized by the project, as it is a private facility that is not sized to accommodate the project site alone or with the City held lands east of Zanker Road.

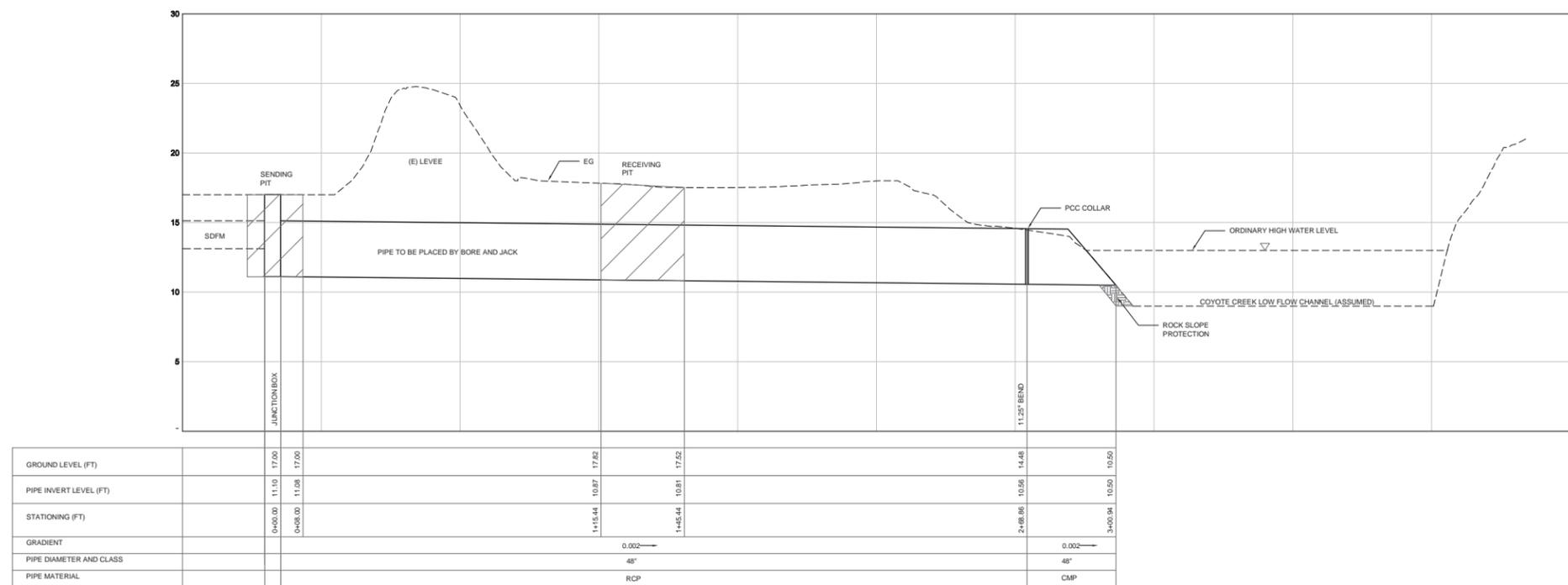
Stormwater flows from the site would be discharged to Coyote Creek via a forcemain into a new gravity outfall pipe that would discharge flows into the main creek channel. It is anticipated that this alternative would require permits from the California Department of Fish and Wildlife (CDFW), U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and Santa Clara Valley Water District (SCVWD).

The second scenario would be to direct stormwater to the City of San José’s existing Oakmead Pump Station located on the Guadalupe River, south of SR 237 and approximately two miles southwest of the project site. New stormwater pipes would be required to convey flows to the southwest across City held lands and upgrades/increases to pipes located in existing public streets near the pump station. Improvements to the pump station itself would not be required as it is sized to accommodate run-off from the site.

If the Oakmead Pump Station is utilized to accommodate the proposed project, the outfall to Coyote Creek would not be required. Both alternatives would require the construction of up to two pump or lift stations for the conveyance of stormwater to either the possible outfall or the Oakmead Pump



PROPOSED CREEK OUTFALL PLAN



PROPOSED CREEK OUTFALL PROFILE

Station. The pump or lift stations would be located on-site and/or within the new sanitary sewer pump station building to be constructed as described below in Section 2.2.3.1.

A stormwater biofiltration system would be included in the project within the 100-foot riparian setback from Coyote Creek in accordance with the C.3 provisions of the City's Municipal NPDES permit. The stormwater drainage system has been designed to incorporate source control measures and numerically-sized Low Impact Development (LID) stormwater treatment measures, including minimizing runoff through site design and source control. A stormwater retention vault may be required in the northeastern portion of the site. The biofiltration system would be designed based on its ultimate distance from the existing Coyote Creek levee and the potential for it to result in seepage and/or slope instability.

2.2.3.1 Sanitary Sewer Pump Station

The City of San Jose is requiring the project applicant to install a new public sanitary sewer pump station to serve the project site and the City-owned undeveloped land west of the site. Based on preliminary sizing calculations by the City of San Jose, the pump station would be required to provide a capacity of approximately seven (7) MGD and would occupy a land area of approximately 5,000 square feet. The proposed location as shown on Figure 2.0-4.

The pump station facility improvements would likely include holding tanks, sumps, redundant submersible pumps, a control building, and generators for backup power. The pump station would require a 70 kilowatt (kW) backup emergency diesel generators. The public sanitary sewer pump station may connect to the underground vault system owned and operated by the LECEF, or a new connection to the gravity sewer trunk lines in Zanker Road would be constructed.

The project would also require gravity sanitary sewer lines that run from the project site to the holding tanks/sumps at the new public sanitary sewer pump station. The gravity sewer lines would follow the alignment of the new public streets that would be built as part of the project's roadway infrastructure improvements (Figure 2.0-5).

2.2.3.2 Water Supply

The project is in the San Jose Municipal Water System's (SJMWS) North San Jose/Alviso service area. Potable water supply for this area is wholesale water purchased from the San Francisco Public Utilities Commission (SFPUC) with some backup supply available from locally produced groundwater. Non-potable supply, which is used primarily for irrigation and industrial purposes, is obtained from the South Bay Water Recycling (SBWR) system.

The proposed project would utilize both recycled and potable water. Recycled water would be utilized for cooling tower uses and landscaping. Potable water would be utilized for restrooms, water fountains, eye wash stations, etc. Potable water would only be used for cooling tower uses if the recycled supply is interrupted. Both potable and recycled water lines would be installed within existing and proposed roadways.

SJMWS has determined that there are sources available to provide for project water demands consistent with their Urban Water Management Plan (UWMP). As a condition of approval, the applicant would provide for the purchase of an approximately 2,500 square foot property within

SJMWS's North San José/Alviso service area for the future installation of a new groundwater well. It is anticipated that a future well site, as a public facility, could be located on property owned by the City, where the Developer would work with the City to determine a pro rata fair share contribution towards this facility. The well would be located and constructed by SJMWS in conformance with the provisions of their Urban Water Management Plan.

2.2.2.3 *Extension of Electricity, Gas, and Fiber Optics*

The proposed project also requires the extension of electricity, gas, and fiber optics to the project site and the City held lands east of Zanker Road. Many of these utility locations can be seen on Figure 2.0-4 and most would be located within the rights-of-way of the proposed new public streets.

2.2.4 Site Access

Access to the project site is currently only allowed via Milpitas-Alviso Road along the southern boundary of the site. Most of the alignment of this roadway is not improved to City of San José standards for a public street. As shown on Figure 2.0-5, both options of the proposed project would require widening of and improvements to Zanker Road and the extension of new roadways from Zanker Road to the project site as described below. The roadway extensions would be construction on land currently held by the RWF (Cities of San José and Santa Clara).

The future Zanker Road/Nortech Parkway intersection would require signalization with both project options. The signal would be a three-way signal, because the extension of Nortech Parkway to the west is not part of the proposed project. It is intended that the signal would be able to accommodate a fourth leg when Nortech Parkway is ultimately extended.

Option 1 would require the construction of two new 68-foot wide, two-lane roadways from Zanker Road; one along the northern boundary of the site to be constructed after technical improvements included in the Regional Wastewater Facility Master Plan are completed, and one at the extension of Nortech Parkway, west of Zanker Road. This option also includes a new 68- to 92-foot wide north-south roadway to be constructed on the western boundaries of the existing PG&E and LECEF properties. The north-south roadway would intersect with the new northern roadway. It would include a cul-de-sac at the southern end and a new 20- to 30-foot wide access roadway to the project site.

Option 2 roadways can be divided into two phases. The first phase would be the construction of the data center in the northern portion of the site. This phase would only require the Nortech Parkway extension roadway from Zanker Road. At the LECEF property, another roadway would intersect with the Nortech Extension to allow access to the data center to the north. The roadway would end at a cul-de-sac and a secure gated entry to the data center site, as shown on Figure 2.0-9.

The second phase of Option 2 would include the construction of all of the roadways described in Option 1 and shown on Figure 2.0-5.

Milpitas-Alviso Road becomes Ranch Drive at Coyote Creek in the City of Milpitas. This roadway is currently utilized by LECEF truck traffic and provides bicycle/pedestrian access to the Coyote Creek Trail on the east side of Coyote Creek. This access would be maintained for the existing

LECEF, however, truck and employee traffic from the proposed project (either option) would not have access to Ranch Drive. Traffic on Ranch Drive related to the proposed project would be limited to emergency vehicle access only.

The proposed project (full development of Option 1 or Option 2) also includes the extension of a Class I improved trail from Ranch Drive along the southern boundary of the site to the end of the existing bike trail, as shown on Figure 2.0-5. Thomas Foon Chew Way, which currently provides access to the LECEF and PG&E substation would not be affected by the proposed project. Traffic generated by the existing LECEF and PG&E substation would be able to utilize the new public streets included in the proposed project which could improve traffic access to the existing facilities west of the site.

2.2.5 Construction Schedule

It is anticipated that Option 1 would be constructed in generally one 20-month phase. Option 2 would be constructed in two construction phases: 1) data center and substation, and 2) light industrial uses. The first phase would be constructed over approximately 30 months. Building A would be the first constructed with Buildings 1 and 2 and Building B to follow. A specific timeframe for the light industrial development included in Option 2 has not been determined.

2.3 PROJECT OBJECTIVES

Pursuant to CEQA Guidelines Section 15124, the EIR must identify the objectives sought by the proposed project. The project applicant has stated the following objectives:

1. Support the community values outlined in the Envision San José 2040 General Plan, including, among others, the Innovative Economy goals by providing key infrastructure improvements driving today's businesses, and Quality Education and Services by significantly increasing property tax revenue to local agencies.
2. Support the implementation of the Alviso Master Plan vision for the project site as well as the "Focused Growth" Major Strategy from the Envision San José 2040 Plan, including a focus on economic growth, fiscal sustainability, and environmental sustainability.
3. Allow for the construction and operations of a data center of approximately 440,000 square feet that will house computer servers, supporting equipment, and associated office uses in an environmentally controlled structure with redundant subsystems systems (cooling, power, network links, storage, fire suppression, etc.) The data center shall be located near a reliable large power source, and emergency response access, and being located such that it can be protected, to the maximum extent feasible, from security threats, natural disasters, and similar events.
4. Provide operational electric power to the proposed data center via an electric substation, and provide other utility infrastructure to serve the project (as well as other planned growth in the vicinity consistent with the City's infrastructure planning and partnership objectives), including water, storm drainage, sanitary sewer, electric, natural gas, and telecommunications, as well as new roadway infrastructure.

5. Support San José's stated job creation objectives by allowing for the construction of up to 1.2 million square feet of new light industrial uses that are compatible with nearby land uses, which would then further stimulate economic activity and employment generation.
6. Develop a light industrial campus that is well-designed per industry standards and properly integrates the planned uses and related improvements including, among others, parking, loading docks, vehicle access, and bicycle and pedestrian connections.
7. Develop a light industrial campus that is well-designed per industry standards and properly integrates light industrial uses, data center uses, parking, loading docks, vehicle access, and bicycle and pedestrian connections.
8. Incorporate, as feasible, environmentally sustainable features into the project, such as appropriate bird-friendly building design components, and the creation of an environmental buffer zone along Coyote Creek consistent with the City's Riparian Corridor Policy setback of 100 feet.
9. Meet the growing demand for light industrial uses, which may include a data center to support the region's growing businesses and work force population in support of Envision San José 2040 General Plan's Major Strategy #4, which calls for development supporting San José's growth as a center of innovation.
10. Construct new on- and off-site infrastructure improvements, including water, storm water, sanitary sewer, electric, natural gas, and telecom facilities to allow the proposed development as well as the implementation of the San José-Santa Clara Regional Wastewater Facility Master Plan which created economic development areas west of the project site. (Separate environmental review was completed for the Master Plan by the City of San José in late 2013.)

2.4 USES OF THE EIR

This EIR provides decision-makers in the City of San José and Santa Clara and the general public with relevant environmental information to use in considering the proposed project. This EIR is intended to be used for appropriate discretionary approvals necessary to implement the proposed project. This EIR will be relied upon for the following project-specific discretionary approvals necessary to implement the project as proposed, including the potential stormwater outfall to Coyote Creek and the sanitary sewer pump station.

City of San José Approvals:

- Rezoning (No.)
- Development Permit
- Building Clearance
- Public Works Clearance
- Grading Permit
- Tree Removal Permit
- Special Use Permit (Option 2)

- Development/Cooperation Agreements

Other Agency Approvals:

Potential Stormwater Outfall to Coyote Creek:

- U.S. Army Corps of Engineers, Section 404 Nationwide Permit
- Regional Water Quality Control Board, Section 401 Clean Water Act Permit
- California Department of Fish and Wildlife, Streambed Alteration Agreement
- Santa Clara Valley Habitat Agency, Valley Habitat Plan
- Santa Clara Valley Water District, Encroachment Permit Application

Sanitary Sewer Pump Station and Data Center (Option 2) Emergency Generators:

- BAAQMD, Air Quality Permits/Permit to Operate

Extension of Utilities under SR 237:

- Caltrans Encroachment Permit(s)

SECTION 3.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

- | | | | |
|-----|-------------------------------------|------|---|
| 3.1 | Aesthetics | 3.9 | Hydrology and Water Quality |
| 3.2 | Air Quality | 3.10 | Land Use and Planning, Population/
Housing, and Agricultural
Resources/Forestry |
| 3.3 | Biological Resources | 3.11 | Noise and Vibration |
| 3.4 | Cultural Resources | 3.12 | Public Services/Recreation |
| 3.5 | Energy | 3.13 | Transportation/Traffic |
| 3.6 | Geology and Soils/Mineral Resources | 3.14 | Utilities and Service Systems |
| 3.7 | Greenhouse Gas Emissions | | |
| 3.8 | Hazards and Hazardous Materials | | |

The discussion for each environmental subject includes the following subsections:

ENVIRONMENTAL SETTING

This subsection: 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.

IMPACTS

This subsection: 1) includes thresholds of significance for determining impacts, 2) discusses the project's consistency with those thresholds, and 3) discusses the project's consistency with applicable plans. For significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered using an alphanumeric system that identifies the environmental issue. For example, **Impact HAZ-1** denotes the first potentially significant impact discussed in the Hazards and Hazardous Materials section. Mitigation measures are also numbered to correspond to the impact they address. For example, **MM NOI-2.3** refers to the third mitigation measure for the second impact in the Noise section.

The project's consistency with applicable plans (such as General Plans, specific plans, and regional plans) is also discussed within this subsection pursuant to CEQA Guidelines Section 15125(d).

CONCLUSION

This subsection provides a summary of the project's impacts on the resource.

Important Note to the Reader

The California Supreme Court in a December 2015 opinion [*California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (No. S 213478)] confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on

the environment, not the effects the existing environment may have on a project. Therefore, the evaluation of the significance of project impacts under CEQA in the following sections focuses on impacts of the project on the environment, including whether a project may exacerbate existing environmental hazards.

The City of San José currently has policies that address existing conditions (e.g., air quality, noise, and hazards) affecting a proposed project, which are also addressed in this section. This is consistent with one of the primary objectives of CEQA and this document, which is to provide objective information to decision-makers and the public regarding a project as a whole. The CEQA Guidelines and the courts are clear that a CEQA document (e.g., EIR or Initial Study) can include information of interest even if such information is not an “environmental impact” as defined by CEQA.

Therefore, where applicable, in addition to describing the impacts of the project on the environment, this chapter will discuss Planning Considerations that relate to policies pertaining to existing conditions and its effects on the project. Such examples include, but are not limited to, locating a project near sources of air emissions that can pose a health risk, in a floodplain, in a geologic hazard zone, or in a high noise environment.

3.1 AESTHETICS

3.1.1 Environmental Setting

3.1.1.1 *Regulatory Framework*

San José General Plan

The Envision San José 2040 General Plan include policies applicable to all development projects in San José.

Policy CD-1.1: Require the highest standards of architecture and site design, and apply strong design controls for all development projects, both public and private, for the enhancement and development of community character and for the proper transition between areas with different types of land uses.

Policy CD-1.18: Encourage the placement of loading docks and other utility uses within parking structures or at other locations that minimize their visibility and reduce their potential to detract from pedestrian activity.

Policy CD-1.23: Further the Community Forest Goals and Policies in this Plan by requiring new development to plant and maintain trees at appropriate locations on private property and along public street frontages. Use trees to help soften the appearance of the built environment, help provide transitions between land uses, and shade pedestrian and bicycle areas.

Policy CD-4.9: For development subject to design review, ensure the design of new or remodeled structures is consistent or complementary with the surrounding neighborhood fabric (including but not limited to prevalent building scale, building materials, and orientation of structures to the street).

Policy CD-10.2: Require that new public and private development adjacent to Gateways and freeways (including 101, 880, 680, 280, 17, 85, 237, and 87), and Grand Boulevards consist of high-quality materials, and contribute to a positive image of San José.

Alviso Master Plan

The following policies are specific to aesthetics and visual resources and are specific to the proposed project.

Environmental Protection Policy 3: The riparian corridors adjacent to Coyote Creek and Guadalupe River should be preserved intact. Any development adjacent to the waterways should follow the City's Riparian Corridor policies.

City of San José Riparian Corridor Policy Study

The City of San José's Riparian Corridor Policy Study defines a riparian corridor as any defined stream channel, including the area up to the bank full-flow line, as well as all riparian (streamside vegetation in contiguous adjacent uplands. The policy study states that riparian setbacks should be measured 100 feet from the outside edges of riparian habitat or the top of bank, whichever is greater. The following guidelines of the policy study are applicable to determining aesthetic impacts for projects adjacent to Coyote Creek.

Guideline 2B: Glare. Building materials should not produce glare that would adversely impact the riparian corridor. Windows should not be mirrored but otherwise their use is not limited.

Guideline 2E: Lighting. All trail corridors, except for the Guadalupe River Downtown, are closed after sunset, and as such do not have lighting (except for security lighting at bridge under crossings). For all other developments, lighting within the corridor and setback areas should be avoided. Lighting on development sites should be designed and sited to avoid light and glare impacts to wildlife within the riparian corridor. Any lighting located adjacent to riparian areas should be as low as feasible in height (bollard lighting is preferred) and must be directed downward with light sources not visible from riparian areas.

3.1.1.2 Existing Conditions

Visual Character of the Project Site

The project site is primarily fallow farmland and can be seen from SR 237, but is not readily visible from Zanker Road or the east side of Coyote Creek, where a levee blocks views of the site (See Photos 1 and 2). Development on-site includes two single-family houses, a mobile home, and three farm-related accessory structures located near the southern end of the site. One of the single-family houses, located at the southeastern corner of the site, is a one-story Craftsman Prairie-style house with Mission Revival influences (Edgar A. Jackson House), as shown in Photo 3.

The structures on the site are mostly hidden by large shrubs and trees, as shown in Photos 4, 5, 6, and 7. Vehicular access to the houses and accessory structures is provided by a paved pathway in the central portion of the site.

Surrounding Land Uses

The project area is primarily agricultural land. The project site is bounded by Alviso-Milpitas Road to the south, lands of the RWF and the LECEF and PG&E substation to the west, lands of the RWF to the north, and Coyote Creek to the east.

Alviso-Milpitas Road becomes Ranch Road at Coyote Creek and provides trail and limited vehicle access to McCarthy Boulevard in Milpitas. South of Alviso-Milpitas Road is State Route 237 (SR 237), a six-lane freeway that extends in an east/west direction between Sunnyvale and Milpitas, as shown in Photo 9.

West of the project site is the LECEF facility and associated electrical substation, as shown on Photo 10. The energy facility is surrounded by a wall and a chain link fence. There is a berm located immediately adjacent to the fence with trees and shrubs. High power transmission lines are located west of the facility.

The San José-Santa Clara Regional Wastewater Facility is located north and northwest of the project site. The main building, located on the west side of Zanker Road, is primarily glass and stucco. The building is an irregular-shaped two-story building and is set back from the roadway with a surface parking lot and landscaped areas. Drying beds for the RWF are located immediately north of the



PHOTO 1: View of the project site, looking south.



PHOTO 2: View of the project site, looking northeast.



PHOTO 3: View of existing Edgar A. Jackson house in the southeastern corner of the site, looking north from Alviso-Milpitas Road.



PHOTO 4: View of the farm complex in the south central portion of the site, looking northwest from the paved pathway.



PHOTO 5: View of existing farm complex structures on-site, looking northwest from the paved pathway.



PHOTO 6: View of the prefabricated house within the farm complex, looking west from the main house.



PHOTO 7: View of an accessory structure looking west, from the paved pathway.



PHOTO 8: View of farm complex structure on the project site, looking northwest from the paved pathway.



PHOTO 9: View of surrounding development, looking northwest from the project site. The LECEF can be seen in the background.



PHOTO 10: Alviso – Milpitas Road, looking west along the southern boundary of the site. SR 237 is located on the left side of the photo.

project site. The Silicon Valley Advanced Water Purification Center, which is operated by the Santa Clara Valley Water District, is located northwest of the site at 4190 Zanker Road.

East of the project site is Coyote Creek, which has a raised levee on both banks. Due to the lower elevation of the site, views of the site from the east side of Coyote Creek in Milpitas are limited.

3.1.1.3 *Scenic Views and Resources*

The project site and the surrounding area are relatively flat and, as a result, the site is only visible from the immediate area. The project area is not located within a designated scenic area or corridor based on the City of San José General Plan. In addition, the project site is not located along or visible from a state-designated scenic highway.³ There are no scenic views within the project area.

3.1.1.4 *Light and Glare*

Sources of light and glare in the project area include security lights, vehicular headlights, internal building lights, and freeway lighting.

3.1.2 Aesthetic Impacts

3.1.2.1 *Thresholds of Significance*

For the purposes of this EIR, an aesthetic impact is considered significant if the project would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings;
or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.2.2 *Consistency with Plans*

The proposed project would be required to go through architectural review and comply with design standards established by the City for light industrial development. For these reasons, the project would be consistent with General Plan Policies CD-1.1, CD-1.18, CD-1.23, CD-4.9, and CD-10.2, the Alviso Master Plan Environmental Protection Policy 3 and the Riparian Corridor Policy Study Guidelines 2B and 2E.

3.1.2.3 *Visual and Aesthetics Impacts*

Aesthetic values are, by their nature, subjective. Opinions as to what constitutes a degradation of visual character would differ among individuals. The best available means for assessing what constitutes a visually acceptable standard for new structures are the City's Design Guidelines and

³ California Department of Transportation. *California Scenic Highway Mapping System*.
http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/ Accessed December 8, 2016.

policies adopted by the City Council. All future development on-site would be reviewed for consistency with applicable design guidelines and policies prior to issuance of planning permits.

The proposed project includes two development options. The light industrial development option proposes seven two-story light industrial buildings with a maximum height of 45 feet. The data center/light industrial development option proposes four buildings for the data center and a PG&E substation. The tallest structure would have a maximum height of 100 feet and the remaining three buildings would have a maximum height of 55 feet. Both project options would be visible from the nearby roadways including Alviso-Milpitas Road, Zanker Road, and SR 237 as well as from the Coyote Creek Trail.

The CEQA thresholds of significance state that a project would have a significant visual impact if it would have a substantial adverse effect on a scenic vista, substantially damage scenic resources (including, but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway), or substantially degrade the existing visual character or quality of a project site. While views of the surrounding hillsides are visible, the area is relatively flat and prominent viewpoints, other than the adjacent LECEF facility, SR 237, and the levee, are limited. There are no City, County, or state designated scenic vistas, highways, or other scenic resources within the project area.

As mentioned previously, the project area is primarily agricultural land. While both development options would alter the visual character of the project site compared to existing conditions, both development options would be comparable in massing and scale to the existing industrial uses near the site. The project would not have a substantial effect on scenic vistas, damage scenic resources, or substantially degrade the existing visual character of the site and its surroundings. **(Less Than Significant Impact)**

3.1.2.4 *Light and Glare*

Under both development options, the site would be visible from Alviso-Milpitas Road, SR 237, Zanker Road, and the Coyote Creek trail. Sources of light and glare include streetlights, parking lot lots, security lights, vehicular headlights, internal building lights, and reflective building surfaces and windows.

The General Plan FPEIR concluded that while new development and redevelopment under the General Plan could be new sources of nighttime light and daytime glare, implementation of the adopted plans and existing regulations would avoid substantial light and glare impacts. Development on-site would comply with General Plan policies, including City Council Lighting Policy 4-3⁴. In addition, the project would be required to comply with Guideline 2B and 2E of the City's Riparian Corridor Policy Study. As a result, the proposed project would not significantly impact adjacent land uses with increased nighttime light levels or daytime glare from building materials. **(Less Than Significant Impact)**

3.1.3 Mitigation and Avoidance Measures for Visual and Aesthetic Impacts

No project specific mitigation is required or proposed.

⁴ This policy requires private development to use energy-efficient outdoor lighting that is fully shielded and not directed skyward.

3.1.4 Conclusion

Implementation of the project under each development option would have a less than significant visual impact. **(Less Than Significant Impact)**

3.2 AIR QUALITY

The following discussion is based on an air quality analysis prepared by *Illingworth & Rodkin* in March 2017. The report can be found in Appendix B.

3.2.1 Environmental Setting

3.2.1.1 *Regulatory Framework*

The significance of a pollutant concentration is determined by comparing the pollutant levels to an appropriate ambient air quality standard. The standards set the level of pollutant concentrations allowable while protecting general public health and welfare.

The Federal Clean Air Act (Federal CAA) establishes pollutant thresholds for air quality in the United States. In addition to being subject to Federal requirements, California has its own, more stringent, regulations under the California Clean Air Act (California CAA). At the Federal level, the U.S. Environmental Protection Agency (EPA) administers the CAA. The California CAA is administered by the California Air Resources Board (CARB) at the state level and by the Air Quality Management District's at the regional and local levels. The Bay Area Air Quality Management District (BAAQMD) regulates air quality in the nine-county Bay Area.

The U.S. EPA is responsible for establishing the National Ambient Air Quality Standards (NAAQS) which are required under the Federal CAA. The U.S. EPA regulates emission sources that are under the exclusive authority of the Federal government, such as aircraft, ships, and certain types of locomotives. The agency also established various emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission standards established by CARB.

California Air Resources Board

As stated above, CARB (which is part of the California EPA) is responsible for meeting the state requirements of the Federal CAA, administering the California CAA, and establishing the California Ambient Air Quality Standards (CAAQS). The California CAA requires all air districts in the state to achieve and maintain CAAQS. CARB regulates mobile air pollution sources such as motor vehicles. The agency is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB has established passenger vehicle fuel specifications and oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional and county level. CARB also conducts or supports research into the effects of air pollution on the public and develops approaches to reduce air pollutant emissions.

Bay Area Air Quality Management District

The Bay Area Air Quality Management District (BAAQMD) is primarily responsible for ensuring that the national and state ambient air quality standards are attained and maintained in the Bay Area. These ambient air quality standards are levels of contaminants which represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are

described in criteria documents. Table 3.2-1 identifies the major criteria pollutants, characteristics, health effects, and typical sources for the Bay Area.

Table 3.2-1: Major Criteria Pollutants			
Pollutant	Characteristics	Health Effects	Major Sources
Ozone	A highly reactive photochemical pollutant created by the action of sun light on ozone precursors. Often called photochemical smog.	<ul style="list-style-type: none"> - Eye Irritation - Respiratory function impairment 	The major sources of ozone precursors are combustion sources such as factories and automobiles, and evaporation of solvents and fuels.
Carbon Monoxide	Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels.	<ul style="list-style-type: none"> - Impairment of oxygen transport in the bloodstream - Aggravation of cardiovascular disease - Fatigue, headache, confusion, dizziness - Can be fatal in the case of very high concentrations 	Automobile exhaust, combustion of fuels, combustion of wood in wood stoves and fireplaces.
Nitrogen Dioxide	Reddish-brown gas that discolors the air, formed during combustion.	<ul style="list-style-type: none"> - Increased risk of acute and chronic respiratory disease 	Automobile and diesel truck exhaust, industrial processes, and fossil-fueled power plants.
Sulfur Dioxide	Sulfur dioxide is a colorless gas with a pungent, irritating odor.	<ul style="list-style-type: none"> - Aggravation of chronic obstruction lung disease - Increased risk of acute and chronic respiratory disease 	Diesel vehicle exhaust, oil-powered power plants, and industrial processes.
Particulate Matter	Solid and liquid particles of dust, soot, aerosols and other matter that are small enough to remain suspended in the air for a long period of time.	<ul style="list-style-type: none"> - Aggravation of chronic disease and heart/lung disease symptoms 	Combustion, automobiles, field burning, factories and unpaved roads. Also a result of photochemical processes.

BAAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, and many other associated activities. BAAQMD has jurisdiction over the nine-county Bay Area, including San José.

National and State Ambient Air Quality Standards

The ambient air quality in a given area depends on the quantities of pollutants emitted within the area, transport of pollutants to and from the surrounding areas, local and regional meteorological conditions, and the surrounding topography of the air basin. Air quality is described by the

concentration of various pollutants in the atmosphere. The significance of the pollutant concentration is determined by comparing the concentration to an appropriate ambient air quality standard. The standards represent the allowable pollutant concentrations designed to ensure that the public health and welfare are protected, while including a reasonable margin of safety to protect the more sensitive individuals in the population.

As required by the Federal CAA, the NAAQS have been established for six major air pollutants; carbon monoxide (CO), nitrogen oxides (NO_x), ozone, respirable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), sulfur oxides (SO_x), and lead (Pb). Pursuant to the California CAA, the State of California has also established ambient air quality standards. The CAAQS are generally more stringent than the corresponding Federal standards and incorporate additional standards for pollutants such as sulfates, hydrogen sulfide, vinyl chloride and visibility reducing particles. Both state and federal standards are summarized in Table 3.2-2. The “primary” standards have been established to protect the public health. The “secondary” standards are intended to protect the nation’s welfare and account for adverse air pollutant effects on soil, water, visibility, materials, vegetation and other aspects of the general welfare. Because CAAQS are more stringent than NAAQS, CAAQS are used as the applicable standard in this analysis.

Pollutant	Averaging Time	California Standards	National Standards	
			Primary	Secondary
Ozone	1-hour	0.09 ppm	---	Same as primary
	8-hour	0.07 ppm	0.075 ppm	---
Carbon monoxide	1-hour	20 ppm	35 ppm	---
	8-hour	9.0 ppm	9.0 ppm	---
Nitrogen dioxide	1-hour	0.18 ppm	0.10 ppm	---
	Annual	0.03 ppm	0.053 ppm	Same as primary
Sulfur dioxide	1-hour	0.25 ppm	0.075 ppm	---
	3-hour	---	---	0.5 ppm
	24-hour	0.04 ppm	---	---
PM ₁₀	24-hour	50 µg/m ³	150 µg/m ³	Same as primary
	Annual	20 µg/m ³	---	---
PM _{2.5}	24-hour	---	35 µg/m ³	Same as primary
	Annual	12 µg/m ³	15 µg/m ³	Same as primary
Lead	Calendar Quarter	---	1.5 µg/m ³	Same as primary
	30-day average	1.5 µg/m ³	---	---

Source: California Air Resources Board, September 2010.

Regional Clean Air Plans

The BAAQMD and other agencies prepare clean air plans in response to the state and federal CAA. The City of San José also has General Plan policies that encourage development that reduces air quality impacts. In addition, BAAQMD has developed CEQA Guidelines to assist local agencies in

evaluating and mitigating air quality impacts in CEQA documents. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). Consistent with the GHG reduction targets adopted by the state of California, the 2017 CAP lays the groundwork for the BAAQMD's long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

The 2017 CAP defines an integrated, multi-pollutant control strategy to reduce emissions of particulate matter, TACs, ozone precursors, and GHGs. The proposed control strategy is designed to complement efforts to improve air quality and protect the climate that are being implemented by partner agencies at the State, regional, and local scale. The control strategy encompasses 85 individual control measures that describe specific actions to reduce emissions of air and climate pollutants from the full range of emission sources and is based on the following four key priorities:

- Reduce emissions of criteria air pollutants and toxic air contaminants from all key sources.
- Reduce emissions of "super-GHGs" such as methane, black carbon, and fluorinated gases.
- Decrease demand for fossil fuels (gasoline, diesel, and natural gas).
- Decarbonize our energy system.

Key elements in the control strategy are described below.

Stationary Sources:

- Decrease emissions of GHGs and criteria air pollutants through a region-wide strategy to reduce combustion and improve combustion efficiency at industrial facilities, beginning with the three largest sources of emissions: oil refineries, power plants, and cement plants.
- Reduce methane emissions from landfills, and from oil and natural gas production and distribution.
- Reduce emissions of toxic air contaminants by adopting more stringent thresholds and methods for evaluating toxic risks at existing and new facilities.

Transportation:

- Reduce motor vehicle travel by promoting transit, bicycling, walking, and ridesharing.
- Implement pricing measures to reduce travel demand.
- Direct new development to areas that are well-served by transit, and conducive to bicycling and walking.
- Accelerate the widespread adoption of electric vehicles.
- Promote the use of clean fuels and low- or zero- carbon technologies in trucks and heavy-duty equipment.

Buildings and Energy:

- Expand the production of low-carbon, renewable energy by promoting on-site technologies such as rooftop solar, wind, and ground-source heat pumps.
- Support the expansion of community choice energy programs throughout the Bay Area.
- Promote energy and water efficiency in both new and existing buildings.

- Promote the switch from natural gas to electricity for space and water heating Bay Area buildings.

San José General Plan

The Envision San José 2040 General Plan includes policies applicable to all development projects in San José.

Policy MS-10.1: Assess projected air emissions from new development in conformance with the BAAQMD CEQA Guidelines and relative to state and federal standards. Identify and implement air emissions reduction measures.

Policy MS-13.1: Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At minimum, conditions shall conform to construction mitigation measures recommended in the current BAAQMD CEQA Guidelines for the relevant project size and type.

Policy MS-13.2: Construction and/or demolition projects that have the potential to disturb asbestos (from soil or building material) shall comply with all the requirements of the California Air Resources Board's air toxic control measures (ATCMs) for Construction, Grading, Quarrying, and Surface Mining Operations.

Policy TR-6.4: Plan industrial and commercial development so that truck access through residential areas is avoided. Minimize truck travel on streets designated in this General Plan as Residential Streets.

Policy TR-7.1: Require large employers to develop TDM programs to reduce the vehicle trips generated by their employees.

3.2.1.2 Existing Conditions

Air quality is determined by the concentration of various pollutants in the atmosphere. Units of concentration are expressed in parts per million (ppm) or micrograms per kilograms ($\mu\text{g}/\text{kg}$). The amount of a given pollutant in the atmosphere is determined by the amount of pollutants released within an area, transport of pollutants to and from surrounding areas, local and regional meteorological conditions, and the surrounding topography of the air basin. The major determinants of transport and dilution are wind, atmospheric stability, terrain and, for photochemical pollutants, sun light.

San José is located in the southern portion of the San Francisco Bay Area Air Basin. The proximity of this location to both the Pacific Ocean and San Francisco Bay has a moderating influence on the climate. Northwest and northerly winds are most common in the project area, reflecting the orientation of the Bay and the San Francisco Peninsula. Winds from these directions carry pollutants released by autos and factories from upwind areas of the Peninsula toward San José, particularly during the summer months. Winds are lightest on average in fall and winter. Every year in fall and winter there are periods of several days when winds are very light and local pollutants can build up.

Air quality standards for ozone are typically exceeded when relatively stagnant conditions occur for periods of several days during the warmer months of the year. Weak wind flow patterns combined with strong inversions substantially reduce normal atmospheric mixing. Key components of ground-level ozone formation are sunlight and heat. Significant ozone formation, therefore, only occurs during the months from late spring through early fall. Prevailing winds during the summer and fall can transport and trap ozone precursors from the more urbanized portions of the Bay Area. Meteorological factors make air pollution potential in the Santa Clara Valley quite high.

Pollutants can be diluted by mixing in the atmosphere both vertically and horizontally. Vertical mixing and dilution of pollutants are often suppressed by inversion conditions, when a warm layer of air traps cooler air close to the surface. During the summer, inversions are generally elevated above ground level, but are present over 90 percent of the time in both the morning and afternoon. In winter, surface-based inversions dominate in the morning hours, but frequently dissipate by afternoon.

Topography can restrict horizontal dilution and mixing of pollutants by creating a barrier to air movement. The South Bay has significant terrain features that affect air quality. The Santa Cruz Mountains and Diablo Range on either side of the South Bay restrict horizontal dilution, and this alignment of the terrain also channels winds from the north to south, carrying pollution from the northern Peninsula toward San José.

The combined effects of moderate ventilation, frequent inversions that restrict vertical dilution and terrain that restrict horizontal dilution give San José a relatively high atmospheric potential for pollution compared to other parts of the San Francisco Bay Air Basin and provide a high potential for transport of pollutants to the east and south.

Carbon Monoxide

Carbon monoxide, a colorless and odorless gas, interferes with the transfer of oxygen to the brain. It can cause dizziness and fatigue, and can impair central nervous system functions. Highest carbon monoxide concentrations measured in the South Bay Area have been well below the national and state ambient standards. Since the primary sources of carbon monoxide are cars and trucks, highest concentrations would be found near congested roadways that carry large volumes of traffic. Carbon monoxide emitted from a vehicle is highest near the origin of a trip and considerably lower once the automobile is warmed up (usually five to ten minutes into a trip). This is different, however, for vehicles of different ages, where older cars require a longer warm up period.

Ozone

While O₃ serves a beneficial purpose in the upper atmosphere (stratosphere) by reducing ultraviolet radiation, when it reaches elevated concentrations in the lower atmosphere it can be harmful to the human respiratory system and to sensitive species of plants. Ozone concentrations build to peak levels during periods of light winds, bright sunshine, and high temperatures. Short-term O₃ exposure can reduce lung function in children, make persons susceptible to respiratory infection, and produce symptoms that cause people to seek medical treatment for respiratory distress. Long-term exposure can impair lung defense mechanisms and lead to emphysema and chronic bronchitis.

Sensitivity to O₃ varies among individuals, but about 20 percent of the population is sensitive to O₃, with exercising children being particularly vulnerable. Ozone is formed in the atmosphere by a complex series of photochemical reactions that involve “ozone precursors” that are two families of pollutants: oxides of nitrogen (NO_x) and reactive organic gases (ROG). Nitrogen oxides and ROG are emitted from a variety of stationary and mobile sources. While NO₂, an oxide of nitrogen, is another criteria pollutant itself, ROGs are not in that category, but are included in this discussion as O₃ precursors. The U.S. EPA recently established a new more stringent standard for O₃ of 0.75 ppm for 8-hour exposures, based on a review of the latest new scientific evidence.

Nitrogen Dioxide

Nitrogen dioxide, a reddish-brown gas, irritates the lungs. Exposure to NO₂ can cause breathing difficulties at high concentrations. Clinical studies suggest that NO₂ exposure to levels near the current standard may worsen the effect of allergens in allergic asthmatics, especially in children. Similar to O₃, NO₂ is not directly emitted, but is formed through a reaction between nitric oxide (NO) and atmospheric oxygen. Nitric oxide and NO₂ are collectively referred to as NO_x and are major contributors to O₃ formation. Nitrogen oxides are emitted from combustion of fuels, with higher rates at higher combustion temperatures. Nitrogen dioxide also contributes to the formation of PM₁₀ (see discussion of PM₁₀ below). Monitored levels in the Bay Area are well below ambient air quality standards.

PM₁₀ and PM_{2.5}

Respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}) consist of particulate matter that is ten microns or less in diameter and 2.5 microns or less in diameter, respectively, and represent fractions of particulate matter that can be inhaled and cause adverse health effects. Both PM₁₀ and PM_{2.5} are health concerns, particularly at levels above the federal and state ambient air quality standards. Scientific studies have suggested links between fine particulate matter and numerous health problems including asthma, bronchitis, and acute and chronic respiratory symptoms such as shortness of breath and labored breathing. Children are more susceptible to the health risks of PM_{2.5} because their immune and respiratory systems are still developing.

Both PM₁₀ and PM_{2.5} pose a greater health risk than larger particles because these tiny particles can penetrate the human respiratory system’s natural defenses and damage the respiratory tract, increasing the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body’s ability to fight infections. Whereas larger particles tend to collect in the upper portion of the respiratory system, PM_{2.5} is miniscule and can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility. Most stations in the Bay Area reported exceedances of the state standard on the same fall/winter days as reported in the South Bay. This indicates a regional air quality problem.

The primary sources of these pollutants are wood smoke and local traffic. Meteorological conditions that are common during fall/winter days produce calm winds and strong surface-based inversions that trap pollutants near the surface. The high levels of PM₁₀ result in not only health effects, but also reduced visibility.

Air Monitoring Data

Air quality in the region is controlled by the rate of pollutant emissions and meteorological conditions. Meteorological conditions, such as wind speed, atmospheric stability, and mixing height may all affect the atmosphere’s ability to mix and disperse pollutants. Long-term variations in air quality typically result from changes in air pollutant emissions, while frequent, short-term variations result from changes in atmospheric conditions. The San Francisco Bay Area is considered to be one of the cleanest metropolitan areas in the country with respect to air quality. BAAQMD monitors air quality conditions at over 30 locations throughout the Bay Area. There are several BAAMQD monitoring stations near in and near San José.

As shown in Table 3.2-3, violations of state and federal standards at the downtown San José monitoring station (the nearest monitoring station to the project site) during the 2013-2015 period (the most recent years for which data is available) include high levels of ozone, PM₁₀, and PM_{2.5}. Violations of the carbon monoxide standard have not been recorded since 1992.

Table 3.2-3: Number of Ambient Air Quality Standards Violations (2013-2015)⁵				
Pollutant	Standard	Days Exceeding Standard		
		2013	2014	2015
SAN JOSÉ CENTRAL STATION				
Ozone	State 1-hour	1	0	0
	Federal 8-hour	1	0	2
Carbon Monoxide	Federal 8-hour	0	0	0
	State 8-hour	0	0	0
Nitrogen Dioxide	State 1-hour	0	0	0
PM ₁₀	Federal 24-hour	0	0	0
	State 24-hour	5	1	1
PM _{2.5}	Federal 24-hour	6	2	2

Source: Bay Area Management District, Bay Area Air Pollution Summary

Attainment Status

The Federal CAA and the California CAA of 1988 require that CARB, based on air quality monitoring data, designate portions of the state where federal or state ambient air quality standards are not met as “nonattainment areas”. Because of the differences between the federal and state standards, the designation of “nonattainment area” is different under the federal and state legislation. Under the California CAA, Santa Clara County is a nonattainment area for ozone and PM₁₀. The County is either in attainment or unclassified for other pollutants. Under the Federal CAA, the entire Bay Area region is classified as nonattainment for the 24-hour PM_{2.5} standard. The U.S. EPA grades the region as in attainment or unclassified for all other air pollutants, including PM₁₀.

⁵ Bay Area Air Quality Management District. Annual Bay Area Air Quality Summaries. <http://www.baaqmd.gov/about-air-quality/air-quality-summaries>. Accessed November 1, 2016.

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified children under 14, the elderly over 65, and people with cardiovascular and chronic respiratory diseases as people most likely to be affected by air pollution. These groups are classified as sensitive receptors. Locations that may contain a high concentration of sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks.



Figure 3.2-1: Project Site, Influence Area and Nearest Sensitive Receptors

As shown on Figure 3.2-1, above, the nearest sensitive receptors to the project site are existing residences along Murphy Ranch Road in Milpitas, about 1,650 feet south of the southern project boundary. Other sensitive receptor locations are residences located approximately 3,100 feet east in Milpitas and mobile homes located approximately 3,400 feet southwest in San José. There is a daycare facility along Barber Lane, about 3,500 feet southeast of the site.⁶ The LECEF located west of the proposed project site is an industrial use and is not considered to be a sensitive receptor.

3.2.2 Air Quality Impacts

3.2.2.1 *Thresholds of Significance*

For the purposes of this EIR, an air quality impact is considered significant if the project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

⁶ BAAQMD typically defines the area of impact for site generated emissions as 1,000 feet.

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

The *BAAQMD CEQA Guidelines*⁷ provide the following definitions of a significant air quality impact:

- A cumulatively considerable net increase of any criteria pollutant or a precursor to that pollutant for which the project region is non-attainment under an applicable national or State ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for O₃ precursors). This is judged by comparing direct and indirect project emissions to the BAAQMD significance thresholds of 54 pounds per day for ROG, NO_x, or PM_{2.5}, and 82 pounds per day for PM₁₀. Annual significance thresholds are 10 tons per year for ROG, NO_x, or PM_{2.5}, and 15 tons per year for PM₁₀.
- A substantial contribution to an existing or projected violation of an ambient air quality standard would result if the project would cause an exceedance of an ambient air quality standard.
- Expose sensitive receptors or the general public to substantial pollutant concentrations. This is evaluated by assessing the health risk in terms of cancer risk or hazards posed by the placement of new sources of air pollutant emissions near existing sensitive receptors or placement of new sensitive receptors near existing sources.
- Create or expose a substantial number of people to objectionable odors. This is evaluated based on the potential for the project to generate odors that could affect nearby sensitive receptors in a manner that would cause frequent complaints.
- Conflict with or obstruct implementation of the applicable air quality plan. This is evaluated by comparing the project effects on projections used in the latest Bay Area CAP and evaluating the plan features that would implement CAP Transportation Control Measures.

In 2009, BAAQMD published Proposed Thresholds of Significance. The CEQA Guidelines prepared by BAAQMD in 2011 used these significance criteria to evaluate the impacts caused by projects. BAAQMD's adoption of the 2011 thresholds was called into question by a trial court order issued March 5, 2012, in *California Building Industry Association v. BAAQMD* (Alameda Superior Court Case Number RGI0548693) that determined the adoption of the thresholds was a project under CEQA but did not address the substantive validity, merits or scientific basis of the thresholds.

The California Court of Appeal for the Fifth District reversed the trial court decision and the Court of Appeal's decision was appealed to the California Supreme Court. In a December 2015 opinion [*California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (No. S 213478)] the California Supreme Court confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. The opinion did not negate the BAAQMD thresholds.

⁷ Bay Area Air Quality Management District. [California Environmental Quality Act, Air Quality Guidelines](http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Updated-CEQA-Guidelines.aspx). 2011. <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Updated-CEQA-Guidelines.aspx>

The issues in the California Building Industry Association v. BAAQMD lawsuit are not relevant to the scientific basis of BAAQMD's analysis of what levels of pollutants should be deemed significant. The City has determined that the scientific information in BAAQMD's proposed thresholds of significance analysis provides substantial evidence to support the 2011 thresholds and, therefore, has determined the thresholds and methodologies from BAAQMD's May 2011 CEQA Air Quality Guidelines are appropriate for use in this analysis to determine whether there would be any project operational impacts in terms of criteria pollutants, toxic air contaminants and odors. These CEQA Air Quality thresholds were used to evaluate air quality impacts from the project.

3.2.2.2 *Consistency with Plans*

The most recent Clean Air Plan, the 2017 CAP, was adopted by BAAQMD in April 2017. The 2017 CAP focuses on two closely-related BAAQMD goals: protecting public health and protecting the climate. The consistency of the proposed project with this regional plan is primarily a question of the consistency with the population/employment assumptions utilized in developing the 2017 CAP, which were based on ABAG Projections. The proposed project is consistent with the General Plan and, as a result, is consistent with the current growth projections in the 2017 CAP.

In addition, determining the consistency with the 2017 CAP involves assessing whether applicable control measures contained in the 2017 CAP are implemented. The 2017 CAP includes about 85 control measures, consistent with the state's climate protection goals aimed at reducing Bay Area GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. These control measures are divided into nine control measure categories that include:

- Stationary (Industrial) Sources;
- Transportation;
- Energy;
- Agriculture;
- Water;
- Waste
- Buildings;
- Natural and Working Lands; and
- Super-GHG Pollutants

The consistency of the project is evaluated with respect to each set of applicable control measures in Table 3.2-4 below.

Table 3.2-4: Bay Area 2017 Clean Air Plan Applicable Control Measures		
Control Measures	Description	Project Consistency
<i>Transportation Measures</i>		
Bicycle and Pedestrian Access and Facilities	Encourage planning for bicycle and pedestrian facilities in local plans e.g., general and specific plans, fund bike lanes, routes, paths and bicycle parking facilities.	The project would include secure bicycle parking spaces consistent with City standards. Due to the location of the project site and the nature of the project, improved pedestrian access is not proposed as part of the project. The site is, however, within walking distance to a nearby shopping center and the Coyote Creek Trail. The project is consistent with this control measure.
<i>Energy Measures</i>		
Urban Heat Island Mitigation	Develop and urge adoption of a model ordinance for “cool parking” that promotes the use of cool surface treatments for new parking facilities, as well existing surface lots undergoing resurfacing. Develop and promote adoption of model building code requirements for new construction or re-roofing/roofing upgrades for commercial and residential multi-family housing.	The project would be required to comply with the City’s Green Building Ordinance which will increase building efficiency over standard construction. Therefore, the project is consistent with this control measure.
<i>Natural and Working Lands Measures</i>		
Urban Tree Planting	Develop or identify an existing model municipal tree planting ordinance and encourage local governments to adopt such an ordinance. Include tree planting recommendations, the Air District’s technical guidance, best management practices for local plans, and CEQA review.	As designed, the project will plant new trees on-site to conform to the City’s Tree Ordinance. With the required tree replacement ratios, the site would have more trees than under current conditions. The additional trees will help with the absorption of air pollutants and will help to reduce the urban heat island effect on-site. The proposed project, therefore, is consistent with this control measure.

The project includes transportation and energy control measures and is consistent with the population projections in the 2017 CAP. The project is also consistent with the City’s General Plan. The project by itself, therefore, would not result in a significant impact related to consistency with the Bay Area 2017 CAP. **(Less Than Significant Impact)**

San José General Plan

As discussed below, the proposed project includes mitigation measures, best management practices, and permit conditions to reduce and/or avoid significant emissions impacts. Therefore, the project is consistent with Policies MS-10.1, MS-13.1, and MS-13.3.

3.2.2.3 Operational Impacts to Regional and Local Air Quality

Criteria Pollutants

A detailed air quality assessment was completed to address operational air quality impacts from the proposed development on-site. Full operation of the site was assumed to occur in 2022. Table 3.2-5 shows estimated daily air emissions from operation of the proposed project based upon a detailed air analysis using CalEEMod.

Table 3.2-5: Operational Emissions for the Project [Tons Per Year (Pounds Per Day)]					
Emission Source	ROG	NOx	CO	PM₁₀	PM_{2.5}
<i>Light Industrial Development Only</i>					
Light Industrial Mobile and Area	7.45 (40.8)	9.81 (53.7)	25.3 (138.6)	7.05 (38.6)	2.03 (11.1)
BAAQMD Thresholds	10 (54)	10 (54)	----	15 (82)	10 (54)
<i>Significant</i>	<i>No</i>	<i>No</i>	----	<i>No</i>	<i>No</i>
<i>Data Center and Light Industrial Development</i>					
Data Center Mobile & Area	2.10 (11.5)	0.89 (4.9)	1.82 (10.0)	0.29 (1.6)	0.10 (0.5)
Data Center Generators – Maximum Emissions Option	0.65 (3.6)	13.16 (72.1)	1.08 (5.9)	0.14 (0.8)	0.13 (0.7)
Data Center Generators – Testing Emissions Option (Maximum)	0.18 (1.0)	2.89 (15.8)	0.69 (3.8)	0.07 (0.4)	0.07 (0.4)
Cooling Towers	0.00 (0.0)	0.00 (0.0)	0.00 (0.0)	0.15 (0.8)	0.15 (0.8)
Light Industrial Mobile & Area	4.52 (24.8)	5.95 (32.6)	15.35 (84.1)	2.62 (14.4)	0.82 (4.5)
Total Emissions	7.3 (39.9)	20.0 (122.7)	18.3 (100.0)	3.2 (17.6)	1.2 (6.5)
BAAQMD Thresholds	10 (54)	10 (54)	----	15 (82)	10 (54)
<i>Significant</i>	<i>No</i>	<i>Yes</i>	----	<i>No</i>	<i>No</i>

Under the light industrial development option (Option 1), the primary emissions would be from traffic (employees and vendor delivery trips) associated with daily operations. As shown in Table 3.2-5, the average emissions of ROG, NO_x, PM₁₀ exhaust, and PM_{2.5} exhaust associated with the light industrial development option would not result in ROG, NO_x, PM_{2.5}, and PM₁₀ emissions above the established thresholds. **(Less Than Significant Impact)**

Under the data center/light industrial development option (Option 2), project emissions would be generated by traffic trips associated with the site, operation of the emergency generators, diesel fuel storage, and operation of the cooling towers. Diesel fuel for each of the emergency generators would be stored in aboveground belly tanks in the generator housing units. Diesel fuel has a very low volatility and emissions of ROG from fuel storage are expected to be negligible. No other emissions would be generated by the storage of fuel on-site.

In cooling tower operations, there is a loss of liquid water via small droplets that enter the air. These droplets can carry chemicals and minerals into the environment. For the proposed project, the water droplets would contain total dissolved solids (TDS). While gas emissions would not occur, PM emissions would result. Based on the operational perimeters of the proposed cooling towers, PM₁₀ and PM_{2.5} emissions would be minimal.

Under the data center/light industrial development option, there would be fewer employees on-site than under the light industrial development option. In addition, there would be fewer delivery trucks due to the reduced light industrial operations. As such, the mobile and area emissions would be substantially less under this option and minimal relative to BAAQMD thresholds.

The primary emissions associated with the data center/light industrial development option would be from the operational testing of the emergency generators. During normal operations, the generators would only run during periodic testing and maintenance. Operation of the generators is limited to 50 hours per engine per year of non-emergency use by the state's Air Toxic Control Measure for Stationary Compression Ignition Engines. For each generator, standard testing would occur for one hour per month for 11 months each year and load testing for up to four hours per year, for a total of 15 hours per year per generator. As proposed, however, the project would only test the generators for one-half hour each month at idle or low load and then for four hours once per year at full load.

The proposed data center/light industrial development option would not result in ROG, PM_{2.5}, and PM₁₀ emissions above the established thresholds. As shown in Table 3.2-5, without any limitations on generator operations for testing and maintenance emissions associated with the data center/light industrial project would have a significant NO_x impact to sensitive receptors. The emergency generator for the proposed 7 MGD sanitary pump station is anticipated to be 50 kW and would result in a small incremental addition to daily operational emissions associated with the proposed project.

Impact AQ-1: The proposed project would result in a significant impact related to the production of NO_x during generator testing. **(Significant Impact)**

Toxic Air Contaminants

With the data center/light industrial development option, the project generators would emit diesel particulate matter (DPM), which is considered a toxic air contaminant (TAC). The potential health risk to nearby sensitive receptors from testing and maintenance of the on-site generators was evaluated based on a 30-year exposure. The nearest receptors are the residences along Murphy Ranch Road in Milpitas, approximately 1,650 feet south of the project site (as shown in the following figure).



Figure 3.2-2: TAC Sensitive Receptor Locations

The nearest sensitive receptors and the location of maximum TAC impact from operation of the proposed project are shown on Figure 3.2-2.

The analysis assumed the emergency generators would operate for a maximum of 50 hours per year per generator at full load (the maximum allowed by the State of California for such a use). The proposed project is required to limit emergency testing of the generators, further reducing potential impacts of operational emissions, as previously described. The results of the analysis are shown in Table 3.2-6.

Table 3.2-6: Maximum TAC Community Risk			
Receptor	Cancer Risk (per million)	Maximum Annual PM_{2.5} (µg/m³)	Maximum Hazard Index
Off-Site Residences	1.6	<0.01	<0.01
<i>BAAQMD Single Source Threshold</i>	<i>10.0</i>	<i>0.3</i>	<i>1.0</i>
Significant Impact	No	No	No

As shown in Table 3.2-6, the health risk to the nearest sensitive receptors would be well below the BAAQMD thresholds. The adjacent LECEF is an industrial use and is not considered to be a sensitive receptor. **(Less Than Significant Impact)**

3.2.2.4 Construction Impacts

Emissions from construction-related automobiles, trucks, and heavy equipment are a primary concern due to release of diesel particulate matter (an air toxic contaminant⁸ due to its potential to cause cancer), TACs from all vehicles, and PM_{2.5}, which is a regulated air pollutant.

Construction emissions can vary depending on the year in which construction is anticipated to occur, as a result of improved technologies over time resulting in lower emitting equipment and vehicles. Construction emissions were considered for both project options because of the difference in timing and scope in the projects. For the light industrial development option, the analysis assumed construction of the entire project, including infrastructure, in one phase with construction beginning in January 2018 and finishing in September 2019. For the data center/light industrial development option, the analysis assumed two phases of construction with the data center being constructed in the near term and the light industrial being constructed at a later date.

Based on construction phasing, construction emissions for the data center/light industrial development option (approximately 10 years between the completion of the data center and the construction of light industrial uses on the southern portion of the site) would be less than for the light industrial development option (approximately 20-months of construction), as that project would be built over an extended number of years which reduce the full impacts of construction on the entire site. Therefore, the following analysis is based on the light industrial development option which represents the worst-case for construction emissions.

Table 3.2-7 shows an estimate of daily air emissions from construction of the proposed project based upon a detailed air analysis using CalEEMod.

Description	ROG	NO_x	PM₁₀	PM_{2.5}
Total Construction Emissions (tons) 2018	0.65	6.58	0.13	0.12
Total Construction Emissions (tons) 2019	6.59	0.66	0.02	0.02
Average Daily Emissions (pounds per day)	36	36	1.0	1.0
<i>BAAQMD Thresholds (pounds per day)</i>	<i>54</i>	<i>54</i>	<i>82</i>	<i>54</i>

Construction of the project would involve demolition of the existing buildings on-site, site grading, trenching for utilities (on- and off-site), paving, building construction, and architectural coating. As shown in Table 3.2-7, the emissions of ROG, NO_x, PM₁₀ exhaust, and PM_{2.5} exhaust associated with construction of the project would not exceed the BAAQMD significance thresholds and, therefore, would not result in a significant impact from construction emissions.

Construction activities on-site would, however, generate dust and other particulate matter that could temporarily impact nearby sensitive receptors. The amount of dust generated would be highly variable and is dependent on the size of the area disturbed at any given time, the amount of activity, soil conditions, and meteorological conditions. The nearest land uses are commercial and office, and

⁸ A toxic air contaminant is a pollutant that is known or suspected to cause cancer or other serious health effects.

are not considered sensitive receptors. The project would be required to implement BAAQMD dust control measures as a condition of project approval, as outlined below. The following permit conditions are included in the project to further reduce construction-related air quality impacts.

Permit Conditions:

All construction phases of the proposed project shall implement the following Best Management Practices that are required of all projects:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible and feasible. Building pads shall be laid as soon as possible and feasible, as well, after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
8. A publicly visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

With implementation of the above described measures, project construction for either development option would not generate significant levels of dust that would affect local and regional air quality. **(Less Than Significant Impact)**

3.2.2.5 Odors

The project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. These emissions may be noticeable from time to time by adjacent receptors. Odors would, however, be temporary and localized and are not likely to affect people off-site. **(Less Than Significant Impact)**

3.2.3 Mitigation and Avoidance Measures for Air Quality Impacts

3.2.3.1 *NOx Impacts*

To ensure that the proposed emergency generator testing/maintenance plan is implemented to reduce NOx, the following mitigation measures are included in the project:

MM AQ-1.1: Prior to issuance of a building permit, the project applicant shall submit a generator operations plan to the Building Division staff and ensure that generator operations for or maintenance and testing purposes shall be limited so that the combined operation of all 24 engines does not exceed 360 hours in any consecutive 12-month period and the average load factor does not exceed 30 percent during testing.

MM AQ-1.2: The operator of the data center shall retain records as required by the Bay Area Air Quality Management District (BAAQMD) as a condition of the Permit to Operate that includes: 1) date and times of all reliability-related testing, and 2) engine load during the testing.

MM AQ-1.3: Prior to issuance of any building permit, the project applicant shall submit the records noted above in MM AQ-1.2 as part of the operator's Permit to Operate conditions, to BAAQMD for approval.

MM AQ-1.4: Prior to approval of any project-specific light industrial development on the project site (e.g., plan development permit or equivalent), excluding the data center use, the Project applicant shall submit a Transportation Demand Management (TDM) Plan to the satisfaction of the Transportation Manager of the Department of Public Works and the PBCE Supervising Environmental Planner.

The TDM Plan shall contain the following components or equivalent measures to result in a 10% reduction in weekday mobile emissions:

- Eco Pass, Clipper Card, or equivalent for all employees, providing free rides on Santa Clara County's local transit agency, the Santa Clara Valley Transportation Authority (VTA) 25% Transit Subsidy for transit agencies other than the VTA, including Caltrain, ACE, Capitol Corridor, and BART;
- Free "Last Mile" Shuttles to local train systems (e.g. Caltrain, Amtrak, ACE) and VTA Light Rail Transit;
- Internal Carpool Matching Program utilizing zip code matching;
- Personalized Commute Assistance offered by an on-site Commute Coordinator;

- Preferred parking for Carpools and Vanpools located near entrances to every building;
- Bicycle Lockers and/or Bicycle Racks near entrances to every building;
- Showers for cyclists and pedestrians, offering clean towel service, complimentary toiletries, hair dryers, and ironing boards; and
- Support Citywide Car Share programs.

Based on CalEEMod modeling, implementation of the above mitigation measures would reduce NOx emissions from Option 1 from 9.8 tons per year (53.6 pounds per day) to 9.2 tons per year (50.5 pounds per day). Emissions from Option 2 would be reduced from 20.0 tons per year (122.7 pounds per day) to 9.3 tons per year (51.1 pounds per day). Emissions of NOx would be reduced below the threshold for NOx of 10 tons per year or 54 pounds per average day. **(Less than Significant with Mitigation)**

3.2.4 Conclusion

With implementation of the identified permit conditions, limits on generator testing, and Transportation Demand Measures (TDMs) the proposed project would have less than significant operational and construction air quality impacts. **(Less Than Significant Impact with Mitigation)**

3.3 BIOLOGICAL RESOURCES

The following evaluation of biological resources on-site and within areas to be temporarily affected by utility installation is based primarily upon a biologic report prepared by *Live Oak Associates* in March 2017. Field surveys, including a protocol-level burrowing owl survey, were conducted in June and October 2016, as stated in the biologic report. An evaluation of the impacts of the potential stormwater outfall to Coyote Creek was evaluated by *H.T. Harvey & Associates, Ecological Consultants*. A tree survey was completed by *HMH Engineers*, in October 2015. These reports are provided in Appendices C, D, and E, respectively.

3.3.1 Environmental Setting

3.3.1.1 *Regulatory Framework*

Threatened and Endangered Species

State and federal endangered species legislation has provided the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal Endangered Species Acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as “species of special status.”

Permits may be required from both the CDFW and USFWS if activities associated with a proposed project will result in the take of a listed species. To “take” a listed species, as defined by the State of California, is “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill” said species (California Fish and Game Code, Section 86). “Take” is more broadly defined by the federal Endangered Species Act to include “harm” of a listed species (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFW and the USFWS are responding agencies under the California Environmental Quality Act (CEQA). Both agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

Migratory Birds

State and federal laws also protect most bird species. The Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

Birds of Prey

Birds of prey are protected in California under provisions of the State Fish and Game Code, Section 3503.5, which states that it is “unlawful to take, possess, or destroy any birds in the order *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto”. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs

or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by the CDFW.

Additionally, the Bald and Golden Eagle Protection Act (16 U.S.C., sec. 668-668c) prohibits anyone from taking bald or golden eagles, including their parts, nests, or eggs, unless authorized under a federal permit. The act prohibits any disturbance that directly affects an eagle or an active eagle nest as well as any disturbance caused by humans around a previously used nest site during a time when eagles are not present such that it agitates or bothers an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

Bats

Section 2000 and 4150 of the California Fish and Game Code states that it is unlawful to take or possess a number of species, including bats, without a license or permit, as required by Section 3007. Additionally, Title 14 of the California Code of Regulations states it is unlawful to harass, herd, or drive a number of species, including bats. To harass is defined as “an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering.” For these reasons, bat colonies in particular are considered to be sensitive and therefore, disturbances that cause harm to bat colonies are unlawful.

Wetlands and Other “Jurisdictional Waters”

Natural drainage channels and adjacent wetlands may be considered “Waters of the United States” (hereafter referred to as “jurisdictional waters”) subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) under provisions of Section 404 of the 1972 Clean Water Act. The extent of jurisdiction has been defined in the Code of Federal Regulations but has also been subject to interpretation of the federal courts. Jurisdictional waters generally include:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce;
- All impoundments of waters otherwise defined as waters of the United States under the definition; and
- Tributaries of waters identified in paragraphs (a)(1)-(4) (i.e. the bulleted items above).

The USACE regulates the filling or grading of jurisdictional waters under the authority of Section 404 of the Clean Water Act. The extent of jurisdiction within drainage channels is defined by “ordinary high water marks” on opposing channel banks. Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils saturated intermittently or permanently saturated by

water), and wetland hydrology according to methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual.

All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE. Such permits are typically issued on the condition that the applicant agrees to provide mitigation that results in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards, under the Porter-Cologne Water Quality Control Act. The filling of isolated wetlands, over which the USACE has disclaimed jurisdiction, is regulated by the RWQCB. Installation of rock slope protection and trenching to install the potential stormwater outfall and the elimination of a small wetland in the southwest corner of the site would require a permit from the USACE and the RWQCB.

CDFW has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1602 of the California Fish and Game Code (2003). Activities that would disturb these drainages are regulated by the CDFW via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented which protect the habitat values of the drainage in question. Installation of rock slope protection and trenching to install the potential stormwater outfall would require a permit from CDFW.

Santa Clara Valley Habitat Plan

Six local partners (i.e., County of Santa Clara, Santa Clara Valley Transportation Authority; Santa Clara Valley Water District; and the Cities of San José, Gilroy, and Morgan Hill) and two wildlife agencies (CDFW and USFWS) prepared and adopted a multi-species Santa Clara Valley Habitat Conservation Plan (SCVHP), which primarily covers southern Santa Clara County, as well as the City of San José with the exception of the bayland areas.

The SCVHP addresses listed species and species that are likely to become listed during the plan's 50-year permit term. The covered species include nine plants and nine animals. The animal species covered include, but are not limited to, the California tiger salamander, California red-legged frog, western pond turtle, and western burrowing owl.

The SCVHP requires that the agencies comment on reportable interim projects and recommend mitigation measures or project alternatives that would help achieve the preliminary conservation objectives and not preclude important conservation planning options or connectivity between areas of high habitat value. Funding sources for the SCVHP include development fees based on land cover types (natural, agricultural or small vacant sites surrounded by urban development). Additional fees are charged based on the occurrence of certain sensitive habitat types such as serpentine and wetlands.

The project is considered a covered project under the SCVHP. As a result, the project would be subject to conditions and fees of the SCVHP, which will be calculated at the time the project submits an application, which corresponds to application timing of grading and/or building permits. The on-site portion of the development area is within Fee Zone B: Mostly Cultivated Agricultural Lands and the majority of the off-site utility alignments are within Fee Zone A: Ranchlands and Natural Lands. The potential stormwater outfall to Coyote Creek would also be located within Zone A. In addition,

a Nitrogen Deposition Fee and temporary impact fees are expected to be assessed for the proposed project.

The SCVHP also includes conditions, as shown in Table 3 of the Technical Biological Report (Appendix C). These conditions are included in the mitigation measures described in Section 3.3.3 Mitigation and Avoidance Measures.

Envision San José 2040 General Plan

The Envision San José 2040 General Plan (General Plan) aims to protect biological resources when properties are developed in San José. Generally, similar types of requirements occur in the General Plan as in the SCVHP. The General Plan includes several policies relevant to biological protections including, but are not limited to, the following:

Policy MS-21.4: Encourage the maintenance of mature trees, especially natives, on public and private property as an integral part of the community forest. Prior to allowing the removal of any mature tree, pursue all reasonable measures to preserve it.

Policy MS-21.5: As part of the development review process, preserve protected trees (as defined by the Municipal Code), and other significant trees. Avoid any adverse effect on the health and longevity of protected or other significant trees through appropriate design measures and construction practices. Special priority should be given to the preservation of native oaks and native sycamores. When tree preservation is not feasible, include appropriate tree replacement, both in number and spread of canopy.

Policy MS-21.6: As a condition of new development, require, where appropriate, the planting and maintenance of both street trees and trees on private property to achieve a level of tree coverage in compliance with and that implements City laws, policies or guidelines.

Policy MS-21.9: Where urban development occurs adjacent to natural plant communities (e.g., oak woodland, riparian forest), landscape plantings shall incorporate tree species native to the area and propagated from local sources (generally from within 5-10 miles and preferably from within the same watershed).

Policy ER-1.4: Minimize the removal of ecologically valuable vegetation such as serpentine and non-serpentine grassland, oak woodland, chaparral, and coastal scrub during development and grading for projects within the City.

Policy ER-1.5: Preserve and protect oak woodlands, and individual oak trees. Any loss of oak woodland and/or native oak trees must be fully mitigated.

Policy ER-1.7: Prohibit planting of invasive non-native plant species in oak woodlands, grasslands, chaparral and coastal scrub habitats, and in hillside areas.

Policy ER-4.1: Preserve and restore, to the greatest extent feasible, habitat areas that support special-status species. Avoid development in such habitats unless no feasible alternatives exist and mitigation is provided of equivalent value.

Policy ER-4.2: Limit recreational uses in wildlife refuges, nature preserves and wilderness areas in parks to those activities which have minimal impact on sensitive habitats.

Policy ER-4.3: Prohibit planting of invasive non-native plant species in natural habitats that support special-status species.

Policy ER-4.4: Require that development projects incorporate mitigation measures to avoid and minimize impacts to individuals of special-status species.

Policy ER-5.2: Require that development projects incorporate measures to avoid impacts to nesting migratory birds.

Policy ER-6.3: Employ low-glare lighting in areas developed adjacent to natural areas, including riparian woodlands. Any high-intensity lighting used near natural areas will be placed as close to the ground as possible and directed downward or away from natural areas.

Policy ER-6.6: Encourage the use of native plants in the landscaping of developed areas adjacent to natural lands.

Policy ER-6.8: Design and construct development to avoid changes in drainage patterns across adjacent natural areas and for adjacent native trees, such as oaks.

Policy ER-6.10: Update the Riparian Corridor Policy Study and all City design guidelines based on guidance from Responsible Agencies on best practices for lighting to protect sensitive habitats and species, including birds and bats.

The General Plan also includes the following policies related to bird-safe design:

Policy ER-7.1: In the area north of Highway 237, design and construct buildings and structures using bird-friendly design and practices to reduce the potential for bird strikes for species associated with the baylands or riparian habitats of lower Coyote Creek.

Policy ER-7.6: Update the Riparian Corridor Policy Study and City of San José design guidelines based on guidance from Responsible Agencies and other interested organizations on best practices for avoiding and minimizing bird strikes at new tall buildings.

Alviso Master Plan

The Vegetation and Wildlife section of the Alviso Master Plan identifies existing habitats in the Plan area, of which the project site is a part. These habitats include seasonal wetlands, agricultural fields, and riparian areas along and aquatic conditions within Coyote Creek. Special status animal species, including burrowing owls, are acknowledged to be within the Plan area and could be affected by future development.

Policies within the Plan, pertinent to the proposed project and the potential stormwater outfall to Coyote Creek, include those that respect and complement the natural setting, marshlands, waterways, trails, and other amenities of Alviso, as described below:

Environmental Protection Policy 1: All new parking, circulation, loading, outdoor storage, utility, and other similar activity areas must be located on paved surfaces with proper drainage to avoid potential pollutants from entering the groundwater, Guadalupe River, Coyote Creek, or San Francisco Bay.

Environmental Protection Policy 3: The riparian corridors adjacent to Coyote Creek and Guadalupe River should be preserved intact. Any development adjacent to the waterways should follow the City's Riparian Corridor policies.

Environmental Protection Policy 4: To mitigate the loss of specific wildlife habitat due to development, certain lands should be set aside to provide needed habitat.

City of San José Riparian Corridor Policy and Bird-Safe Design

The City of San José has a riparian buffer policy that is administered through the Riparian Corridor Policy Study. The Riparian Corridor Study defines a riparian corridor as any defined stream channel, including the area up to the bank full-flow line, as well as all riparian vegetation in contiguous adjacent uplands. The policy states that riparian setbacks should be measured 100 feet from the outside edges of riparian habitat or the top of bank, whichever is greater. However, the policy also states that setback distances for individual sites may vary if consultation with the City and a qualified biologist indicates that a smaller or larger setback is more appropriate for consistency with riparian preservation objectives.

The riparian corridor of Coyote Creek is located approximately 100 feet from the eastern boundary of the project site. A stormwater outfall may be located within the riparian corridor of Coyote Creek. The construction of the outfall is dependent upon proximity to the creek and cannot be designed to avoid the riparian corridor setback.

Council Policy 6-34 became effective on August 23, 2016. The purpose of the policy is to provide guidance consistent with the goals, policies, and actions of the City's General Plan for 1) protecting, preserving, or restoring riparian habitat; 2) limiting the creation of new impervious surface within Riparian Corridor setbacks to minimize flooding from urban run-off, and control erosion; and 3) encouraging bird-safe design in baylands and riparian habitats of lower Coyote Creek, north of State Route 237.

This policy supplements the regulations for riparian corridor protection already contained within the Habitat Plan, Municipal Code, and other existing City policies that may provide for riparian protection and bird-safe design.

Specific guidance pertaining to setbacks, allowed activities, and materials and lighting in riparian areas are included within Council Policy 6-34. Further, bird-safe design guidelines for structures north of SR 237 advise that buildings:

- Avoid use of mirrors and large areas of reflective glass;
- Avoid use of transparent glass skyways, walkways, or entryways, free-standing glass walls, and transparent building corners;
- Avoid funneling open space to a building façade;

- Strategically place landscaping to reduce reflection and views of foliage inside or through glass;
- Avoid or minimize up-lighting and spotlights; and
- Turn non-emergency lighting off, or shield it, at night to minimize light from buildings that is visible to birds, especially during bird migration season (February through May and August through November).

Ordinance-Size Trees

The City of San José has a Tree Ordinance (Chapter 13.32 of the Municipal Code), which regulates the removal of trees. The City’s Tree Ordinance seeks to:

Promote the health, safety, and welfare of the city by controlling the removal of trees in the city, as trees enhance the scenic beauty of the city, significantly reduce the erosion of topsoil, contribute to increased storm water quality, reduce flood hazards and risks of landslides, increase property values, reduce the cost of construction and maintenance of draining systems through the reduction of flow and the need to divert surface waters, contribute to energy efficiency and the reduction of urban temperatures, serve as windbreaks and are prime oxygen producers and air purification systems.

An “ordinance-size tree” is defined as any native or non-native tree with a circumference of 56 inches (diameter of 18 inches) at 24 inches above the natural grade of slope. For multi-trunk trees, the circumference is measured as the sum of the circumferences of all trunks at 24 inches above the natural grade of slope. The ordinance covers both native and non-native species. A tree removal permit is required from the City prior to the removal of any trees covered under the ordinance. Prior to the issuance of a removal permit, the City requires that a formal tree survey be conducted which indicates the number, species, trunk circumference and location of all trees which will be removed or impacted by the project.

3.3.1.2 *Existing Conditions*

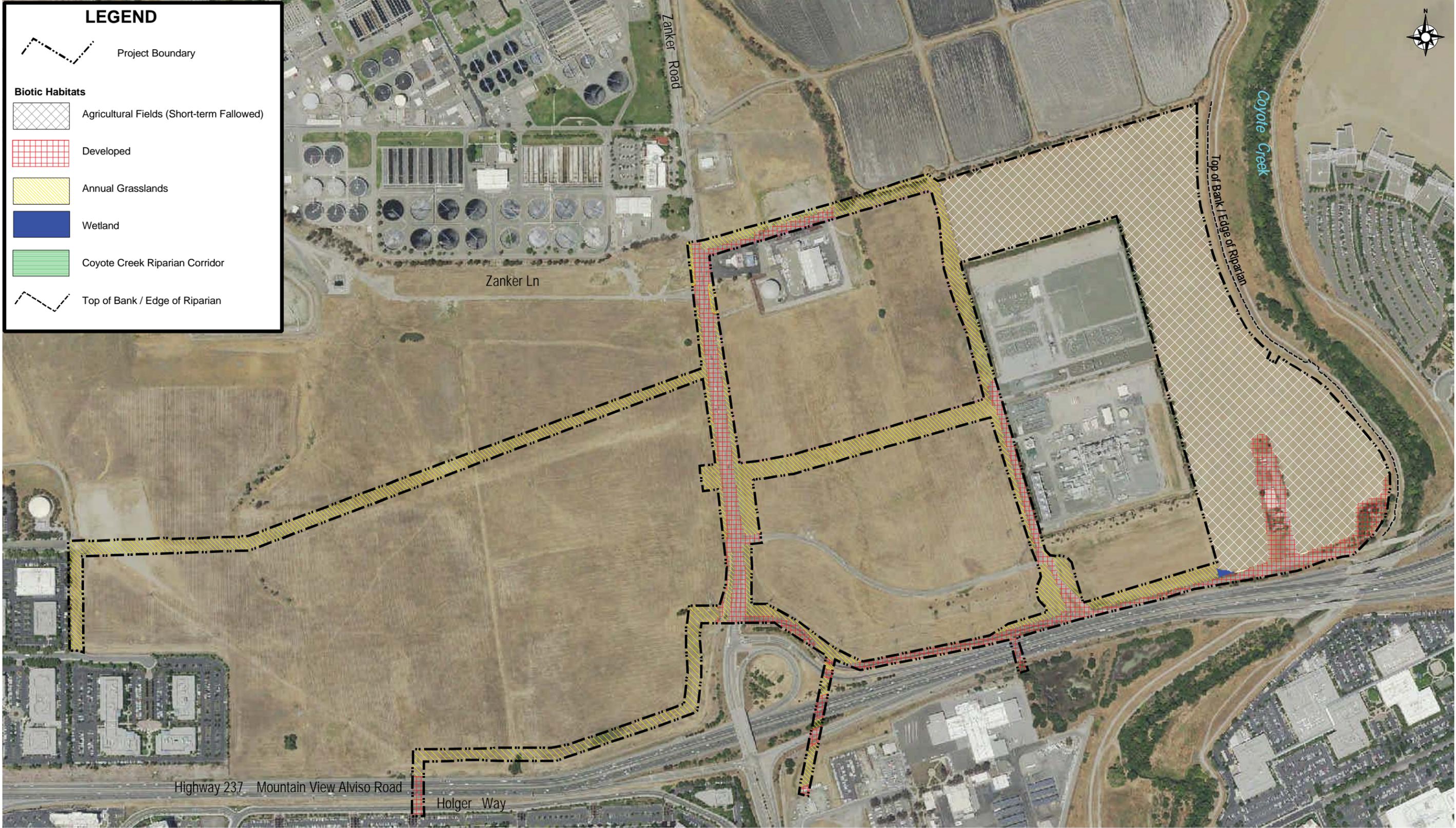
Four general biotic habitat distinctions – agricultural fields (short-term fallowed), annual grassland, developed, and Coyote Creek riparian corridor describe the habitat areas identified within the project area (Figure 3.3-1). The main portion of the site (a total of approximately 60 acres) is comprised of agricultural fields with two developed residential farm supporting areas and a small wetland. The utility alignments (a total of approximately 46.8 acres) are comprised of annual grassland with some developed roads. The potential storm drain outfall would be within the Coyote Creek riparian corridor with a small portion of developed levee road. This riparian habitat is broken up into two habitat types; riparian woodland and riparian floodplain. All habitat areas of the project area are described below.

LEGEND

--- Project Boundary

Biotic Habitats

-  Agricultural Fields (Short-term Fallowed)
-  Developed
-  Annual Grasslands
-  Wetland
-  Coyote Creek Riparian Corridor
- Top of Bank / Edge of Riparian



Source: Live Oak Associate, Inc., 3/7/2017.

BIOTIC HABITATS

FIGURE 3.3-1

Agricultural Fields

The core project area (approximately 64.5 acres of land located west of Coyote Creek and to the east and north of the LECEF natural gas plant and the PG&E station), is predominantly comprised of managed agricultural fields that are regularly disked and are currently fallowed. These areas of the project site appear to have been annually disked and/or farmed for more than 20 years according to historical photography available from Google Earth (accessed June 20, 2016). At the time of the surveys, these fields were mostly comprised of barren exposed soils with scattered ruderal annual grassland species. Vegetation of the agricultural fields were dominated by typical grassland species such as wild oat and Italian rye grass and forb species included cheeseweed mallow, black mustard, and summer mustard.

Other species observed in this habitat of the project area included Harding grass, poison hemlock, field bindweed, bristly ox tongue, prickly lettuce, wild radish, and milk thistle. Along the northern margin of the site, which was less managed, a few woody plants occurred including coyote brush, box elder, Northern California black walnut, and blue elderberry. A linear low depression exists along the western edge of the site, however, with the exception of a couple individuals of wetland species like curly dock, this feature is dominated by upland species like cheeseweed and wild radish. Grasses dominating this feature appear to be undifferentiated from the adjacent field to the east and it has no real defined bed/bank.

Animals observed within this habitat during the site visits include the double-crested cormorant, gull, Canada goose, mallard duck, red-tailed hawk, red-shouldered hawk, barn owl, killdeer, great egret, American crow, western scrub jay, northern mockingbird, black phoebe, mourning dove, rock dove, California towhee, yellow-rumped warbler, western meadowlark, song sparrow, house finch, mouse, Botta's pocket gopher, California ground squirrel, and black-tailed jackrabbit.

Annual Grassland

Annual grassland areas were observed along much of the off-site infrastructure alignment areas of the proposed project (i.e., roadways, potential outfall alignment into Coyote Creek, and potable water, recycled water, fiber optic, sewer, and gas lines). Annual grasslands range from managed fields to a more mesic and intact grasslands and total approximately 32.6 off-site acres. The remaining acres are developed habitat. A filled creek exits running north-south where the utility alignment is planned; this no longer functions as a creek and does not support a bed or bank.

Man-made raised earthen berms exist within the annual grassland, which provide habitat for California ground squirrels, which have colonized many of the berms. One long thin berm exists in the field east of Zanker Road and north of the existing bike path. This berm had several black corrugated pipes installed within the berm. These may have been installed to promote habitat suitability of the property for burrowing owls. Artificial burrows installed to promote burrowing owl use are located within mounds adjacent to the western edge of the infrastructure alignments. Burrowing owls were not observed during the site surveys.

Plants observed in this habitat and along the edges of this habitat include ruderal plants generally found in annual grasslands such as wild oats, black mustard, ripgut, soft chess, Italian thistle, barnyard barley, prickly lettuce, common mallow, wild radish, Russian-thistle, prickly sow-thistle, and common chickweed. Borders of this habitat included landscaped trees and other landscaping.

Animals observed during the site visit in addition to species observed in the agricultural fields include white pelican, turkey vulture, American kestrel, European starling, and vole. Coyote scat was also observed.

Developed

There are developed lands both on the main project site and off-site in the utility alignment areas. Approximately four acres of developed area exists on-site and include:

- A landscaped margin along the western side of the agricultural fields which is shared with the PG&E and LECEF properties (the margin to the west of project site);
- A residential unit in the southeast corner of the site;
- Two additional residential units, a warehouse storage building likely associated with the agricultural uses of the agriculture fields near the center of the site; and
- A large gravel driveway that provides access from the two additional residential units to Ranch Drive.

The residential properties of the site support a mix of horticultural plant species and weedy species. Plants observed in the developed areas include landscape plantings of jacaranda, oleander, privet, pepper trees, and a row of various managed fruit trees and olives. Weedy species around the residential properties include many of the same species observed in the agricultural fields of the site. Animals in the adjacent habitats would be expected to occur in this habitat.

Within the infrastructure alignment areas off-site, approximately 15 acres of developed land use areas include public and private roadways and a bike path on Alviso-Milpitas Road that parallels Highway 237. The potential outfall structure on Coyote Creek would cross an off-site levee, a levee road, and another road on the creek side of the toe of the levee. Both roads are graded gravel roadways. No plants were observed in any of the on- or off-site roadways.

The landscaped margin of the site, which lies along the border of the site, supports pepper and sycamore trees, privet, and crimson bottlebrush to name a few of the plantings. Some of these species overhang the property and some are likely off-site on the utility properties.

Wetlands

A small wetland (approximately 0.066 square feet) exists in the shape of a narrow triangular area near Ranch Drive in the southwestern corner of the main site. It is dominated by a dense stand of California blackberry and there is a pump station next to it. Animals in the adjacent habitats would be expected to occur in this habitat.

Off-Site Riparian Corridor: Coyote Creek Riparian Woodland and Floodplain

Coyote Creek is separated from the project site by a levee topped with a gravel levee road. The riparian habitat of Coyote Creek is comprised of two habitat types; a riparian woodland and a mesic grassland floodplain that appears to be managed for fire fuel abatement. The total acreage of the grassland, mixed riparian forest, seasonal wetland, and urban habitat is approximately 0.43 acres in the area of the potential stormwater outfall.

The riparian woodland of Coyote Creek that runs along the project site's eastern boundary contains mature riparian tree species that provide a dominant habitat canopy. Tree species in the riparian woodland include box elder, California buckeye, cottonwood, valley oak, coast live oak, willows, and black elderberry. Shrubs, forbs, and grasses in the understory of the riparian tree canopy included mugwort, giant reed grass, mulefat, coyote brush, poison hemlock, teasel, broad-leaved peppergrass, California blackberry, curly dock and cattail, to name a few of the observed species.

A grassland floodplain occurs adjacent to the riparian woodland that was dominated by mesic species during the June 2016 site visit. During the October 2016 site visit, this portion of the riparian corridor had been mowed, likely for fire fuel abatement. In general, this area supports grassland species with several mesic and riparian species. Species observed in this habitat area include wild oats, mugwort, broad-leaved peppergrass, curly dock, poison hemlock, teasel, Bermuda grass, stinkwort, perennial wildrye, serrated lettuce, bur clover, and wild radish.

A variety of animal species may use this habitat for both migratory and non-migratory purposes, including those species within the adjacent habitat.

Movement Corridors

Ecologists and conservation biologists have expended a great deal of energy since the early 1980's advocating the protection and restoration of landscape linkages among suitable habitat patches. Movement corridors or landscape linkages are usually linear habitats that connect two or more habitat patches, providing assumed benefits to the species by reducing inbreeding depression, and increasing the potential for recolonization of habitat patches. Some researchers have even demonstrated that poor quality corridors can still provide some benefit to the species that use them. Habitat corridors are vital to terrestrial animals for connectivity between core habitat areas (i.e., larger intact habitat areas where species make their living). Movement corridors in California are typically associated with valleys, rivers and creeks supporting riparian vegetation, and ridgelines.

Healthy riparian areas (supporting structural diversity, i.e., understory species to saplings to mature riparian trees) have a high biological value as they not only support a rich and diverse wildlife community but have also been shown to facilitate regional wildlife movement. Riparian areas can vary from tributaries winding through scrubland to densely vegetated riparian forests.

Although the project site and Coyote Creek are not within a defined linkage in the Santa Clara Valley Habitat Conservation Plan, Coyote Creek is defined as an important regional habitat linkage. Coyote Creek is expected to act as a movement corridor for many common local species.

Special Status Plant and Animal Species

Several species of plants and animals within the State of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the state's human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described above in Section 3.4.1.1, state and federal laws have provided the CDFW and the USFWS with a mechanism for conserving and protecting the diversity of plant and animal species native to the state.

A sizable number of native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as “candidates” for such listing. Still others have been designated as “species of special concern” by the CDFW. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened, or endangered (CNPS 2001). Collectively, these plants and animals are referred to as “special status species.”

A number of special status plants and animals occur in the vicinity of the project area. These species, and their potential to occur in the study area, are listed in Table 1 of Appendix C. Sources of information for this table included *California’s Wildlife, Volumes I, II, and III* (Zeiner et. al 1990), *California Natural Diversity Data Base* (CDFW 2016), *Endangered and Threatened Wildlife and Plants* (USFWS 2016), and the *Annual Report on the Status of California State Listed Threatened and Endangered Animals and Plants* (CDFW 2016).

A search of published accounts for all of the relevant special status plant and animal species was conducted for the Milpitas USGS 7.5 minute quadrangle in which the project site occurs, and for the eight surrounding quadrangles (Newark, Niles, La Costa Valley, Mountain View, Calaveras Reservoir, Cupertino, San José West, and San José East) using the California Natural Diversity Data Base Rarefind5 2016 (CNDDDB). All species listed as occurring in these quadrangles on CNPS Lists 1A, 1B, 2, or 4 were also reviewed.

Serpentine soils are absent from the site; therefore, those species that are uniquely adapted to serpentine conditions are considered absent from the site. Other plant species occur in habitats not present in the study area (e.g., chaparral, broadleafed forest, coastal prairie, coastal scrub, etc.) or at elevations significantly above on-site elevation. Therefore, they are also considered absent from the site.

Thirteen special status animal species from Table 1 in Appendix C potentially occur more frequently as potential foragers, transients, may be resident to the site, or they may occur within areas adjacent to the site. These include steelhead, western snowy plover, American peregrine falcon, northern harrier, white-tailed kite, western burrowing owl, saltmarsh common yellowthroat, tricolored blackbird, Alameda song sparrow, California yellow warbler, Townsend’s big-eared bat, San Francisco dusky-footed woodrat, and ringtail. Several of these species may also roost or nest in trees or shrubs occurring within or adjacent to the site.

The western snowy plover, American peregrine falcon, northern harrier, white-tailed kite, western burrowing owl, saltmarsh common yellowthroat, tricolored blackbird, and Alameda song sparrow, and California yellow warbler may nest on-site or adjacent to the site, and the American peregrine falcon would be expected to forage on and over the site.

No evidence of bats was observed during reconnaissance surveys, and it is highly unlikely that the site supports roosting habitat for bats; however, individual Townsend’s big-eared bats may forage within the site from time to time.

While not observed, the San Francisco dusky-footed woodrat, and salt marsh harvest mouse and shrew are considered to be species that could occur within the Coyote Creek riparian corridor. The majority of the project site does not represent unique habitat for either species, but both could utilize the riparian habitat for foraging habitat and/or nesting/denning habitat.

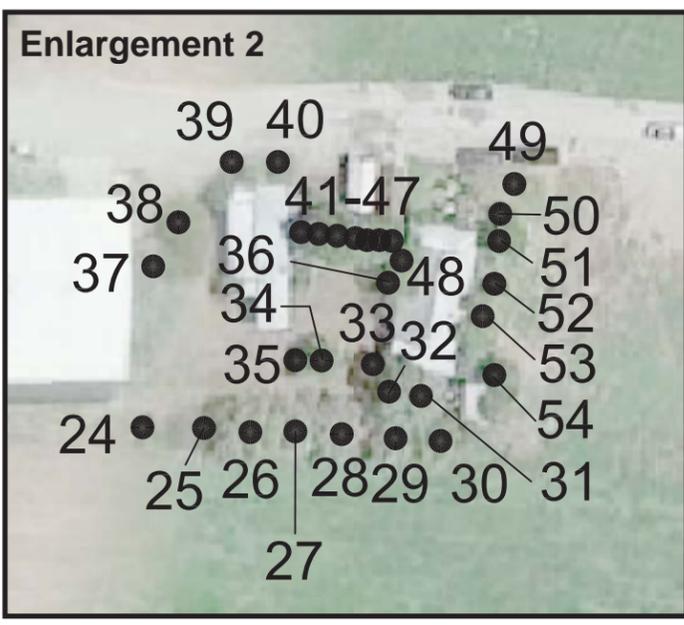
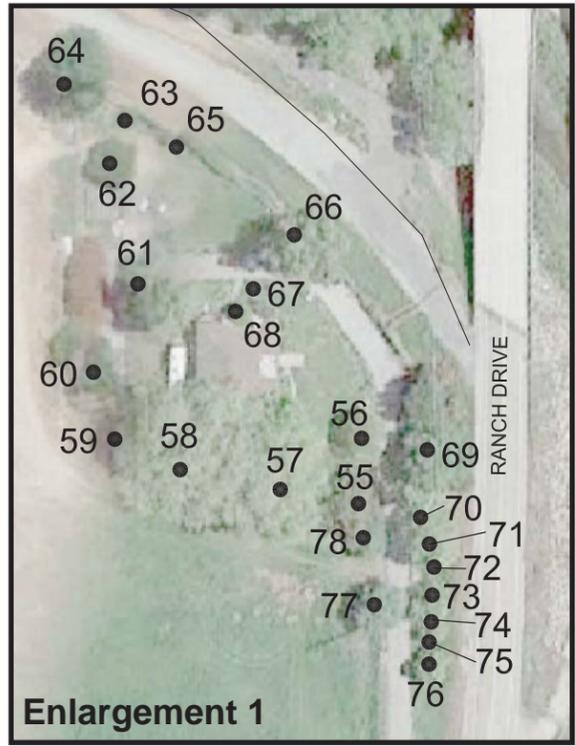
Jurisdictional Waters

Jurisdictional waters include rivers, creeks, and drainages that have a defined bed and bank and which, at the very least, carry ephemeral flows. Jurisdictional waters also include lakes, ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the USACE, CDFW, and the RWQCB. Coyote Creek is considered to be a jurisdictional water. In addition, a small wetland that occurs in the southwestern portion of the main project site may be claimed by the USACE and/or RWQCB.

Trees

There are no trees located within the off-site utility alignment areas, as described in the HMM Engineers tree survey of the utility alignment areas (Appendix E). Approximately 95 trees are located on the main project site, primarily adjacent to the existing residences on-site (as shown in Figure 3.3-2). Approximately 16 of the total trees are located along the northern boundary of the site where the data center would be constructed.

There are approximately 24 ordinance-size trees located on site. Seven of these ordinance-size trees are located along the northern boundary of the site, as shown on Figure 3.3-2 and include three Fremont's Cottonwood, three California Box Elder, and one California Walnut. The remainder of the ordinance-size trees are located in the southern portion of the site adjacent to the existing residences. These trees include Blue Elderberry (3), London Plane (4), California Bay Laurel (1), Cherry (1), California Walnut (1), Glossy Privet (2), Coast Redwood (1), Crepe Myrtle (1), European Olive (2), and Shamel Ash (1).



Source: HMM Engineers., Oct. 6, 2015.

TREE MAP

FIGURE 3.3-2

3.3.2 Biological Resources Impacts

3.3.2.1 *Thresholds of Significance*

For the purposes of this EIR, a biological resource impact is considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS);
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal filling, hydrological interruption, or other means?
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.3.2.2 *Consistency with Plans*

Threatened and Endangered Species

Impacts to migratory birds, birds of prey, and bat species are prohibited under state and federal laws, including the Federal Migratory Bird Treaty Act and State Fish and Game Code. Mitigation measures are included in the project, as described in Section 3.3.3, below to reduce impacts to a less than significant level. Therefore, the project is consistent with plans and policies related to the protection of state and federally threatened and endangered species.

Wetlands and Other Jurisdictional Waters

All activities that involve the filling of jurisdictional waters are subject to the permit requirements of the USACE and RWQCB. The project will be required to acquire permits from these agencies should the wetlands be filled as a part of the construction of the project.

CDFW has jurisdiction over the bed and banks of Coyote Creek up to the inboard top of levee. A Streambed Alteration Permit will be required for impacts associated with the potential stormwater outfall to the creek. Mitigation measures included in the USACE, RWQCB, and CDFW permits and as described below in Section 3.3.3 will be included in the project to reduce impacts to a less than significant level consistent with the plans and policies of these agencies, as well as the SCVHP.

Santa Clara Valley Habitat Plan

The project is considered a covered project under the SCVHP. As a result, the project would be subject to conditions and fees of the SCVHP. Portions of the site are within both Zone A and Zone B Fee Areas. In addition, conditions for covered activities under the SCVHP would be implemented to meet the requirements of the Habitat Plan as well as reduce impacts to biological resources to a less than significant level as described in Section 3.3.3.

Envision San José 2040 General Plan

As previously described in, the Envision San José 2040 General Plan (General Plan) aims to protect biological resources when properties are developed in San José. Projects must be consistent with all measures (Goals) of the General Plan. Implementation of the mitigation measures will be required by the City of San José such that the project is consistent with the General Plan. Final building materials for the proposed structures would be determined based upon their ability to reduce the potential for bird strikes for species associated with the riparian habitats of lower Coyote Creek, consistent with the General Plan.

Riparian Corridor Policy and Bird-Safe Design

The potential stormwater outfall to Coyote Creek is consistent with the Riparian Corridor Policy because buildings, impervious surfaces, and ornamental landscaping are not proposed and it meets the utility exemption to the policy. The proposed industrial project is consistent with the Riparian Corridor Policy because it is located outside of the 100-foot setback. Loading docks and lighting will be oriented away from the creek area to the extent possible. Landscaping and other screening features will be utilized to minimize impacts to the riparian corridor. Outdoor storage, if necessary, will be restricted to areas away from the creek.

The proposed project has been designed to limit the use of transparent or reflective glass to covered front entrances and cafeteria areas. Secondary facades over the window areas serving office areas will be included in the project. Buildings would not be placed in a funneling configuration and up-lighting or spotlights are not planned for the project. Lighting on-site will be minimized to that required for security, safe operation, and maintenance of the facility. For these reasons, and the reasons above, the project is in conformance with Council Policy 6-34 and General Plan policies ER 6-3, 6.10, 7.1, and 7.6.

Ordinance Size Trees

The City of San José's Tree Ordinance regulates the removal of trees. A tree removal permit is required from the City prior to the removal of any trees covered under the ordinance. Approximately 24 ordinance size trees would be removed by the project. Replacement trees would be planted as described in the permit conditions, below, consistent with the Municipal Code.

3.3.2.3 *Loss of Habitat for Special Status Plants and Animal Species*

Of the 20 special status plant species that occur regionally within habitats that are broadly similar to those of the project site, all are considered absent and/or unlikely to occur on- or off-site. This is

because they are not known to occur near the site or they occur within habitats that are subtly and importantly different from those of the site. **(Less than Significant Impact)**

Twenty-nine (29) special status animal species occur, or once occurred, regionally. Of these, sixteen species would be absent or unlikely to occur on the site due to a lack of suitable habitat for these species. The species that would be absent or unlikely to occur include the Bay checkerspot butterfly, vernal pool tadpole shrimp, longfin smelt, California tiger salamander, California red-legged frog, foothill yellow-legged frog, western pond turtle, Alameda whipsnake, California black rail, California clapper rail (Ridgway rail), California least tern, Swainson's hawk, bank swallow, western yellow-billed cuckoo, salt-marsh wandering shrew, and salt marsh harvest mouse.

The thirteen remaining special status animal species from Table 1 in Appendix C potentially occur more frequently as potential foragers, transients, may be resident to the site, or they may occur within areas adjacent to the site. These include steelhead, western snowy plover, American peregrine falcon, northern harrier, white-tailed kite, western burrowing owl, saltmarsh common yellowthroat, tricolored blackbird, Alameda song sparrow, California yellow warbler, Townsend's big-eared bat, and San Francisco dusky-footed woodrat. Several of these species may also roost or nest in trees or shrubs occurring on or adjacent to the site. These species are discussed below:

The western snowy plover, American peregrine falcon, northern harrier, white-tailed kite, western burrowing owl, salt marsh common yellowthroat, tricolored blackbird, and Alameda song sparrow, and California yellow warbler may nest on-site or adjacent to the site, and the American peregrine falcon would be expected to forage on and over the site.

No evidence of bats was observed during reconnaissance surveys and it is highly unlikely that the site supports roosting habitat for bats; however, individual Townsend's big-eared bats may forage in the project area from time to time. Loss of the potential forage habitat for this bat species would be considered a less than significant impact due to the large areas of similar or higher quality bat forage habitat occurring within the vicinity of the project site.

Steelhead and Chinook salmon occur in Coyote Creek in the area of the potential stormwater outfall during migration between marine habitats and upstream spawning habitats. However, no aquatic habitat for special-status fish species occurs in the area of the creek to be affected by potential construction of the stormwater outfall.

The salt marsh harvest mouse and salt marsh wandering shrew are known to occur in salt marsh habitats of the South Bay; however, suitable habitat for these species is not present near Coyote Creek. The San Francisco dusky-footed woodrat is known to occur in the Coyote Creek corridor downstream of the outfall area; however, no woodrat nests were detected during a focused survey in July 2016. For the reasons described above, these species are determined to be absent in the potential outfall area.

3.3.2.4 *Nesting Migratory Bird Including Nesting Raptors and Tri-Colored Blackbirds, and other Protected Birds*

Trees and large shrubs of the site and adjacent Coyote Creek riparian corridor and landscaped areas may support nesting birds and raptors. Buildout of the project during the nesting period for

migratory birds (i.e., typically between February 1 to August 31), including initial site grading, soil excavation, and/or tree and vegetation removal, poses a risk of nest abandonment and death of any live eggs or young that may be present within the nest within or near the site. Such an effect would be considered a significant impact.

Impact BIO-1: Construction activities could result in significant impacts to nesting migratory and other protected bird species. **(Significant Impact)**

3.3.2.5 *Impacts to Western Burrowing Owls*

The project site and off-site utility alignment areas are within the burrowing owl fee area for the SCVHP. Burrowing owls are known to occur adjacent to the site and could occur within artificial burrows specifically designed for burrowing owls near the off-site utility alignments to the west of the site.

The site and off-site utility locations currently support California ground squirrel burrows, and provides potential habitat for burrowing owls. Surveys for burrowing owl per the HCP protocol were conducted on the main portion of the site on June 20 and October 18, 2016 and the utility alignments were surveyed on October 18, 2016. Burrowing owls were not observed during the surveys. As the site is within the burrowing owl fee zone, the project is required to conduct pre-construction surveys in accordance with the Condition 15 of the SCVHP. Measures to ensure compliance with this condition are included below.

Should site grading occur during the nesting season for this species (February 1 through August 31), nests and nestlings that may be present would likely be destroyed. Overwintering burrowing owls may also be buried in their roost burrows outside of the nesting season (September 1 through January 31).

Impact BIO-2: Any actions related to site development that result in the mortality of burrowing owls shall constitute a violation of the Federal Migratory Bird Treaty Act and provisions of the California Fish and Game Code. Therefore, the mortality of burrowing owls would be a significant impact under CEQA. **(Significant Impact)**

3.3.2.6 *Impacts to Riparian Habitat and Other Sensitive Natural Communities, Including Federally Protected Wetlands*

Riparian habitat occurs along Coyote Creek where the potential stormwater outfall would be installed and within the wetland on-site, as shown on Figure 3.3-2. The only impacts to these communities would be the small impact to riparian habitat which would occur where the outfall could occur in the Coyote Creek riparian corridor (approximately 0.16 acres), and a small triangular wetland near Ranch Road in the southwestern corner of the agricultural field (approximately 0.066 acres).

The project complies with the riparian setback requirements of the City of San José and the SCVHP and will not result in significant adverse impacts to riparian habitat. The project would be required to apply for permits from CDFW, USACE, and RWQCB for the potential outfall and from USACE and RWQCB should the small wetland be impacted. Therefore, development of the site would constitute a significant effect on sensitive and protected habitat communities.

Impact BIO-3: The project would cause permanent impacts to riparian vegetation and seasonal wetlands as a result of installation of the potential stormwater outfall at Coyote Creek and project construction in the southwest corner of the site. **(Significant Impact)**

3.3.2.7 *Loss of Habitat for Native Wildlife*

The habitats of the site and off-site utility alignments comprise only a small portion of the regionally available habitat for plant and animal species that are expected to use the habitat. The proposed project would result in the loss of an agricultural field and annual grassland habitat, both of which have been partially disturbed through introduction of non-native plants, historic use of the site, and development and use of a residential areas and roadways.

The Coyote Creek riparian corridor habitat has a high degree of native species in the canopy and thus supports high quality habitat for local species. The loss of a small amount of riparian habitat is not expected to result in a significant effect on local wildlife. Therefore, impacts due to the loss of these habitats for native wildlife resulting from the proposed project are considered less than significant. In addition, the project would be a covered project under the SCVHP. Therefore, the project is subject to paying SCVHP fees, which provide funding into the regional conservation program of the SCVHP that seeks to preserve equal or higher quality habitat within the Habitat Plan Permit Area (generally Santa Clara County). **(Less than Significant Impact)**

3.3.2.8 *Interference with the Movement of Native Wildlife*

Buildout of the site and installation of utilities would not constrain native wildlife movement, as the only corridor is the Coyote Creek riparian corridor at the eastern edge of the project site, and the only impacts to this corridor would be related to a potential outfall into Coyote Creek. Animals currently using Coyote Creek as a corridor are expected to continue to use it at buildout of the project, especially since the existing levee on the west side of the creek would not be affected. The project would therefore, result in a less than significant interference on the movement of native wildlife.

In addition, the project would be a covered project under the SCVHP. Therefore, the project is subject to paying SCVHP fees, which provide funding into the regional conservation program of the SCVHP that seeks to preserve equal or higher quality habitat within the Habitat Plan Permit Area (generally the Santa Clara County). **(Less than Significant Impact)**

3.3.2.9 *Degradation of Water Quality in Seasonal Drainages, Stock Ponds and Downstream Waters*

Eventual site development and construction would require grading that would leave the construction zone barren of vegetation and, therefore, vulnerable to erosion. Eroded soil is generally carried as sediment in surface runoff to be deposited in natural creek beds, and adjacent wetlands. Furthermore, urban runoff is often polluted with grease, oil, pesticide and herbicide residues, heavy metals, etc. These pollutants may eventually be carried to sensitive wetland habitats used by a diversity of native wildlife species.

The deposition of pollutants and sediments in sensitive riparian and wetland habitats would be considered a potentially significant adverse environmental impact. The project would comply with

the City’s grading and NPDES requirements, City policies 6-29 and 8-14, and Condition 3 of the SCVHP (as described within Appendix C), which are designed to protect water quality. Therefore, the project buildout would result in a less than significant impact to water quality. **(Less than Significant Impact)**

3.3.2.10 Impacts to Trees

A tree survey was completed for the site (Appendix E) and identified 94 trees on the project site, of which 24 are ordinance size. While an updated survey would be required prior to approval of a Development Permit for the project, it is currently anticipated that the project would remove all 94 existing trees from the site. The data center alone would remove approximately 16 trees along the northern boundary of the site.

Consistent with the Envision San José 2040 General Plan, trees removed by the project would be replace in accordance with all applicable laws, policies or guidelines, including:

- City of San José Municipal Code
 - Section 13.28 (Street Trees)
 - Section 13.32 (Tree Protection Controls)
- Envision San José 2040 General Plan Policies MS-21.4, MS-21.5, and MS-21.6

Permit Conditions:

Tree removal as a result of the project will require replacement-to-removal ratios set forth by the City of San José, as shown in the table below. The exact number and species of trees to be determined based on consultation with the City Arborist and with the Director of the Department of PBCE.

Table 3.4-2: Tree Replacement-to-Removal Ratios				
Diameter of Tree to be Removed	Native	Non-native	Orchard	Minimum Size of Replacement Trees
≥ 18”	5:1	4:1	3:1	24” box
≥ 12” but < 18”	3:1	2:1	none	24” box
< 12”	1:1	1:1	none	15-gallon container
x:x = tree replacement to tree loss ratio Note: Trees greater than 18” diameter shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees.				

If it is determined that the site lacks sufficient areas to accommodate all of the replacement plantings, one or more of the following measures will be implemented to the satisfaction of the Director of PBCE, at the development permit stage:

- The size of a 15-gallon replacement tree may be increased to 24-inch box and count as two replacement trees.
- Replacement tree plantings may be accommodated at an alternative site(s). An alternative site may include local parks or schools, or an adjacent property

where such plantings may be utilized for screening purposes. However, any alternatively proposed site will be pursuant to agreement with the Director of the Department of PBCE.

- A donation may be made to Our City Forest or similar organization for in-lieu tree planting in the community. Such donation will be equal to the cost of the required replacement trees, including associated installation costs, for off-site tree planting in the local community. A receipt for any such donation will be provided to the City of San José Planning Project prior to issuance of a development permit.

The General Plan FPEIR concluded that compliance with local laws, policies, or guidelines would reduce impacts to trees to a less than significant level. **(Less than Significant Impact)**

There is a potential that some trees on-site may be retained during project construction. Construction activities on-site could potentially damage tree roots, harming the health of the existing trees.

Impact BIO-4: Construction activities on-site could result in significant impacts to trees that may be retained. **(Significant Impact)**

3.3.3 Mitigation and Avoidance Measures

Migratory Birds and Other Protected Bird Species

To ensure that any active nests will not be disturbed and individual birds would not be harmed by construction activities, the following mitigation measures are included in the project to reduce impacts to a less than significant level. In addition, although unlikely to occur on the main portion of the site itself, the SCVHP identifies the project site and the off-site utility alignments to be within 250 feet of potentially suitable tricolored blackbird nesting habitat, thus requiring pre-construction surveys in accordance with the Condition 17 of the SCVHP.

MM BIO-1.1: If initial site disturbance activities, including tree, shrub, or vegetation removal, are to occur during the breeding season February 1st to August 31st inclusive, a qualified biologist shall conduct pre-construction surveys for nesting migratory birds onsite and within 250 feet (for raptors) of the site, where accessible. The survey shall occur within 14 days of the onset of ground disturbance if disturbances are to commence between February 1st and June 30th and within 30 days prior to the onset of ground disturbance between July 1st and August 31st. If a nesting migratory bird were to be detected, an appropriate construction-free buffer shall be established in consultation with the California Department of Fish and Wildlife (CDFW). The actual size of the buffer, which shall be determined by the project biologist, would depend on species, topography, and type of activity that would occur in the vicinity of the nest. The project buffer would be monitored periodically by the project biologist to ensure compliance. After the nest is completed, as determined by the biologist, the buffer would no longer be required.

MM BIO-1.2:

The Santa Clara Valley Habitat Plan (SCVHP) identifies the project site to be within 250 feet of potentially suitable tricolored blackbird nesting habitat occurring along Coyote Creek. The project applicant shall conduct surveys for tricolored blackbirds within 250 feet of this habitat, where visual access is possible, prior to start of construction following protocols in Condition 17 in Chapter 6 of the SCVHP. Such protocols include:

- Prior to any ground disturbance, a qualified biologist shall complete a background assessment to determine if there has been nesting at the site or near the site in the past five years. This includes checking the California Natural Diversity Database (CNDDDB), contacting local experts, and looking for evidence of historical nesting (i.e., old nests).
- If nesting in the past five years is not evident, the qualified biologist shall conduct a preconstruction survey in areas identified in the habitat survey as supporting potential tricolored blackbird nesting habitat. Surveys shall be made at the appropriate times of year when nesting use is expected to occur, and shall document the presence or absence of nesting colonies of tricolored blackbird. Surveys shall conclude no more than two calendar days prior to construction, per Condition 17 of Chapter 6 in the SCVHP.
- Should a nesting colony of tricolored blackbirds be located, a 250-foot construction-free buffer shall be established from the edge of all hydric vegetation associated with the nest site and the buffer shall be avoided, and the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) shall be notified immediately.
- If construction occurs in the project area during the nesting season and when the 250-foot buffer is in place around active nesting habitat, a qualified biologist shall conduct periodic monitoring of the site to ensure the 250-foot buffer is enforced. The biologist shall have the authority to increase the buffer size if needed based on tricolored blackbird behavior at the active nesting area.
- If active tricolored blackbird nesting occurs within 250 feet of the project site and off-site utility alignment areas and construction occurs during the active nesting period resulting in the need for a buffer, the qualified biologist shall conduct training for construction personnel in avoidance procedures, buffer zones, and safety protocols to ensure no impacts to the nest.

Western Burrowing Owls

The following mitigation measures will ensure that burrowing owls will not be harmed by construction activities. Completion of the following measures, including the payment of SCVHP fees, will reduce the potential impacts to burrowing owls to a less than significant level.

MM BIO-2.1: To mitigate impacts to occupied burrowing owl habitat, the project applicant shall pay the burrowing owl fee as specified in the SCVHP for each acre of occupied burrowing owl nesting habitat impacted as a result of project buildout. Fees shall also be required from the loss of foraging habitat on the agricultural fields on-site (approximately 60 acres; Zone B fees) and annual grassland off-site (approximately 31.5 acres; Zone A fees).

MM BIO-2.2: The project applicant shall conduct preconstruction surveys to ascertain whether or not burrowing owls occupy burrows on the site and along the utility alignments off-site prior to construction. The preconstruction surveys shall be performed by a qualified biologist and shall consist of a minimum of two surveys, with the first survey no more than 14 days prior to initial construction activities (i.e. vegetation removal, grading, excavation, etc.) and the second survey conducted no more than 2 days prior to initial construction activities. If no burrowing owls or fresh sign of burrowing owls are observed during preconstruction surveys, construction may continue. However, if a burrowing owl is observed during these surveys, occupied burrows shall be identified by the monitoring biologist and a buffer shall be established, as described below:

- If an active nest is found, a qualified biologist shall establish a 250-foot non-disturbance buffer around all nest sites. If the biologist determines that the nest is vacant, the non-disturbance buffer zone may be removed, in accordance with measures described in the SCVHP. The biologist shall supervise hand excavation of the burrow to prevent reoccupation only after receiving approval from the wildlife agencies (CDFW and USFWS) in accordance with Chapter 6, Condition 15 of the SCVHP.
- For permission to encroach within 250 feet of such burrows during the nesting season (February 1st through August 31st), an Avoidance, Minimization, and Monitoring Plan (AMMP) shall be prepared and approved by the City and the wildlife agencies prior to such encroachment in accordance with Chapter 6 of the SCVHP.

MM BIO-2.3: Should a burrowing owl be located during the non-breeding season (September through January), a 250-foot buffer shall be established and construction activities shall not be allowed within the 250-foot buffer of the active burrow(s) used by any burrowing owl unless the following avoidance measures are adhered to:

- A qualified biologist shall monitor the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).
- The same qualified biologist shall monitor the owls during construction. If the biologist determines there is a change in owl nesting and foraging

behavior as a result of construction activities, these activities shall cease within the 250-foot buffer.

- If the owls are gone from the burrows for at least one week, the project applicant may request approval from the habitat agency to excavate all usable burrows within the construction area to prevent owls from reoccupying the site. After all usable burrows are excavated, the buffer zone shall be removed and construction may continue;

MM BIO-2.4: In the event the voluntary relocation of site burrowing owls does not occur (defined as owls having vacated the site for 10 or more consecutive days), the project applicant can request permission to engage in passive relocation during the non-breeding season through the standard SCVHP application process (Section 6.8 of the SCVHP).

If passive relocation is granted, additional measures may be required by the Habitat Agency.

If the owls voluntarily vacate the site for 10 or more consecutive days, as documented by a qualified biologist, the project applicant could seek permission from the Santa Clara Valley Habitat Agency to have the qualified biologist take measures to collapse vacated and other suitable burrows to ensure that owls do not recolonize the site, in accordance with the SCVHP.

Riparian and Wetland Habitats

Impacts to riparian habitats or areas regulated by the USACE, RWQCB, or CDFW would be considered significant. The following avoidance and minimization measures and compensation, consistent with the SCVHP (Conditions 3, 4, and 12 from Chapter 6) are included in the project to reduce impacts to a less than significant level.

MM BIO-3.1: Prior to the start of any grading or other soil disturbing activities, the project applicant shall be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) consistent with the City's NDPEs C3 provisions.

MM BIO-3.2: A qualified biological monitor shall visit the project site daily during outfall construction to verify that these measures are being fully implemented and are effective.

MM BIO-3.3: Removal of riparian vegetation and/or trees for the potential installation of the outfall shall be limited to the minimum extent required.

MM BIO-3.4: The project applicant shall ensure that all seed mixtures used for revegetation of the impacted riparian habitat of Coyote Creek shall be native or sterile non-native species only. No invasive non-native plant species shall be used for revegetation.

MM BIO-3.5: The project applicant shall comply with all requirements of the CDFW, U.S. Army Corps of Engineers (USACE), and Regional Water Quality Control Board (RWQCB) permits required for the construction of the outfall, including any additional mitigation measures and all monitoring requirements.

Trees

The following measure shall be implemented to reduce impacts to trees (that may be retained) from project construction to a less than significant level. All mitigation measures for impacts to trees that may be retained are subject to agreement with the Director of the Department of PBCE.

MM BIO-4.1: The project applicant, in consultation with a certified arborist or biologist, shall submit a Tree Protection Plan (TPP) to the Supervising Environmental Planner of the Department of Planning, Building, and Code Enforcement for trees to be preserved. The TPP shall include, but is not limited to:

- Number of trees and location of trees to be protected
- Final landscaping proposal
- Tree Protection Zone (TPZ)
- Size and location of TPZ
- Specific recommendation and suggestions or recommendation for each TPZ if applicable
- Maintenance methodology for tree protection zones during the entire demolition and construction period
- Irrigated schedule
- Pruning schedule for preserved trees, if applicable
- Herbicides and other products recommended to be used on preserved trees

3.3.4 Conclusion

The proposed project includes mitigation measures consistent with the plans and policies of CDFW, USACE, RWQCB, and the City of San José's General Plan and Municipal Code. For these reasons, the project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **(Less than Significant Impact)**

With implementation of the identified mitigation measures and permit conditions, the proposed project would have a less than significant impact to special-status species, habitat, and trees. **(Less than Significant With Mitigation)**

3.4 CULTURAL RESOURCES

The following analysis is based on a historic evaluation prepared by *Archives & Architecture* in March 2017 and a cultural resources survey completed by *Holman & Associates* in November 2016. The historic report is provided in Appendix F of this EIR. The cultural resources report is on file at the City of San José Department of PBCE.

3.4.1 Environmental Setting

3.4.1.1 *Regulatory Framework*

Historic Structures

Below is an overview of criteria used to assess the historic significance and eligibility of a building, structure, object, site or district for listing in the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and the City of San José Historic Resources Inventory.

National Criteria

The NRHP is the nation's most comprehensive list of historic resources and includes historic resources significant in American history, architecture, archeology, engineering and culture, at the local, state and national level. National Register Bulletin Number 15, How to Apply the National Register Criteria for Evaluation, describes the Criteria for Evaluation as being composed of two factors. First, the property must be "associated with an important historic context", and second the property must retain integrity of those features necessary to convey its significance.

The National Register identifies four possible context types or criteria, at least one of which must be applicable at the national, state, or local level. As listed under Section 8, "Statement of Significance," of the National Register of Historic Places Registration Form, these are:

- A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B. Property is associated with the lives of persons significant in our past.
- C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D. Property has yielded, or is likely to yield, information important to prehistory or history.

State of California Criteria

The California Office of Historic Preservation's Technical Assistance Series #6, *California Register and National Register: a Comparison*, outlines the differences between the federal and state processes. The context types to be used when establishing the significance of a property for listing

on the California Register of Historical Resources are very similar, with emphasis on local and state significance. They are:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
2. It is associated with the lives of persons important to local, California, or national history; or
3. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; or
4. It has yielded, or is likely to yield, information important to prehistory or history of the local area, California, or the nation.

City of San José Criteria for Local Significance

In accordance with the City of San José’s Historic Preservation Ordinance (Chapter 13.48 of the Municipal Code), a resource qualifies as a City Landmark if it has “special historical, architectural, cultural, aesthetic or engineering interest or value of an historic nature” and is one of the following resource types:

1. An individual structure or portion thereof;
2. An integrated group of structures on a single lot;
3. A site, or portion thereof; or
4. Any combination thereof.

The ordinance defines the term “historical, architectural, cultural, aesthetic, or engineering interest or value of an historic nature” as deriving from, based on, or related to any of the following factors:

1. Identification or association with persons, eras or events that have contributed to local, regional, state or national history, heritage or culture in a distinctive, significant or important way;
2. Identification as, or association with, a distinctive, significant or important work or vestige:
 - a. Of an architectural style, design or method of construction;
 - b. Of a master architect, builder, artist or craftsman;
 - c. Of high artistic merit;
 - d. The totality of which comprises a distinctive, significant or important work or vestige whose component parts may lack the same attributes;
 - e. That has yielded or is substantially likely to yield information of value about history, architecture, engineering, culture or aesthetics, or that provides for existing and future generations an example of the physical surroundings in which past generations lived or worked; or
 - f. That the construction materials or engineering methods used in the proposed landmark are unusual or significant of uniquely effective.
3. The factor of age alone does not necessarily confer a special historical, architectural, cultural,

aesthetic, or engineering significance, value or interest upon a structure or site, but it may have such effect if a more distinctive, significant or important example thereof no longer exists (Section 13.48.020 A).

The ordinance also provides a designation of a district: “a geographically definable area of urban or rural character, possessing a significant concentration or continuity of site, building, structures or objects unified by past events or aesthetically by plan or physical development (Section 13.48.020 B).

Any potentially historic property can be nominated for designation as a city landmark by the City Council, the Historic Landmarks Commission or by application of the owner or the authorized agent of the owner of the property for which designation is requested.

Based upon the criteria of the City of San José Historic Preservation Ordinance, the San José Historic Landmarks Commission established a quantitative process, based on the work of Harold Kalman (1980), by which historical resources are evaluated for varying levels of significance. This historic evaluation criterion, and the related Evaluation Rating Sheets, is utilized within the Guidelines for Historic Reports published by the City’s Department of PBCE, as last revised on February 26, 2010.

Although the criteria listed within the Historic Preservation Ordinance are the most relevant determinants when evaluating the significance of historic resources in San José, the numerical tally system is used as a general guide for the identification of potential historic resources. The “Historic Evaluation Sheet” reflects the historic evaluation criteria for the Registers as well as the City’s Historic Preservation Ordinance, and analyzes resources according to the following criteria:

- Visual quality/design
- History/association
- Environment/context
- Integrity
- Reversibility

A rating with numerical “points” is assigned by a qualified evaluator according to the extent to which each building meets the criteria listed above.

33 and above points Structure of Merit (SM)
1-32 points Evaluated and found to be non-significant

The numerical rating system is not used to determine eligibility of a property for City Landmark designation.

Envision San José General Plan

The Envision San José 2040 General Plan includes policies applicable to all development projects in San José. The following policies are specific to cultural resources and are applicable to the proposed project.

Policy ER-10.1: For proposed development sites that have been identified as archaeologically or paleontologically sensitive, require investigation during the planning process in order to determine whether potentially significant archaeological or paleontological information may be affected by the project and then require, if needed, that appropriate mitigation measures be incorporated into the project design.

Policy ER-10.2: Recognizing that Native American human remains may be encountered at unexpected locations, impose a requirement on all development permits and tentative subdivision maps that upon discovery during construction, development activity will cease until professional archaeological examination confirms whether the burial is human. If the remains are determined to be Native American, applicable state laws shall be enforced

Policy ER-10.3: Ensure that City, State, and Federal historic preservation laws, regulations, and codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and prehistoric resources.

Policy LU-13.4: Require public and private development projects to conform to the adopted City Council Policy on the Preservation of Historic Landmarks.

Policy LU-13.9: Promote the preservation, conservation, rehabilitation, restoration, reuse, and/ or reconstruction, as appropriate, of contextual elements (e.g., structures, landscapes, street lamps, street trees, sidewalk design, signs) related to candidate and/or landmark buildings, structures, districts, or areas.

Policy LU-14.4: Discourage demolition of any building or structure listed on or eligible for the Historic Resources Inventory as a Structure of Merit by pursuing the alternatives of rehabilitation, re-use on the subject site, and/or relocation of the resource.

Policy LU-16.4: Require development approvals that include demolition of a structure eligible for or listed on the Historic Resources Inventory to salvage the resource's building materials and architectural elements to allow re-use of those elements and materials and avoid the energy costs of producing new and disposing of old building materials.

Policy CD-1.26: Apply the Historic Preservation Goals and Policies of this Plan to proposals that modify historic resources or include development near historic resources.

Alviso Master Plan

The *Alviso Master Plan* includes policies applicable to all development projects within the plan area. The following policies are specific to cultural resources and are applicable to the proposed project.

Historic Preservation Policy 1: Existing structures with significant historic or architectural merit should be preserved where possible and may be occupied with any land use which is compatible with the existing and planned character of surrounding properties.

3.4.1.2 *Existing Conditions*

Native Americans occupied Santa Clara Valley and the greater Bay Area for more than 1,000 years. The exact time period of the Ohlone (originally referred to as Costanoan) migration into the Bay Area is debated by scholars. Dates of the migration range between 3000 B.C. and 500 A.D. Regardless of the actual timeframe of their initial occupation of the Bay Area and, in particular, Santa Clara Valley, it is known that the Ohlone had a well-established population of approximately 7,000 to 11,000 people with a territory that ranged from the San Francisco Peninsula and the East Bay south through the Santa Clara Valley and San Juan Bautista and Monterey.

The Ohlone lived in small villages referred to as tribelets. Each tribelet occupied a permanent primary habitation site and also had smaller resource procurement camps. The Ohlone, who were hunter/gatherers, traveled between their various village sites to take advantage of seasonal food resources (both plants and animals). During winter months, tribelets would merge to share food stores and engage in ceremonial activities.

The project site is located in a culturally sensitive area due to known prehistoric and historic occupation of San José and the Bay and the site's proximity to Coyote Creek. Native American settlements are commonly associated with the abundant food supply in the Santa Clara Valley and they often established settlements near local waterways.

Literature Review

A literature review was completed to document any recorded archaeological sites within one-quarter mile of the project site. The review confirmed that no cultural resources have been recorded within the boundaries of the main project site or within the proposed locations of the new utility lines. One resource, CA-SCL-528, is located within the project area. The site, first recorded in 1983 contains a low-density midden with bay and marine shells, bones, and heat affected rock. Historic era artifacts were also identified during the 1983 survey, as well as one burial. Agricultural operations on the project site and surrounding area have resulted in a high level of disturbance in the top 20 inches of soil.

In 1997, a survey was completed for the proposed Los Esteros Substation and Transmission Routes project, which included portions of the project site. No cultural resources were found. Another survey in 2000 for the U.S. Dataport project included the project site. The site survey found scattered fragments of non-historic age. Nevertheless, the area was deemed to have a high potential for prehistoric and historic-era resources.

In 2009, further testing was completed north of CA-SCL-528 to identify further artifacts potentially associated with that resource. Only minor fragments were found but the boundaries of the resource were further defined.

Twelve additional surveys have been completed within portions of the current project area, most of which were linear studies related to Coyote Creek, Highway 237, trails, and a telecommunication tower.

Two historical complexes have been recorded on the east side of Coyote Creek related to Murphy Ranch/Shaghnessy-Murphy Ranch and an early twentieth century agricultural compound. A Native

American site was recorded generally southeast of the site (just outside the one-quarter mile project area radius) which contained a shell midden with dietary faunal remains, heat affected rock, and human remains. In this area of northern San José, Native American sites have been recorded on the wide valley terraces within one-half mile of major waterways and creeks and adjacent to the original Bay shoreline.

Site Survey

In October 2016, a survey was completed for the project site and off-site utility corridors. The main project site had been recently disked. The utilities corridors were covered with a dense layer of matted grass and had limited visibility. No surface indications of any buried archaeological deposits or cultural materials was found.

Structures on the Project Site

Two residential buildings, one mobile home and multiple farm-related accessory structures are located in the southern portion of the project site. Both of the permanent houses are more than 50 years old and are discussed in detail below.

1657 Alviso-Milpitas Road (Edgar Jackson House)



The building at 1657 Alviso-Milpitas Road is a one-story Craftsman Prairie-style house with Mission Revival details that was constructed in 1929/30. The house was originally constructed for Edgar Jackson, who operated a 79-acre pear orchard on the site. It appears that the house was designed by the firm Wolfe & Higgins following the death of Frank Delos Wolfe, although the listing was not found in construction journals from the period.

The house is a square-shaped, wood-frame structure clad in stucco with a symmetrical façade. The defining features of the building include a small recessed entry patio, an ornate arched door within a stoop with a stucco-clad, arched, Mission Revival style surround, and a hipped roof. One of the original entry doors on the west elevation has been sealed and some windows have been replaced. Some original windows do, however, remain including tall casement windows with multi-lite glazing on the southeast corner of the building and Mission Revival style arched multi-lite windows on the east façade. To the rear of the house is a matching garage and attached shed.

1591 Alviso-Milpitas Road



The buildings at 1591 Alviso-Milpitas Road consist of a house and related ancillary buildings which serve as housing and staging areas for current ranch operations. The house, mostly hidden behind large trees and shrubs, is a one-story National-style house that was constructed around 1899.

The house is a simple board-wall structure that has been clad with single-bevel teardrop wood siding. The siding may be part of the original construction or may have been added at a later date as the siding does not match up on all sides of the structure. The house has a covered front porch, which is a replacement. The roof is peaked and a small six-lite attic window is centered over the porch. The roof has been replaced with standing-seam metal roofing. The house has no foundation and sits on a wood base. It appears that the house may have been relocated to the project site from another location. The house is in a deteriorated condition. The shed addition is of make-shift construction and has exposed rafter-tails at the rear of the structure, which indicates it was constructed in the twentieth century.

As shown in the photo on the right, a second ancillary residence is located behind the main house. It is a circa 1960s prefabricated structure with metal cladding.



North of the second dwelling is a large prefabricated metal farm building (circa 1960s), as shown in the photo to the left.

The most northern building (shown in the photo to the right) is an early twentieth century equipment shed which was likely associated with the 1920s development on the project site. The shed is of post and beam construction with seven bays and a corrugated metal roof. The two most northern bays were likely added to the original structure. This shed is in a deteriorated state.



The property was originally owned by William Boots, a local farmer and horse breeder. The project site was only a portion of his total land holdings. Mr. Boots died in 1900 and his wife and children continued operations. His son, William Boots Jr., took over the farming operations site in 1906 and farmed the land until 1913 when the property was sold. Edgar Jackson, a farmer, entrepreneur, and community leader, purchased the property sometime before 1922, constructed the home, and operated a pear orchard until the mid-1960s, when the property was sold and converted to row crops. Mr. Jackson lived on-site until the mid-1950s at which time the house became a rental property and has continued as such to the present time.

The project site was part of a larger farm owned and operated by William Boots. While the site has been used for agriculture for approximately 150 years, in its current state it is not representative of early row crop and later orchard development in the area. The main grouping of buildings has a mixed history and it appears some original buildings are no longer extant. The Jackson House, while constructed in the 1920s, was separated from later ranch operations and does not convey the agricultural history of the site.

While William Boots was a local farmer, he is not considered locally significant regarding that business. He may have some significance as an early horse breeder, but breeding operations were not located on the project site. Mr. Jackson has some importance in twentieth century North San José agriculture, although his contributions are not known to be significant. As a result, neither the site nor the buildings are representative of persons of significance at a local or state level.

The main grouping of buildings are vernacular and lack distinction. As noted above, however, the Jackson House appears architect-designed and may be associated with the firm of Wolfe & Higgins following the death of Frank Delos Wolfe. It has been reviewed by Krista Van Laan, author of *Wolfe and Higgins; Master Architects of the Spanish Revival*, and she concurs that the structure is a Wolfe & Higgins design based on the design features and year of construction.

While the Jackson House is an unusual design and has well-preserved character associated with both Prairie and Craftsman residential architecture, it is not a distinctive example of the work of the assumed architects Wolfe and Higgins. Designs such as the Jackson House, if attributed to Wolfe and Higgins, and commissioned after Frank's death, are derivative of his earlier recognized work and often lack the distinctive qualities that are reflective of the hand of a master architect. While William E. Higgins is recognized as an important San José architect in his own right, the house appears more associated with Frank's son Carl, who provided continuity to the firm in the late 1920s until Higgins became the sole proprietor.

The site and buildings have not yielded, nor are likely to yield, information important to prehistory or history of the local area, California, or the nation. The buildings are not eligible for the CRHP under any criterion and are not considered a historic resources.

When considering the City's landmark eligibility criteria in the context of the California Register eligibility considerations as well as qualities specific to the local landmark designation process, the property does not appear to qualify as a City Landmark. Under the City of San José evaluation rating system, the Jackson House scores 50.16 points, indicating that it qualifies for listing on the San José Historic Resources Inventory as a Structure of Merit. The collection of buildings at 1591 Alviso-Milpitas Road scored 26.64 points, indicating that they do not qualify for listing on the San José Historic Resources Inventory. None of the buildings would qualify as a candidate City Landmark.

3.4.2 Cultural Resources Impacts

3.4.2.1 *Thresholds of Significance*

For the purposes of this EIR, a cultural resources impact is considered significant if the project would:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Disturb any human remains, including those interred outside of dedicated cemeteries;
- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or
 - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying this criteria, the significance of the resource to a California Native American tribe shall be considered.

3.4.2.2 *Consistency with Plans*

The project would have no impact on historic structure on or off the project site and would be consistent with General Plan Policies LU-13.4, LU-13.9, LU-14.4, LU-16.4, and CD-1.26 and Master Plan Policy *Historic Preservation Policy 1*. With implementation of permit conditions, the project would be consistent with Policies ER-10.1, ER-10.2, and ER-10.3.

3.4.2.3 *Impacts to Prehistoric and Historic Subsurface Archaeological Resources*

As discussed in Section 3.5.1.2, the project site is near a recorded prehistoric site, the boundaries of which have not been fully defined. Based on the known prehistoric and historic occupation of the immediate project area and project site, the location of the site adjacent to Coyote Creek, and findings of previous archaeological work in the project area, it is reasonable to assume that prehistoric and historic subsurface artifacts (including human remains) could be found on the project site.

The *2040 General Plan Final EIR* concluded that with implementation of existing regulations and adopted General Plan policies, new development within San José would have a less than significant impact on subsurface prehistoric and historic resources.

Policy ER-10.1 states that for proposed development sites that have been identified as archaeologically or paleontologically sensitive, the City will require investigation during the planning process in order to determine whether potentially significant archaeological or paleontological information may be affected by the project and then require, if needed, that appropriate mitigation measures be incorporated into the project design.

The CEQA Guidelines provide detailed direction on the requirements for avoiding or mitigating significant impacts to historical and archaeological resources. Section 15064.5(b)(4) of the Guidelines states that a lead agency shall identify mitigation measures and ensure that the adopted measures are fully enforceable through permit conditions, agreements, or other measures. In addition, CEQA Guidelines Section 15126.4(b)(3) states that public agencies should, whenever feasible, seek to avoid damaging effects on any historical resources of an archaeological nature. Preservation in place is the preferred manner of avoiding impacts to archaeological sites, although data recovery through excavation is acceptable if preservation is not feasible. If data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provisions for adequately recovering the scientifically consequential information from and about the historic resource, needs to be prepared and adopted prior to any excavation being undertaken.

As proposed, the project would excavate the site to a minimum depth of 10 feet to accommodate building foundations and utilities. As a result, subsurface resources on-site would be disturbed if present on-site.

Impact CUL-1: Construction of the proposed project could result in significant impacts to subsurface cultural resources should they be located on-site. **(Significant Impact)**

3.4.2.4 *Paleontological Resources*

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. Geologic units of Holocene age are generally not considered sensitive for paleontological resources, because biological remains younger than 10,000 years are not usually considered fossils; however, mammoth remains were found along the nearby Guadalupe River in San José in 2005. These sediments have low potential to yield fossil resources or to contain significant nonrenewable paleontological resources. These recent sediments, however, may overlie older Pleistocene sediments with high potential to contain paleontological resources. These older

sediments, often found at depths of greater than 10 feet below the ground surface, have yielded the fossil remains of plants and extinct terrestrial Pleistocene vertebrates. Based on the underlying geologic formation of the project site, the *2040 General Plan Final EIR* found the project site to have a high sensitivity (at depth) for paleontological resources.

The *2040 General Plan Final EIR* concluded that with implementation of existing regulations (California Public Resources Code Section 30244) and adopted General Plan policies ER-10.1 and ER-10.3, new development within San José would have a less than significant impact on paleontological resources. To protect from inadvertent discovery during construction, the project shall comply with the following permit conditions:

Permit Conditions:

- The project proponent shall ensure all construction personnel receive paleontological resources awareness training that includes information on the possibility of encountering fossils during construction; the types of fossils likely to be seen, based on past finds in the project area; and proper procedures in the event fossils are encountered. Worker training shall be prepared and presented by a qualified paleontologist.
- If vertebrae fossils are discovered during construction, all work on the site shall stop immediately until a qualified professional paleontologist can assess the nature and importance of the find and recommend an appropriate treatment plan. The treatment plan shall be submitted to the PBCE Supervising Environmental Planner and Historic Preservation Officer to approval. The approved treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds.

While excavation on-site would reach a maximum depth of 10 feet and the site is near the original Bay shoreline, it is unlikely that paleontological resources would be discovered because no paleontological resources have been discovered in this area of San José or on the project site in numerous surveys and excavations. With implementation of the identified permit conditions and compliance to identified regulations and General Plan policies, the project would result in a less than significant impact on paleontological resources. (**Less Than Significant Impact**)

3.4.2.5 *Impacts to Historic Structures*

Under CEQA, a structure need not be listed on a national, state, or local register to qualify as a significant resource. A structure is considered a significant resource under CEQA if it is found to be eligible for inclusion on a national, state, or local register. Furthermore, as outlined in the criteria of significance above, a prized architectural style or appealing aesthetic is not the sole determining factor in the historical significance of a structure, as structures can also be significant for association with important persons or events.

Public opinions on what is visually appealing or architecturally important change over time, so a structure's aesthetic may not be appreciated by modern standards. That does not, however, preclude it from being eligible for listing as a historic resource. The Jackson House was found to be eligible for listing on the City's Historic Resources Inventory as a Structure of Merit, but is not a candidate City Landmark. At the discretion of the Historic Preservation Officer, the project and historic report

shall be reviewed by the Historic Landmarks Commission to make a recommendation as to whether the Jackson House should be included on the San José Historic Resources Inventory.

The City's General Plan Policy LU-14.4 discourages the demolition of any building or structure listed on or eligible for the Historic Resources Inventory as a Structure of Merit by pursuing the alternatives of rehabilitation, re-use on the subject site, and/or relocation of the resource.

Therefore, the project applicant has proposed that prior to implementation of development on the southern portion of the project site, they would implement the following Standard Measures:

Standard Measures:

- **Photo Documentation:**

Professional Qualifications: The photo documentation shall be conducted by a qualified consultant meeting the professional qualification standards of the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*. Department of Parks and Recreation, Primary Record (DPR A) and Building, Structure, and Object (DPR 523B) forms:

- The bound and electronic copy of the Historic Report and/or DPR forms for the Structures/Site

Non-Historic American Building Survey Archival Photo-Documentation:

- Cover sheet-The documentation shall include a cover sheet identifying the following: photographer, address of building, common or historic building name, date of construction, date of photographs and description of photographs.
- Camera- A 35mm camera.
- Film-Must use black and white film; tri-X, Plus-X, or T-Max film is recommended.
- View-Perspective view-front and other elevations.
- Lighting-Sunlight is usually preferred for exteriors, especially of the front facade.
- Technical-All areas of the photograph must be in sharp focus

Submission of Photo-Documentation: Evidence that the documentation, including the original prints and negatives, has been submitted to History San Jose, 1650 Senter Road, San Jose, CA 95112-2599), shall be submitted to the Historic Preservation Officer. Digital photos may be provided as a supplement to, but not in place of, the above photo-documentation. The above shall be accompanied by a transmittal stating that the documentation is submitted in fulfillment of standard measures for the loss of the Structure of Merit which shall be named and the address stated.

- **Relocation:** Prior to issuance of Public Works clearance, the structure(s) shall be advertised for relocation. The project applicant shall provide evidence that the structure has been retained and advertised for relocation by placing an advertisement in a newspaper of general circulation, posting on a website, and on-site posting for 60 days. The draft public notice shall be submitted to the City's Historic Preservation Officer for review prior to publication.

- **Salvage:** If relocation is not successful, prior to issuance of Public Works Clearance, the structure and site shall be retained and advertised for salvage by placing an advertisement in a newspaper of general circulation, posting on a website, and on-site posting for 30 days.

While the City deems Structures of Merit as important local resources, they are not considered significant historic resources under CEQA. Therefore, demolition of this structure would have a less than significant impact on historic structures. **(Less Than Significant Impact)**

3.4.3 Mitigation and Avoidance Measures

3.4.3.1 *Impacts to Subsurface Cultural Resources*

To comply with General Plan Policy ER-10.1 and reduce impacts to subsurface cultural materials, the following measures are included in the proposed project.

MM CUL-1.1: Prior to the issuance of any grading permit, the project applicant shall be required to complete subsurface testing to determine the extent of possible resources on-site. Subsurface testing shall be completed by a qualified archaeologist. Based on the findings of the subsurface testing, an archaeological resources treatment plan shall be prepared by a qualified archaeologist and submitted to PBCE Supervising Environmental Planner and Historic Preservation Officer for approval prior to the issuance of grading permits.

MM CUL-1.2: The project applicant shall implement the approved treatment plan prior to the issuance of grading permits. The approved treatment plan shall utilize data recovery methods to reduce impacts on subsurface resources.

MM CUL-1.3: All prehistoric and historic-era features identified during exploration shall be evaluated by a qualified archaeologist based on the California Register of Historical Resources criteria consistent with the archaeological treatment plan. After completion of the field work, all artifacts shall be cataloged and the appropriate forms shall be completed and filed with the Northwest Information Center of the California Archaeological Inventory at Sonoma State University by the qualified archaeologist in coordination with the PBCE Supervising Environmental Planner and Historic Preservation Officer prior to issuance of occupancy permits (temporary or final).

MM CUL-1.4: In the event that prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped, the Director of PBCE shall be notified, and a qualified archaeologist shall examine the find. The archaeologist shall evaluate the find(s) to determine if they meet the definition of a historical or archaeological resource and make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits. If the finds do not meet the definition of a historical or archaeological resources, no further study or protection is necessary prior to project implementation. If the find(s) does meet the definition of a historical or archaeological resource, then it

shall be avoided by project activities. If avoidance is not feasible, adverse effects to such resources shall be mitigated in accordance with the recommendations of the archaeologist. Recommendations shall include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery would be submitted to the Director of PBCE and the Northwest Information Center.

The project applicant shall ensure that construction personnel does not collect or move any cultural material, and shall ensure that any fill soils that may be used for construction purposes do not contain any archaeological materials.

MM CUL-1.5: In the event that human remains are discovered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped. The Santa Clara County Coroner shall be notified immediately and shall make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the identification. Once the NAHC identifies the most likely descendants (MLD), the descendants shall make recommendations regarding proper burial (including the treatment of grave goods), which shall be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

The archaeologist shall recover scientifically-valuable information, as appropriate and in accordance with the recommendations of the MLD. A report of findings documenting any data recovery shall be submitted to the Director of PBCE and the Northwest Information Center.

3.4.4 Conclusion

With implementation of the conditions of approval and permit conditions measures, the proposed project would not result in significant impacts to subsurface archaeological resources. **(Less Than Significant Impact with Mitigation)**

The proposed project would be consistent with applicable City policies and regulatory programs and, as a result, would have a less than significant impact on paleontological resources impact. **(Less Than Significant Impact)**

The proposed project would have a less than significant impact on historic structures. **(Less Than Significant Impact)**

3.5 ENERGY

The following discussion is based, in part, on an air quality analysis prepared by *Illingworth & Rodkin* in November 2016. The report can be found in Appendix B.

3.5.1 Environmental Setting

The proposed project site is fallow farmland, with energy consumption limited to farm equipment used for weed control (disking) and for the three residential structures.

Energy consumption is analyzed in an EIR because of the environmental impacts associated with its production and usage. Such impacts include the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.) and emissions of pollutants during both the production and consumption phases of energy use.

Energy usage is typically quantified using the British thermal unit (Btu).⁹ As points of reference, the approximate amount of energy contained in a gallon of gasoline, a cubic foot of natural gas, and a kilowatt hour (kWh) of electricity are 123,000 Btus, 1,000 Btus, and 3,400 Btus, respectively. Utility providers measure gas usage in therms. One therm is approximately equal to 100,000 Btus.

Electrical energy is expressed in units of kilowatts (kW) and kWh. One kW, a measurement of power (energy used over time), equals one thousand joules¹⁰ per second. A kWh is a measurement of energy. If run for one hour, a 1,000 watt (one kW) hair dryer would use one kWh of electrical energy. Other measurements of electrical energy include the megawatt (1,000 kW) and the gigawatt (1,000,000 kW).

Total energy usage in California was approximately 7,600 trillion Btus in the year 2014 (the most recent year for which this specific data was available).¹¹ The breakdown by sector was approximately 18 percent for residential uses, 19 percent for commercial uses, 24 percent for industrial uses, and 39 percent for transportation.¹²

3.5.1.1 *Regulatory Framework*

Federal

At the federal level, energy standards set by the United States Environmental Protection Agency (EPA) apply to numerous consumer and commercial products (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

⁹ A Btu is the amount of energy that is required to raise the temperature of one pound of water by one degree Fahrenheit.

¹⁰ As defined by the International Bureau of Weights and Measures, the joule is a unit of energy or work. One joule equals the work done when one unit of force (a Newton) moves through a distance of one meter in the direction of the force.

¹¹ United States Energy Information Administration (EIA). California Energy Consumption Estimates 2014. Accessed December 7, 2016. <http://www.eia.gov/state/?sid=CA#tabs-2>.

¹² EIA. California Energy Consumption by End-Use Sector, 2014. Accessed December 7, 2016.

http://www.eia.gov/beta/state/seds/data.cfm?incfile=/state/seds/sep_sum/html/sum_btu_1.html&sid=CA.

State of California

Renewable Energy Standards

In 2002, California established its Renewables Portfolio Standard (RPS) Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. In 2006, California's 20 percent by 2010 RPS goal was codified under Senate Bill (SB) 107. Under the provisions of SB 107, investor-owned utilities were required to generate 20 percent of their retail electricity using qualified renewable energy technologies by the end of 2010. In 2008, Executive Order S-14-08 was signed into law and required that retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Pacific Gas and Electric Company (PG&E) is the electricity provider to the project site. PG&E's 2015 electricity mix was 30 percent renewable.¹³

In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 for retail sellers and publicly owned utilities, requires them to procure 50 percent of the state's electricity from renewable sources by 2030.

Building Codes

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years; the 2013 standards became effective July 1, 2014. The 2016 Title 24 updates will likely go into effect on January 1, 2017.¹⁴ Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.¹⁵

In January 2010, the state adopted the California Green Building Standards Code (CALGreen), which established mandatory green building standards for buildings in California. In 2013, the code was subsequently updated. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality.

City of San José

At the local level, the City of San José sets green building standards for municipal development. All projects are required to submit a Leadership in Energy and Environmental Design (LEED)¹⁶, GreenPoint¹⁷, or Build It Green checklist with the development proposal. Private developments are required to implement green building practices if they meet the Applicable Projects criteria defined by Council Policy 6-32 and shown in Table 3.5-1 below.

¹³ PG&E. Exploring Clean Energy Solutions. Accessed December 7, 2016. https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page.

¹⁴ California Building Standards Commission. 2015 Triennial Code Adoption Cycle. Accessed December 7, 2016. <http://www.bsc.ca.gov/>.

¹⁵ California Energy Commission (CEC). Building Energy Efficiency Program. 2013. Accessed December 7, 2016. <http://www.energy.ca.gov/title24/>.

¹⁶ Created by the U.S. Green Building Council, LEED is a certification system that assigns points for green building measures based on a 110-point rating scale.

¹⁷ Created by Build It Green, GreenPoint is a certification system that assigns points for green building measures based on a 381-point scale for multi-family developments and 341-point scale for single-family developments.

Table 3.5-1: Private Sector Green Building Policy Applicable Projects	
Applicable Project	Minimum Green Building Rating
Commercial/Industrial – Tier 1 (Less than 25,000 Square Feet)	LEED Applicable New Construction Checklist
Commercial/Industrial – Tier 2 (25,000 Square Feet or greater)	LEED Silver
Residential – Tier 1 (Less than 10 units)	GreenPoint or LEED Checklist
Residential – Tier 2 (10 units or greater)	GreenPoint Rated 50 points or LEED Certified
High Rise Residential (75 feet or higher)	LEED Certified
Source: City of San José. Private Sector Green Building Policy: Policy Number 6-32. October 7, 2008. http://www3.sanJoseca.gov/clerk/cp_manual/CPM_6_32.pdf .	

3.5.1.2 Existing Conditions

Electricity

The electricity supply in California involves a complex grid of power plants and transmission lines. In 2015, California produced approximately 75 percent of the electricity it consumed; it imported the remaining 25 percent from the Pacific Northwest (generated by wind), and the Southwest (generated at coal-fired and natural gas-fired power plants, and from nuclear power plants). Electricity supplied from out-of-state coal-fired power plants has decreased since 2006 after the enactment of a state law requiring California utilities to limit new long-term financial investments to power plants that meet California emissions.¹⁸

The bulk of California’s electricity comes from power plants. In 2015, 44 percent of the state’s electricity was generated by natural gas, nine percent by nuclear, five percent by large hydroelectric, and six percent by coal. Renewable sources such as rooftop photovoltaic systems, biomass power plants, and wind turbines, accounted for 22 percent of California’s electricity. Fourteen percent of California’s power comes from unspecified sources. California also leads the nation in electricity generation from solar, geothermal, and biomass resources.¹⁹

In 2015, total electrical system power for California was 282,896 gigawatt-hours (GWh), about one percent lower than 2014. California's in-state electricity production decreased by 1.5 percent at 196,195 GWh compared to 199,193 GWh from 2014 levels. Growth in annual electricity consumption declined in 2015 reflecting increased energy efficiency. Per capita drops in electrical consumption are predicted through 2025 as a result of energy efficiency gains and increased self-generation (particularly for photovoltaic systems).²⁰ Due to population increases, however, it is

¹⁸ EIA. California State Profile and Energy Sources. Accessed December 7, 2016.
<https://www.eia.gov/state/analysis.cfm?sid=CA>.

¹⁹ CEC. Energy Almanac. Total Electricity System Power. Accessed December 7, 2016.
http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html.

²⁰ CEC. California Energy Demand 2016-2026, Revised Electricity Forecast. Accessed December 7, 2016.
http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN207439_20160115T152221_California_Energy_Demand_20162026_Revised_Electricity_Forecast.pdf.

estimated that future demand in California for electricity will grow at approximately one percent each year through 2025, and that 320,862 GWh of electricity would be utilized in the state in 2025.²¹

PG&E is the City of San José's energy utility, providing both natural gas and electricity for residential, commercial, industrial, and municipal uses. PG&E generates or buys electricity from hydroelectric, nuclear, renewable, natural gas, and coal facilities. In 2015, natural gas facilities provided 25 percent of PG&E's electricity delivered to retail customers; nuclear plants provided 23 percent; hydroelectric operations provided six percent; renewable energy facilities including solar, geothermal, and biomass provided 30 percent; and 17 percent was unspecified.²²

Electricity usage for differing land uses varies substantially by the type of uses in a building, the type of construction materials used, and the efficiency of the electricity-consuming devices used. Electricity in Santa Clara County in 2014 was consumed primarily by the commercial sector (77 percent), the residential sector consuming 23 percent. In 2015, a total of approximately 16,812 GWh of electricity were consumed in Santa Clara County.²³

Natural Gas

In 2013, approximately ten percent of California's natural gas supply came from in-state production, while 90 percent was imported from other western states and Canada.²⁴ In 2015, approximately 36 percent of the natural gas delivered for consumption in California was for electricity generation, 35 percent for industrial uses, 18 percent for residential uses, 10 percent for commercial uses, and less than one percent for transportation. As with electricity usage, natural gas usage depends on the type of uses in a building, the type of construction materials used, and the efficiency of gas-consuming devices. In 2015, the State of California consumed approximately 2.4 billion MBtu of natural gas (or 2.4 quadrillion Btu) of natural gas.^{25,26} In Santa Clara County, a total of 41 MBtu were consumed in 2015.²⁷

Overall demand for direct-service natural gas in the commercial and residential sectors in California is expected decrease by 1.1 percent between 2015 and 2026 as a result of overall energy efficiency. Demand for natural gas at power plants for electricity generation is expected to decrease by 2.1 percent between 2015 and 2026 as a result of the implementation of state-mandated RPS targets.²⁸

²¹ CEC. California Energy Demand Updated Forecast 2015-2015. Accessed December 7, 2016.

<http://www.energy.ca.gov/2014publications/CEC-200-2014-009/CEC-200-2014-009-SD.pdf>.

²² PG&E. Delivering Low-emission Energy. Accessed October 31, 2016. https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page.

²³ CEC. Energy Consumption Data Management System. Electricity Consumption by County. Accessed December 7, 2016.

<http://ecdms.energy.ca.gov/electbycounty.aspx>.

²⁴ CEC. Natural Gas Supply by Region. Accessed December 7, 2016.

http://www.energyalmanac.ca.gov/naturalgas/natural_gas_supply.html.

²⁵ EIA. Natural Gas Summary. Accessed December 7, 2016. http://www.eia.gov/dnav/ng/ng_sum_lsum_dcua_sca_a.htm.

²⁶ EIA. Natural Gas Conversion Calculator. Accessed December 7, 2016.

https://www.eia.gov/kids/energy.cfm?page=about_energy_conversion_calculator-basics#natgascal.

²⁷ CEC. Natural Gas Consumption by County. Santa Clara County 2015 Data. Accessed December 7, 2016.

<http://ecdms.energy.ca.gov/gasbycounty.aspx>.

²⁸ CEC. *Electricity and Natural Gas Demand Forecast*. Accessed December 8, 2016.

http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN206501_20151103T100153_Draft_Staff_Report_2015_Natural_Gas_Outlook.pdf.

Gasoline for Motor Vehicles

California accounts for more than one-tenth of the United States' crude oil production and petroleum refining capacity.²⁹ In 2015, over 140 billion gallons of gasoline, diesel, and jet fuel were consumed in the United States and over 14 billion gallons of gasoline were consumed in California.^{30,31} The United States has seen low prices and high demand in the last few years due to low oil prices and a recovering economy, and this trend is expected to continue in the near term.³²

The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 13.1 miles-per-gallon (mpg) in the mid-1970s to 23.2 mpg in 2014.³³ Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 mpg by the year 2020, applies to cars and light trucks of Model Years 2011 through 2020.^{34,35} In 2012, the federal government raised the fuel economy standard to 54.5 mpg for cars and light-duty trucks by Model Year 2025.³⁶

3.5.2 Energy Impacts

3.5.2.1 *Thresholds of Significance*

Based on Appendix F of the CEQA Guidelines, and for the purposes of this EIR, a project will result in a significant energy impact if the project will:

- Use fuel or energy in a wasteful manner; or
- Result in a substantial increase in demand upon energy resources in relation to projected supplies.

3.5.2.2 *Energy Use of the Proposed Project*

Energy would be consumed during both the construction and operational phases of the proposed project. The construction phase would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., demolition and grading), and the actual construction of the buildings. Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks. The operation of the proposed commercial uses would consume energy (in the form of electricity and natural gas) primarily for building heating and cooling, lighting, and water heating. For the purposes of this analysis, the energy use of the existing uses on site (two

²⁹ EIA. California State Energy Profile. Accessed December 7, 2016. <http://www.eia.gov/beta/state/analysis.cfm?sid=CA>.

³⁰ EIA. Frequently Asked Questions. Accessed December 7, 2016. <https://www.eia.gov/tools/faqs/faq.cfm?id=23&t=10>.

³¹ California State Board of Equalization. Taxable Gasoline, Diesel Fuel, Jet Fuel Ten Year Reports. Accessed December 7, 2016. <http://www.boe.ca.gov/sptaxprog/spftrpts.htm>.

³² EIA. Short-Term Energy and Fuels Outlook. Accessed December 7, 2016.

http://www.eia.gov/forecasts/steo/report/us_oil.cfm.

³³ EPA. Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Accessed December 7, 2016.

http://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/publications/national_transportation_statistics/html/table_04_23.html.

³⁴ U.S. Department of Energy. Energy Independence & Security Act of 2007. Accessed December 7, 2016.

<http://www.afdc.energy.gov/laws/eisa>.

³⁵ Public Law 110-140—December 19, 2007. Energy Independence & Security Act of 2007. Page 1449. Accessed December 7, 2016. <http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf>.

³⁶ National Highway Traffic Safety Administration. *Obama Administration Finalizes Historic 54.5 mpg Fuel Efficiency Standards*. Accessed December 7, 2016.

<http://www.nhtsa.gov/About+NHTSA/Press+Releases/2012/Obama+Administration+Finalizes+Historic+54.5+mpg+Fuel+Efficiency+Standards>.

single-family residences, several accessory structures, and fallow farmlands) is not subtracted from the operational energy use estimates for the proposed project. Additionally, the energy use increase is likely overstated because the estimates for energy use do not take into account the required Green Building Ordinance energy efficiency measures associated with LEED-Silver requirements.

The project includes two development options. Option 1 proposes approximately 1.2 million square feet of light industrial development. Option 2 proposes a 436,880 square foot data center and approximately 728,000 square feet of light industrial development. Energy would be consumed at the site in the form of diesel fuel for emergency generators and electricity and natural gas for building heating cooling, and other operational functions.

Energy use for both options is summarized in Table 3.5-1. As show in the table, the data center/light industrial development would use substantially more electricity on an annual basis (for the cooling needs of the data center), and the light industrial development would use more gasoline (as a result of more on-site employees driving to the facility). The higher natural gas usage for the light industrial development is related to the greater amount of climate controlled office space for on-site employees.

Table 3.5-1: Estimated Annual Energy Use of Proposed Project				
Development Options	Electricity (kWh)	Natural Gas (kBtu)	Emergency Generator Diesel Fuel (gallons)	Gasoline (gallons)
Light-Industrial Development	11,026,592	31,776,000	240	794,956
Data Center/Light Industrial Development	378,977,968	26,464,080	240	531,151
Source: Illingworth & Rodkin. <i>237 Industrial Center San José, California Air Quality Assessment</i> . November 16, 2016.				

Electricity Demand

As described previously, the annual 282,896 GWh electricity demand in California is projected to increase by approximately one percent each year through 2025 (despite 2015’s decrease in overall demand from 2014). The proposed project would increase annual electricity use at the site by either 11,026,592 kWh (approximately 11 GWh) for the light industrial development, or 378,977,968 kWh (approximately 379 GWh) for the data center/light industrial development. The light-industrial development represents a 0.004 percent increase in overall state-wide electricity demand and the data center/light industrial development represents a 0.1 percent increase in demand. Given these small percentage increases, neither development option would result in a substantial increase in demand on electrical energy resources in relation to projected supply. Thus, while the demand for energy would increase, the impact is less than significant.

Natural Gas Demand

California uses approximately 2.4 quadrillion Btu of natural gas each year. As described previously, it is assumed that energy efficiency technology and the RPS targets are likely to reduce demand for natural gas in the state in the future. Additionally, system and drilling efficiencies will continue to

enhance production and decrease the overall need for natural gas.³⁷ Based on the relatively small increase in natural gas demand from the project for either the light industrial development (31,776,000 kBtu) or the data center/light industrial development (26,464,080 kBtu) and compared to the growth trends in natural gas supply and the existing available supply in California, the proposed project would not result in a substantial increase in natural gas demand relative to projected supplies.³⁸

Diesel and Gasoline Demand

The 240 gallon increase in demand for diesel fuel for the emergency generator at the project site would not significantly impact state or local diesel supplies, especially given the assumed sporadic use of the equipment.

The light industrial development would generate a total vehicle miles traveled (VMT) of 18,442,969 annually, and the data center light industrial development would generate a VMT of 12,322,704 annually.³⁹ The estimated gallons of gasoline that would be consumed with each development option is shown in Table 3.5-1. The estimates are based on EPA average fuel economy estimates for 2014, which is 23.2 mpg for a passenger car.^{40,41} Though this increase is sizable when compared to the gasoline use associated with the limited scale of the existing development at the site, it would not be a substantial increase in the context of gasoline supply and demand in the City of San José and State of California.

New automobiles purchased by future occupants of the proposed project would be subject to fuel economy and efficiency standards applied throughout the State of California, which means that over time the fuel efficiency of vehicles associated with the project site would improve. Additionally, ongoing increases in the fuel economy standards for new vehicles would result in efficiency gains for vehicles overtime. While the project would increase the VMT associated with the project site compared to the existing condition, this increase is not significant when viewed with regard to the citywide or area-wide VMT. Additionally, the VMT-associated gasoline demand increase is not significant in terms of increasing demand above supply. **(Less than Significant Impact)**

3.5.2.3 Energy Efficiency

Construction

The anticipated construction schedule assumes that the light industrial development would be constructed over one year and the data center/light industrial development would take several years to complete. The project would require demolition, grading, and site preparation for construction of the proposed buildings. Based on data provided by the applicant, the proposed project would require importing up to 124,000 cubic yards.

³⁷ CEC. *Electricity and Natural Gas Demand Forecast*. Accessed December 7, 2016. http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN206501_20151103T100153_Draft_Staff_Report_2015_Natural_Gas_Outlook.pdf.

³⁸ Both Option 1 and Option 2 would result in less than 0.000000001 percent increase in statewide natural gas demand.

³⁹ Illingworth & Rodkin. *237 Industrial Center San Jose, California Air Quality Assessment*. November 16, 2016.

⁴⁰ Option 1: 18,442,969/23.2 mpg = 794,956 gallons of gasoline. Option 2: 12,322,704/23.2 mpg = 531,151 gallons of gasoline.

⁴¹ Association of Bay Area Governments. *Plan Bay Area*. Table 2.1-5. Accessed April 18, 2016.

http://planbayarea.org/pdf/Draft_EIR_Chapters/2.1_Transportation.pdf 10,529.

The overall construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. That is, equipment and fuel are not typically used wastefully on the site because of the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for future efficiency gains during construction are limited. The proposed project, however, does include several measures that would improve the efficiency of the construction process. Implementation of the BAAQMD BMPs detailed in Section 3.2 *Air Quality* would restrict equipment idling times to five minutes or less and would require the applicant to post signs on the project site reminding workers to shut off idle equipment. The project would also recycle or salvage at least 30 percent of construction waste as part of its LEED certification.

There would be unavoidable adverse effects caused by construction of the project because of the use of fuels and building materials; however, implementation of the air quality-related BMPs would reduce the energy impacts of construction and unavoidable effects of development to a less than significant level.

Operation

The proposed project would be required to build to the state's CalGreen code, which includes insulation and design provisions to minimize wasteful energy consumption. Though the proposed project does not include on-site renewable energy resources, the proposed mixed-use development would be built to achieve LEED Silver certification consistent with San José's Council Policy 6-32.

The proposed project would be required to include up to 240 bicycle parking spaces. The inclusion of bicycle parking, on-site showers in the office buildings, and other TDMs as described in mitigation measure AQ-1.4 (refer to *Section 3.2 Air Quality*) would incentivize the use of alternative methods of transportation to and from the site. In addition, at least 50 percent of the hardscape surfaces on the site would have a solar reflectance index (SRI) of 29 or more as required for LEED certification.

By including pavement that is more reflective than traditional blacktop surfaces, the project would reduce the heat generated locally by hardscape (known as the heat island effect) and, by extension, incrementally reduce the use of air conditioning in the new building. Based on the measures required for LEED Certification, the proposed project would comply with existing state energy standards. By reducing single-occupancy traffic trips and including green-building measures to achieve LEED certification, the proposed project would comply with existing state energy standards and would not use fuel or energy in a wasteful manner.

Power Usage Effectiveness during Data Center Operation

Power Usage Effectiveness, or PUE, is a metric used to compare the efficiency of facilities that house computer servers. PUE is defined as the ratio of total facility energy use to Information Technology (IT) (i.e., server) power draw (e.g., $PUE = \text{Total Facility Source Energy} / \text{IT Source Energy}$). For example a PUE of two (2), means that the data center or laboratory must draw two (2) watts of electricity for every one (1) watt of power consumed by the IT/server equipment. It is equal to the total energy consumption of a data center (for all fuels) divided by the energy consumption used for the IT equipment. The ideal PUE is one (1) where all power drawn by the facility goes to the IT infrastructure.

With implementation of the proposed mechanical and electrical design of the building and the anticipated data center occupancy, the PUE of the data center would be no more than 1.2. **(Less Than Significant Impact)**

3.5.2.4 ***Distance Between Jobs and Housing***

The project is a light industrial development that would result in additional jobs in a city that currently has a higher number of employed residents than jobs (approximately 0.8 jobs per employed resident). The implications of this imbalance are that many residents leave San José five times per week to commute to and from work, typically by personal vehicle. The proposed project would incrementally reduce the imbalance between jobs and employed residents; though, it is assumed that the light-industrial development would provide substantially more jobs than the data center/light industrial development. Therefore, the project would not increase the distance between jobs and housing; rather, the proposed project would incrementally decrease the imbalance between jobs and employed residents in the City of San José.

In addition, the project would include up to 240 bicycle parking spaces per City code (22 spaces are being provided by the data center in Option 2) and the site is in proximity to multiple transit routes, which would help to reduce vehicle trips to and from the project site. Ongoing increases in the fuel economy standards for new vehicles would result in efficiency gains for vehicles overtime. Therefore, although the project would increase the VMT associated with the project site compared to the existing condition, the project would not result in significant energy impacts and would not substantially increase the distance between jobs and housing. **(Less than Significant Impact)**

3.5.3 **Mitigation and Avoidance Measures**

No mitigation is required or proposed.

3.5.4 **Conclusion**

The project would not result in significant energy impacts associated with the distance between jobs and housing and, due to the inclusion of green building design features, the project would not result in the wasteful use of fuel or energy. The project would not result in a substantial increase in demand upon energy resources in relation to projected supplies. **(Less Than Significant Impact)**

3.6 GEOLOGY AND SOILS/MINERAL RESOURCES

The following discussion is based in part, on a Geotechnical Investigation Report prepared by *Kleinfelder, Inc.* in June 2016. A copy of the report is attached to this Environmental Impact Report as Appendix H.

3.6.1 Environmental Setting

3.6.1.1 *Regulatory Framework*

Development within the City of San José is subject to various federal, state, and local regulations aimed at reducing potential impacts of geologic and seismic hazards to people, property, and the environment. As described in Section 4.9 *Hydrology and Water Quality*, erosion control is regulated by the Federal Clean Water Act, State of California Porter Cologne Water Quality Act, the National Pollutant Discharge Elimination System (NPDES), and City policies 6-29 and 8-14.

The California Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. Local agencies must regulate the construction of buildings used for human occupancy in these zones.

The California Building Code (in Title 24, California Code of Regulations) serves as the basis for the design and construction of buildings in the state. Currently, the 2013 California Building Code contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, the strength of the ground, and distance to seismic resources.

City of San José Municipal Code

Title 24 of the San José Municipal Code includes the 2013 California Building, Plumbing, Mechanical, Electrical, Existing Building, Historical Building, and Green Building Codes. Requirements for building safety and earthquake hazard reduction are also addressed in Chapter 17.40 (Dangerous Buildings) and Chapter 17.10 (Geologic Hazards Regulations) of the Municipal Code. Requirements for grading, excavation, and erosion control are included in Chapter 17.04 (Building Code, Part 6 Excavation and Grading). In accordance with the Municipal Code, the Director of Public Works must issue a Certificate of Geologic Hazard Clearance prior to the issuance of grading and building permits within defined geologic hazard zones.

Envision San José 2040 General Plan

The Envision San José 2040 General Plan includes the following policies applicable to all development projects in San José.

Policy EC-3.1: Design all new or remodeled habitable structures in accordance with the most recent California Building Code and California Fire Code as amended locally and adopted by the City of San José, including provisions regarding lateral forces.

Policy EC-3.2: Within seismic hazard zones identified under the Alquist-Priolo Fault Zoning Act, California Seismic Hazards Mapping Act and/or by the City of San José, complete geotechnical and

geological investigations and approve development proposals only when the severity of seismic hazards have been evaluated and appropriate mitigation measures are provided as reviewed and approved by the City of San José Geologist. State guidelines for evaluating and mitigating seismic hazards and the City-adopted California Building Code will be followed.

Policy EC-4.1: Design and build all new or remodeled habitable structures in accordance with the most recent California Building Code and municipal code requirements as amended and adopted by the City of San José, including provisions for expansive soil, and grading and storm water controls.

Policy EC-4.2: Approve development in areas subject to soils and geologic hazards, including un-engineered fill and weak soils and landslide-prone areas, only when the severity of hazards have been evaluated and if shown to be required, appropriate mitigation measures are provided. New development proposed within areas of geologic hazards shall not be endangered by, nor contribute to, the hazardous conditions on the site or on adjoining properties. The City of San José Geologist will review and approve geotechnical and geological investigation reports for projects within these areas as part of the project approval process.

Policy EC-4.4: Require all new development to conform to the City of San José's Geologic Hazard Ordinance.

Policy EC-4.5: Ensure that any development activity that requires grading does not impact adjacent properties, local creeks and storm drainage systems by designing and building the site to drain properly and minimize erosion. An Erosion Control Plan is required for all private development projects that have soil disturbance of one acre or more, are adjacent to a creek/river, and/or are located in hillside areas. Erosion Control Plans are also required for any grading occurring between October 15 and April 15.

Policy EC-4.7: Consistent with the San José Geologic Hazard Ordinance, prepare geotechnical and geological investigation reports for projects in areas of known concern to address the implications of irrigated landscaping to slope stability and to determine if hazards can be adequately mitigated.

Policy ES-4.9: Permit development only in those areas where potential danger to health, safety, and welfare of the persons in that area can be mitigated to an acceptable level.

3.6.1.2 *Existing Conditions*

Regional Geology

The project site is located in the Santa Clara Valley, an alluvial basin, bounded by the Santa Cruz Mountains to the west, the Hamilton/Diablo Range to the east, and the San Francisco Bay to the north. The Santa Clara Valley was formed when sediments derived from the Santa Cruz Mountains and the Hamilton/Diablo Range were exposed by the continued tectonic uplift and regression of the inland sea that had previously inundated the area. Sediments of the Santa Clara Valley are composed of water-bearing Plio-Pleistocene and Upper Quaternary sediments, which are underlain by older non-water bearing rocks. The Upper Quaternary sediments consist of up to 1,000 feet of poorly sorted gravel, sand and clay, which were deposited in alluvial fan and deltaic depositional environments.

Site Geology

Soils

The project site is approximately 20 feet above mean sea level and gently slopes down to the north at zero to two percent declines. The site is underlain by soils of the Campbell silt loam complex (approximately 16.2 percent) and Elder fine sandy loam soils (approximately 63.2 percent). These soils are composed of undifferentiated deposits of alluvium and marine deposits (“Bay Muds”). The soils in the upper three to five feet of the site are predominately granular soils consisting of clayey sands, sands and gravels with variable clay content, and some sandy clays. Below these soils to depths of approximately 20 to 25 feet bgs, soils on-site are lean to fat clays which are underlain by interbedded loose to medium dense gravels with sand, loose to medium dense sands with gravel, and low to medium plasticity sandy lean clays to a depth of approximately 80 feet bgs.

Soils of the Campbell silt loam complex exhibit low shrink-swell potential (i.e., expansive behavior) within approximately the first two feet of ground surface and exhibit high to very-high shrink-swell potential beyond two feet of the ground surface. Soils of the Elder fine sandy loam soils exhibit low shrink-swell potential. Expansive soils shrink and swell as a result of moisture changes. These changes can cause heaving and cracking of slabs-on-grade, pavement, and structures found on shallow foundations. There are no unique geologic features on or adjacent to the project site. Due to the flat topography of the project site, the potential for erosion or landslide on or adjacent to the site is low.

Groundwater

Depth to shallow groundwater has historically been encountered at approximately five feet below ground surface.⁴²

Seismicity

The San Francisco Bay Area is classified as the most seismically active region in the United States. The significant earthquakes that occur in the Bay Area are generally associated with crustal movement along well defined active fault zones of the San Andreas Fault System, which regionally trends in a northwesterly direction. The U.S. Geological Survey’s Working Group on California Earthquake Probabilities 2007 estimates that there is a 63 percent chance of at least one magnitude 6.7 earthquake occurring in the Bay Area between 2007 and 2036. The Hayward Fault is the most likely to generate an earthquake of this magnitude in the next 30 years.

The project site is not located within a State-designated Alquist-Priolo Earthquake Fault Zone and no active faults have been mapped on-site. Therefore, the risk of fault rupture at the site is low. Faults in the region are, however, capable of generating earthquakes of magnitude 7.0 or higher and strong to very strong ground shaking would be expected to occur at the project site during a major earthquake on one of the nearby faults.

The nearest faults to the project site are the Hayward fault (located approximately 4.5 miles to the northeast), the Crosley fault (located approximately 3 miles to the northeast), the Calaveras fault

⁴² *Kleinfelder, Inc.* Geotechnical Study Results PACLAND Project 1926. June 10, 2016.

(located approximately 8 miles to the east), and the San Andreas fault (located approximately 14.5 miles to the southwest).

Liquefaction

Liquefaction is the result of seismic activity and is characterized as the transformation of loose water-saturated soils from a solid state to a liquid state during ground shaking. Soils most susceptible to liquefaction are loose, non-cohesive soils that are saturated and are bedded with poor drainage, such as sand and silt layers bedded with a cohesive cap. Historic groundwater beneath the project site is potentially as shallow as five feet below the existing ground surface and soils beneath the project site were found to be highly susceptible to liquefaction. According to the Santa Clara County Geologic Hazard Zones Map, the project site is located in a potential liquefaction zone.⁴³

Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open area, such as the steep bank of a stream channel. The project site is relatively flat and is bordered by Coyote Creek to the east. Based on the findings of the Geotechnical Investigation by *Kleinfelder, Inc.*, the east and northeast areas of the project site have a low potential for lateral spreading and the southeast area adjacent to the creek has a high potential for lateral spreading.

The Santa Clara Valley Water District (SCVWD) owns the existing levees along the west bank of Coyote Creek, adjacent to the subject property. The US Army Corp of Engineers and SCVWD identify the levees location as within Reach 2B of the Coyote Creek levee system. The Coyote Creek levees adjacent to the project site are listed as “minimally acceptable”⁴⁴ according to the National Levee Database (USACE, 2016) based on an inspection conducted in August, 2011. Levees adjacent to the project site are approximately eight feet above ground.

Mineral Resources

Mineral resources are known to exist in and near the Santa Clara Valley and include cement, sand, gravel, crushed rock, clay, and limestone. Santa Clara County has also supplied a significant portion of the nation’s mercury over the past century. Pursuant to the mandate of the Surface Mining and Reclamation Act of 1975 (SMARA), the State Mining and Geology Board has designated the Communications Hill Area, bounded generally by the Union Pacific Railroad, Curtner Avenue, State Route 87, and Hillsdale Avenue as a source of construction aggregate materials.

Neither the State Geologist nor the State Mining and Geology Board has classified any other areas in San José as containing mineral deposits which are either of statewide significance or the significance of which requires further evaluation. Therefore, other than the Communications Hill area cited

⁴³ Santa Clara County. *Santa Clara County Geologic Hazard Zones, Map 3*. <https://www.sccgov.org/sites/dpd/DocsForms/Documents/GEO_GeohazardATLAS.pdf> Accessed May 19, 2017.

⁴⁴ *Minimally Acceptable* is used when “one or more inspection items are rated as Minimally Acceptable or one or more items are rated as Unacceptable and an engineering determination concludes that the Unacceptable inspection items would not prevent the segment/system from performing as intended during the next flood event”. Available at: <http://www.usace.army.mil/Missions/Civil-Works/Levee-Safety-Program/Levee-Inspections/>. Accessed on December 8, 2016.

above, San José does not have mineral deposits subject to SMARA. Communications Hill is approximately 14.8 miles south of the project site.

3.6.2 Geology and Soils Impacts

3.6.2.1 *Thresholds of Significance*

For the purposes of this EIR, a geology and soils impact is considered significant if the project would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42);
 - Strong seismic ground shaking;
 - Seismic-related ground failure, including liquefaction; or
 - Landslides.
- Result in substantial soil erosion or the loss of topsoil; or
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property;
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water;
- Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state; or
- Result in the loss of availability of locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

3.6.2.2 *Consistency with Plans*

The proposed project would be required to be built in conformance with a site specific geotechnical report and the most recent California Building Code standards to address all geological and seismic related issues on the project site. In addition, as a condition of approval, the project would be required to implement erosion control measures during construction to avoid loss of topsoil and pollution of local waterways. Therefore, the project would be consistent with General Plan Policies EC-3.1, EC-3.2, EC-4.1, EC-4.2, EC-4.4, EC-4.5, EC-4.7, and EC-4.9.

3.6.2.3 *Geologic Impacts from the Project*

The project site is in the seismically active San Francisco Bay Area which has a 63 percent probability of experiencing at least one magnitude 6.7 earthquake during the next 30 years. Earthquake faults in the region, specifically the San Andreas, Hayward, and Calaveras faults, are capable of generating earthquakes larger than 7.0 in magnitude. The project site would experience intense ground shaking in the event of a large earthquake. As described previously, the project site

and surrounding areas are, however, relatively flat. As a result, development of the project site would not expose adjacent or nearby properties to landslide related hazards. **(Less Than Significant Impact)**

As described previously, the likelihood of liquefaction occurrence in the east and northeast area of the project site is insignificant. The southeast area of the project site was identified as having a significant likelihood of liquefaction. The potential for lateral spreading is low in the east and northeast areas of the site, and high in the southeast area along the creek. A design-level geotechnical investigation will be required for the proposed development, consistent with General Plan policies, that identifies site-specific ground failure hazards such as liquefaction and lateral spreading and appropriate techniques to minimize risks to people and structures.

Over-excavation and re-compaction is a commonly used method to mitigate soil conditions susceptible to settlement. In addition, the project shall be designed and constructed in accordance with the California Building Code. Adherence to the California Building Code would ensure the project resists minor earthquakes without damage and major earthquakes without collapse and would not exacerbate existing geologic conditions on adjacent sites. **(Less Than Significant Impact)**

The project site is located in an area of very strong ground shaking during an earthquake. Based on the findings of the Geotechnical Investigation by *Kleinfelder, Inc.* it is recommended that the project undergo additional supplementary laboratory testing of the subgrade soils after the completion of rough grading operations to evaluate the expansion potential of the exposed subgrade soils as part of the project's permit condition identified below.

Permit Condition

- Prior to the issuance of a grading permit, the site-specific geotechnical investigation shall be submitted to the Director of Public Works for approval.
- Recommendations from the approved geotechnical investigation shall be implemented including, supplementary laboratory testing.

The supplementary testing would confirm or modify the recommendations of the geotechnical report prepared for this project. With compliance with the identified permit conditions, future development of the project site would not change or exacerbate the geologic conditions of the project area and would not result in a significant geology hazards impact. **(Less Than Significant Impact)**

The proposed project would require the extension of sanitary sewer lines to the site from those located within Zanker Road. Therefore, the site will not need to support septic tanks or alternative wastewater disposal systems. **(No Impact)**

3.6.2.4 Construction Impacts

The site is currently undeveloped with the majority of the site's soils exposed. The project would require site grading to include fill placement to raise the current side grade by approximately three to five feet. Ground disturbance to soils on-site would increase the potential for wind or water related erosion and sedimentation at the site until construction is complete.

The City's NPDES Municipal Permit, urban runoff policies, and the Municipal Code are the primary means of enforcing erosion control measures through the grading and building permit process. The General Plan FPEIR concluded that with the regulatory programs currently in place, the possible impacts of accelerated erosion during construction would be less than significant. The City shall require all phases of the project to comply with all applicable City regulatory programs pertaining to construction related erosion as a condition of project approval, including but not limited to the following permit conditions:

Permit Conditions:

- All excavation and grading work will be scheduled in dry weather months or construction sites will be weatherized.
- Stockpiles and excavated soils will be covered with secured tarps or plastic sheeting.
- Ditches will be installed, if necessary, to divert runoff around excavations and graded areas.

Because the project would comply with the regulations identified in the General Plan FPEIR and all applicable City regulatory programs pertaining to construction related erosion including the identified permit conditions, implementation of the proposed project would have a less than significant soil erosion impact. **(Less Than Significant Impact)**

3.6.2.5 Mineral Resources

The project site is not located in an area designated as containing regionally or locally significant mineral resources. **(No Impact)**

3.6.2.6 Existing Geologic Conditions Affecting the Project Site

The California Supreme Court in a December 2015 opinion (*BIA v. BAAQMD*) confirmed CEQA is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project; nevertheless, the City has policies that address existing conditions (e.g. geologic hazards) affecting a proposed project, which are addressed below.

The policies of the City of San José 2040 General Plan have been adopted for the purpose of avoiding or mitigating environmental effects resulting from planned development within the City. The City of San José General Plan Policy EC-4.2 states that development is allowed in areas subject to soils and geologic hazards, including unengineered fill and weak soils and landslide-prone areas, only when the severity of hazards have been evaluated and if shown to be required, appropriate mitigation measures are provided. New development proposed within areas of geologic hazards shall not be endangered by, nor contribute to, the hazardous conditions on the site or on adjoining properties. To ensure this, the policy requires the City of San José Geologist to review and approve geotechnical and geological investigation reports for projects within these areas as part of the project approval process. In addition, Policy EC-4.4 requires all new development to conform to the City of San José's Geologic Hazard Ordinance. To ensure that proposed development sites are suitable, Action EC-4.11 requires the preparation of geotechnical and geological investigation reports for

projects within areas subject to soils and geologic hazards, and require review and implementation of mitigation measures as part of the project approval process.

Given the project site's adjacency to Coyote Creek, future development of the project site may experience lateral spreading during seismic events. A design-level geotechnical investigation will be prepared for the proposed development that identifies site-specific ground failure hazards such as liquefaction and lateral spreading and appropriate techniques to minimize risks to people and structures. Over-excavation and re-compaction is a commonly used method to mitigate soil conditions susceptible to settlement. In addition, the project shall be designed and constructed in conformance with the requirements of the California Building Code. The General Plan FPEIR concluded that adherence to the California Building Code would reduce seismic related impacts to a less than significant level. The project would be built and maintained in accordance with a site-specific geotechnical report and applicable regulations including the California Building Code.

As discussed in Section 3.6.2.3, the project site is in the seismically active San Francisco Bay Area which has a 63 percent probability of experiencing at least one magnitude 6.7 earthquake during the next 30 years. Earthquake faults in the region, specifically the San Andreas, Hayward, and Calaveras faults, are capable of generating earthquakes larger than 7.0 in magnitude. The project site would experience intense ground shaking in the event of a large earthquake.

Geologic conditions in the project area will require that the proposed structures be designed and built in conformance with the requirements of the California Building Code. The General Plan FPEIR concluded that adherence to the California Building Code would reduce seismic related impacts to a less than significant level. The project would be built and maintained in accordance with a design-level site-specific geotechnical report and applicable regulations including the California Building Code.

Because the proposed project would comply with the design-specific geotechnical report, the California Building Code, and regulations identified in the General Plan FPEIR that ensure geologic hazards are adequately addressed, the project would comply with Policies EC-4.2 and EC-4.4.

3.6.3 Mitigation and Avoidance Measures

Mitigation is not required or proposed.

3.6.4 Conclusion

Adherence to all existing building codes, regulations, and policies, including the California Building Code and those in the General Plan will ensure construction of the proposed project will have a less than significant geologic and soils impact. **(Less Than Significant Impact)**

3.7 GREENHOUSE GAS EMISSIONS

In accordance with CEQA Section 21093 and CEQA Guidelines Section 15152, the following impacts analysis tiers from the certified 2015 *Envision San José 2040 Final Supplemental Program Environmental Impact Report* (PEIR) (SCH#2003042127). Updated information reflecting changes to the regulatory setting is also incorporated in the discussion.

3.7.1 Environmental Setting

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of Greenhouse Gases (GHGs) have a broader, global impact. Global warming associated with the “greenhouse effect” is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth’s atmosphere. The principal GHGs contributing to global warming and associated climate change are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated compounds. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial and manufacturing, utility, residential, commercial, and agricultural sectors.

3.7.1.1 *Regulatory Framework*

California Assembly Bill 32 and Executive Orders

Assembly Bill 32 (AB 32), also known as the Global Warming Solutions Act, was passed in 2006 and established a goal to reduce GHG emissions to 1990 levels by 2020. Prior to the adoption of AB 32, the Governor of California also signed Executive Order S-3-05 into law, which set a long term objective to reduce GHG emissions to 80 percent below 1990 levels by 2050. The California Environmental Protection Agency (CalEPA) is the state agency in charge of coordinating the GHG emissions reduction effort and establishing targets along the way.

In December 2008, CARB approved the *Climate Change Scoping Plan*, which proposes a comprehensive set of actions designed to reduce California’s dependence on oil, diversify energy sources, save energy, and enhance public health, among other goals. Per AB 32, the *Climate Change Scoping Plan*, must be updated every five years to evaluate the mix of AB 32 policies to ensure that California is on track to achieve the 2020 GHG reduction goal. The First Update to the *Climate Change Scoping Plan*, was approved on May 22, 2014 and builds upon the previous plan with new strategies and recommendations. The First Update defines CARB’s priorities over the next five years and lays the groundwork to reach long-term goals set forth in Executive Order S-3-05.⁴⁵

Executive Order B-30-15

On April 29, 2015, Governor Brown issued Executive Order B-30-15 establishing a GHG reduction target for California of 40 percent below 1990 levels by 2030. This is considered a mid-term target for implementation of reducing statewide GHG emissions to 80 percent below 1990 levels by 2050. State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets.

⁴⁵ California Environmental Protection Agency. Air Resources Board. *First Update to the AB 32 Scoping Plan*. Accessed May 26, 2016. Available here: <http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm>

As discussed in the following subsection, a second update to the Climate Change Scoping Plan has been released in draft form and will be considered for adoption by CARB in June 2017. It specifically addresses the 2030 mid-term target established under SB 32 and identifies local actions as well as State of California actions and programs to reduce GHG emissions.

SB 32 and AB 197

SB 32 and AB 197 were signed into law in September 2016. SB 32 legislation amends provisions of AB 32, the California Global Warming Solutions Act of 2006 (Health and Safety Code Division 25.5), to require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by December 31, 2030. This legislation incorporates the Executive Order B-30-15 target discussed above into state law. Changes to the California Health and Safety Code under the companion AB 197 legislation call for each scoping plan update to identify emissions reduction measures and include the range of projected GHG emissions reductions as well as the range of projected air pollution reductions that result from the emission reduction measures.

The mid-term target established under SB 32 is considered critical by the state to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing GHG emissions. CARB is charged with adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions to meet the new interim statewide GHG target. The framework for GHG emissions reductions will be provided through an update to the current Climate Change Scoping Plan. The estimated timeline for development and approval of the *2030 Target Scoping Plan* includes release of a draft for public comment in January 2017 and consideration by CARB in June of 2017.⁴⁶

Other Implementing Laws and Regulations

There are a number laws that have been adopted as a part of the State of California's efforts to reduce GHG emissions and their contribution to climate change. State laws and regulations related to growth, development, planning and municipal operations in San José include, but are not limited to:

- California Mandatory Commercial Recycling Law (AB 341)
- California Water Conservation in Landscaping Act of 2006 (AB 1881)
- California Water Conservation Act of 2009 (SBX7-7)
- Various Diesel-Fuel Vehicle Idling regulations in Chapter 13 of the California Code of Regulations
- Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Code (Title 24, Part 11)
- Appliance Energy Efficiency Standards (Title 20)

Implementation of the policies in the *Envision San José 2040 General Plan* as a part of the City's development permitting and other programs provides for meeting building standards for energy

⁴⁶CARB. *Discussion Draft 2030 Target Scoping Plan, December 2, 2016*. Accessed December 2, 2016. Available at: https://www.arb.ca.gov/cc/scopingplan/2030target_sp_dd120216.pdf.

efficiency, recycling, and water conservation, consistent with the laws and regulations designed to reduce GHG emissions.

Senate Bill 375

Senate Bill 375

Senate Bill 375 (SB 375), known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. It builds on AB 32 by requiring CARB to develop regional GHG reduction targets to be achieved from the automobile and light truck sectors for 2020 and 2035 in comparison to 2005 emissions. The per capita GHG reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.⁴⁷ The four major requirements of SB 375 are:

- Metropolitan Planning Organizations (MPOs) must meet GHG emission reduction targets for automobiles and light trucks through land use and transportation strategies.
- MPOs must create a Sustainable Communities Strategy (SCS), to provide an integrated land use/transportation plan for meeting regional targets, consistent with the Regional Transportation Plan.
- Regional housing elements and transportation plans must be synchronized on eight-year schedules, with Regional Housing Needs Assessment allocation numbers conforming to the SCS.
- MPOs must use transportation and air emissions modeling techniques consistent with guidelines prepared by the California Transportation Commission.

The Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) adopted *Plan Bay Area* in July 2013, and the updated *2040 Plan Bay Area* was released in draft form on April 3, 2017. The strategies in the plan are intended to promote compact, mixed-use development close to public transit, jobs, schools, shopping, parks, recreation, and other amenities, particularly within Priority Development Areas (PDAs) identified by local jurisdictions. PDAs are areas where new development would support the day-to-day needs of residents and workers in a pedestrian-friendly environment served by transit. The project site is not within a designated PDA.⁴⁸

Renewables Portfolio Standard for Energy Generation

California's Renewables Portfolio Standard (RPS) is one of the most ambitious renewable energy standards in the country. The RPS program requires electric corporations to increase procurement from eligible renewable energy resources and meet established milestones. Under SB X1-2, all electricity suppliers must achieve the criterion that 33 percent of electric generation come from renewable sources by the end of 2020. These requirements apply to all electricity retailers in the state – investor-owned utilities, municipal utilities and independent sellers. The California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) jointly implement the RPS program. To the extent that several types of renewable energy sources (e.g., hydropower, wind

⁴⁷ The emission reduction targets are for those associated with land use and transportation strategies only. Emission reductions due to the California Low Carbon Fuel Standards or Pavley emission control standards are not included.

⁴⁸ One Bay Area. *Future Place Type for Priority Development Areas in Santa Clara County*. Accessed May 10, 2017. <<http://www.sanjoseca.gov/DocumentCenter/View/735>>.

and solar) have limited GHG emissions from power generation compared to energy generated through combustion processes, implementation of this standard would reduce GHG emissions from electric power generation.

Regional and Local Plans

2017 Bay Area Clean Air Plan

BAAQMD and other agencies prepare clean air plans as required under the state and federal Clean Air Acts. The 2017 CAP, entitled *Spare the Air/Cool the Climate*, is a blueprint for BAAQMD's efforts to reduce air pollution and protect public health and the global climate. Consistent with the GHG reduction targets adopted by the state of California, the 2017 CAP lays the groundwork for the BAAQMD's long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

BAAQMD CEQA Guidelines

BAAQMD identifies sources of information on potential thresholds of significance and mitigation strategies for operational GHG emissions from land-use development projects in its CEQA Air Quality Guidelines. The BAAQMD CEQA Guidelines also outline a methodology for estimating GHG emissions. In jurisdictions where a qualified GHG Reduction Strategy has been reviewed under CEQA and adopted by decision-makers, compliance with the GHG Reduction Strategy would reduce a project's contribution to cumulative GHG emission impacts to a less than significant level. The BAAQMD CEQA Guidelines also outline a methodology for estimating GHG emissions.

City of San José Municipal Code

The City's Municipal Code includes the following regulations that would reduce GHG emissions from future development:

- Green Building Regulations for Private Development (Chapter 17.84)
- Water Efficient Landscape Standards for New and Rehabilitated Landscaping (Chapter 15.10)
- Transportation Demand Programs for employers with more than 100 employees (Chapter 11.105)
- Construction and Demolition Diversion Deposit Program (Chapter 9.10)
- Wood Burning Ordinance (Chapter 9.10)

City of San José Private Sector Green Building Policy (6-32)

In October 2008, the City adopted the Private Sector Green Building Policy (6-32) that establishes baseline green building standards for private sector new construction and provides a framework for the implementation of these standards. This policy requires that applicable projects achieve minimum green building performance levels using the Council adopted standards. The proposed project would be subject to this policy. Since the proposed industrial project would be greater than

25,000 square feet, the proposed data center buildings would be required to achieve LEED Silver certification, at minimum.⁴⁹

Envision San José 2040 General Plan

The General Plan includes strategies, policies, and action items that are incorporated in the City's GHG Reduction Strategy to help reduce GHG emissions. Multiple policies and actions in the General Plan have GHG implications, including land use, housing, transportation, water usage, solid waste generation and recycling, and reuse of historic buildings. The City's Green Vision, as reflected in these policies, also has a monitoring component that allows for adaptation and adjustment of City programs and initiatives related to sustainability and associated reductions in GHG emissions. The GHG Reduction Strategy is intended to meet the mandates outlined in the CEQA Guidelines, as well as the BAAQMD requirements for Qualified GHG Reduction Strategies.

The City's GHG Reduction Strategy identifies GHG emissions reduction measures to be implemented by development projects as part of three categories: built environment and energy, land use and transportation, and recycling and waste reduction. Some measures are mandatory for all proposed development projects and others are voluntary. Voluntary measures could be incorporated as mitigation measures for proposed projects, at the City's discretion.

The primary test for consistency with the City's GHG Reduction Strategy is conformance with the General Plan Land Use/Transportation Diagram and supporting policies. CEQA clearance for development proposals are required to address the consistency of individual projects with the goals and policies in the General Plan designed to reduce GHG emissions. Compliance with the mandatory measures and voluntary measures (if required by the City) would ensure an individual project's consistency with the GHG Reduction Strategy. Projects that are consistent with the GHG Reduction Strategy would have a less than significant impact related to GHG emissions through 2020 and would not conflict with targets in the currently adopted State of California Climate Change Scoping Plan through 2020.

The environmental impacts of the GHG Reduction Strategy were analyzed in the General Plan FPEIR as supplemented. Beyond 2020, the emission reductions in the GHG Reduction Strategy are not large enough to meet the City's identified 3.04 metric tons (MT) CO₂e/SP efficiency metric for 2035. An additional reduction of 5,392,000 MT CO₂e per year would be required for the projected service population to meet the City's target for 2035.⁵⁰

Achieving the substantial communitywide GHG emissions reductions needed beyond 2020 cannot be done alone with the measures identified in the GHG Reduction Strategy adopted by the City Council in 2015. The General Plan FPEIR disclosed that it would require an aggressive multiple-pronged approach that includes policy decisions and additional emission controls at the federal and state level,

⁴⁹ City of San José. *Private Sector Green Building*. Accessed June 13, 2016. Available at: <https://www.sanjoseca.gov/index.aspx?NID=3284>

⁵⁰ As described in General Plan FPEIR, the 2035 efficiency target above, reflects a straight line 40 percent emissions reduction compared to the projected citywide emissions (10.90 MT CO₂e) for San José in 2020. It was developed prior to issuance of Executive Order S-30-15 in April 2015, which calls for a statewide reduction target of 40 percent by 2030 (five years earlier) to keep on track with the more aggressive target of 80 percent reduction by 2050. The necessary information to estimate a second mid-term or interim efficiency target (e.g., statewide emissions, population and employment in 2030) is being developed by CARB.

new and substantially advanced technologies, and substantial behavioral changes to reduce single occupant vehicle trips—especially to and from work places. Future policy and regulatory decisions by other agencies (such as CARB, California Public Utilities Commission, California Energy Commission, MTC, and BAAQMD) and technological advances are outside the City’s control, and therefore could not be relied upon as feasible mitigation strategies at the time of the latest revisions to the GHG Reduction Strategy (e.g., when the Final Supplemental PEIR to the General Plan FPEIR was certified on December 15, 2015). Thus, the City Council adopted overriding considerations for the identified cumulative impact for the 2035 timeframe.

The General Plan includes an implementation program for monitoring, reporting progress on, and updating the GHG Reduction Strategy over time as new technologies or practical measures are identified. Implementation of future updates is called for in General Plan Policies IP-3.7 and IP-17.2 and embodied in the GHG Reduction Strategy. The City of San José recognizes that additional strategies, policies and programs, to supplement those currently identified, would ultimately be required to meet the mid-term 2035 reduction target of 40 percent below 1990 levels in the GHG Reduction Strategy and the target of 80 percent below 1990 emission levels by 2050.

General Plan Policies

The General Plan includes the following GHG reduction policies, which are applicable to the project. These policies are also described within the City’s GHG Reduction Strategy.

Policy CD-2.10: Recognize that finite land area exists for development and that density supports retail vitality and transit ridership. Use land regulations to require compact, low-impact development that efficiently uses land planned for growth, particularly for residential development which tends to have a long life-span. Strongly discourage small-lot and single-family detached residential product types in growth areas.

Policy CD-2.11: Within the Downtown and Urban Village Overlay areas, consistent with the minimum density requirements of the pertaining Land Use/Transportation Diagram designation, avoid the construction of surface parking lots except as an interim use, so that long-term development of the site will result in a cohesive urban form. In these areas, whenever possible, use structured parking, rather than surface parking, to fulfill parking requirements. Encourage the incorporation of alternative uses, such as parks, above parking structures.

Policy CD-3.2: Prioritize pedestrian and bicycle connections to transit, community facilities (including schools), commercial areas, and other areas serving daily needs. Ensure that the design of new facilities can accommodate significant anticipated future increases in bicycle and pedestrian activity.

Policy CD-5.1: Design areas to promote pedestrian and bicycle movements and to facilitate interaction between community members and to strengthen the sense of community.

Policy LU-5.4: Require new commercial development to facilitate pedestrian and bicycle access through techniques such as minimizing building separation from public sidewalks; providing safe, accessible, convenient, and pleasant pedestrian connections; and including secure and convenient bike storage.

Policy MS-2.3: Encourage consideration of solar orientation, including building placement, landscaping, design, and construction techniques for new construction to minimize energy consumption.

Policy MS-2.11: Require new development to incorporate green building practices, including those required by the Green Building Ordinance. Specifically, target reduced energy use through construction techniques (e.g., design of building envelopes and systems to maximize energy performance), through architectural design (e.g. design to maximize cross ventilation and interior daylight) and through site design techniques (e.g. orienting buildings on sites to maximize the effectiveness of passive solar design).

Policy MS-14.4: Implement the City's Green Building Policies so that new construction and rehabilitation of existing buildings fully implements industry best practices, including the use of optimized energy systems, selection of materials and resources, water efficiency, sustainable site selection, passive solar building design, and planting of trees and other landscape materials to reduce energy consumption.

Policy TR-2.18: Provide bicycle storage facilities as identified in the Bicycle Master Plan.

Policy TR-3.3: As part of the development review process, require that new development along existing and planned transit facilities consist of land use and development types and intensities that contribute toward transit ridership. In addition, require that new development is designed to accommodate and to provide direct access to transit facilities.

3.7.1.2 *Existing Conditions*

The project site is currently developed with two residences, a mobile home, and farm-related accessory structures. Operation of these buildings generates minimal GHG emissions from motor vehicles traveling to and from the site, and electricity and natural gas usage for lighting, heating and cooling, etc.

3.7.2 Greenhouse Gas Emissions Impacts

3.7.2.1 *Thresholds of Significance*

For the purposes of this EIR, a greenhouse gas emissions impact is considered significant if the project would:

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

3.7.2.2 *Overview of Impact Assessment*

GHG emissions worldwide cumulatively contribute to the significant adverse environmental impacts of global climate change. No single land use project could generate sufficient GHG emissions on its own to noticeably change the global average temperature. The combination of GHG emissions from

past, present, and future projects in San José, the entire State of California, across the nation and around the world, contribute cumulatively to the phenomenon of global climate change and its associated environmental impacts.

Per the CEQA Guidelines, a lead agency may analyze and mitigate significant greenhouse gas emissions in a plan for the reduction of greenhouse gas emissions that has been adopted in a public process following environmental review. The City of San José has an adopted GHG Reduction Strategy that was initially approved by the City Council in November 2011 in conjunction with the General Plan, and following litigation, was re-adopted after certification of a Supplemental EIR in December 2015. The City's projected emissions and the GHG Reduction Strategy are consistent with measures necessary to meet statewide 2020 goals established by AB 32 and addressed in the Climate Change Scoping Plan. The City's projected 2035 GHG emissions, could prevent the State of California from maintaining a statewide trajectory to achieve Executive Order S-3-05 emissions levels in 2050, and therefore, would represent a cumulatively considerable contribution to global climate change. The City Council adopted overriding considerations for the identified cumulative GHG impacts for the 2035 timeframe.

The following discussion focuses on whether project emissions represent a cumulatively considerable contribution to climate change as determined by consistency with City of San José and statewide efforts to curb GHG emissions. Projects that are consistent with the City's adopted GHG Reduction Strategy would have a less than significant impact related to GHG emissions for development through 2020.

3.7.2.3 *Consistency with Plans and Policies*

Consistency with the San José Greenhouse Gas Reduction Strategy

The General Plan contains goals and policies adopted for the purpose of reducing GHG emissions, which center around five strategies: energy, waste, water, transportation, and carbon sequestration. These goals and policies are also discussed within the City's GHG Reduction Strategy. Some measures are considered mandatory for all proposed development projects, while others are voluntary. Voluntary measures can be incorporated as mitigation measures for projects at the discretion of the City. The proposed project's consistency with the relevant mandatory GHG reduction criteria is detailed below.

Mandatory Criteria

1. Consistency with the Land Use/Transportation Diagram (General Plan Goals/Policies IP-1, LU-10)
2. Implementation of Green Building Measures (GP Goals: MS-1, MS-2, MS-14)
 - Solar Site Orientation
 - Site Design
 - Architectural Design
 - Construction Techniques
 - Consistency with City Green Building Ordinance and Policies
 - Consistency with GHG Reduction Strategy Policies: MS-1.1, MS-1.2, MC-2.3, MS-2.11, and MS-14.4

3. Pedestrian/Bicycle Site Design Measures
 - Consistency with Zoning Ordinance
 - Consistency with GHGRS Policies: CD-2.1, CD-3.2, CD-3.3, Cd-3.4, CD-3.6, CD-3.8, CD-3.10, CD-5.1, LU-5.4, LU-5.5, LU-9.1, TR-2.8, TR-2.11, TR-2.18, TR-3.3, TR-6.7
4. Salvage building materials and architectural elements from historic structures to be demolished to allow re-use (General Plan Policy LU-16.4), if applicable;
5. Complete an evaluation of operational energy efficiency and design measures for energy-intensive industries (e.g. data centers) (General Plan Policy MS-2.8), if applicable;
6. Preparation and implementation of the Transportation Demand Management (TDM) Program at large employers (General Plan Policy TR-7.1), if applicable; and
7. Limits on drive-through and vehicle serving uses; all new uses that serve the occupants of vehicles (e.g. drive-through windows, car washes, service stations) must not disrupt pedestrian flow. (General Plan Policy LU-3.6), if applicable.

The light industrial development option is consistent with the General Plan land use designation for the site. Bicycle parking would be provided consistent with San José requirements. Given the project is consistent with the General Plan land use designation and the inclusion of bicycle parking, the project would be consistent with the mandatory Criteria 1 and 3.

The light industrial development option would be constructed consistent with the City's required green building measures. Therefore, the project would be consistent with Criteria 2, 4, and 6. Criteria 5 and 7 are not applicable to this project option because the project does not include an energy-intensive industry, drive-through, or vehicle serving uses.

The light industrial development option would be operational prior to the year 2020 and is consistent with the applicable mandatory GHG Reduction Strategy goals and policies intended to reduce GHG emissions. **(Less than Significant Impact)**

The data center/light industrial development option is also consistent with the General Plan and would be consistent with the mandatory Criteria 1 and 3. This option would also be constructed consistent with the City's required green building measures and would not include a drive-through or vehicle service uses. Therefore, the project would be consistent with Criteria 2, 4, 6, and 7.

The data center/light industrial development option includes a data center using 372,222,000 kWh of electricity annually, as well as a PG&E substation. As previously described in Section 3.5.2, the PUE of the data center is expected to be no more than 1.2. Operation of the substation, by itself, would result in negligible daily operational GHG emissions, primarily from employee trips for maintenance purposes. GHG impacts of the substation (which distributes but does not produce electricity), therefore, are not specifically addressed further.

If the data center/light industrial development option is constructed, the data center would be operational prior to the year 2020 and, would be considered to have a less than significant impact related to GHG emissions. The project would, however, be required as a condition of project

approval to complete an evaluation of operational energy efficiency and design measures consistent with Criteria 5. The evaluation would have to be completed and submitted to the Director of PBCE for review and approval prior to issuance of building permits for the data center and substation.

Under the data center/light industrial development option, the data center and substation would be operational by the year 2020, but construction of the light industrial component would extend beyond 2020. As described previously and in the Final Supplemental PEIR for the Envision San José 2040 General Plan, the necessary information to estimate a second mid-term or interim efficiency target (e.g., statewide emissions, population and employment in 2030) is being developed by CARB. Under SB 32 and AB 197, CARB is also charged with identifying and adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions to meet this new interim statewide GHG target. Therefore, the information to address this new state interim target at a local level is not currently available and development of an additional target in the City's GHG Reduction Strategy will be required at a later date once the *2030 Target Scoping Plan* is complete.

The City's GHG Reduction Strategy, as well as local and state regulations for energy efficiency and the California's Renewables Portfolio Standard, are measures that would minimize cumulative GHG impacts but not reduce them to a less than significant level by 2035 (mid-term). Development of light industrial development on-site after 2020 could contribute to the previously identified significant GHG emission impacts resulting from implementation of the planned development considered in the Envision San José 2040 General Plan. The project would implement feasible energy efficiency measures to minimize impacts and would not result in any new or greater impacts than were previously identified in the Envision San José 2040 Supplemental FPEIR. The impact would be significant and unavoidable as disclosed in the Envision San José 2040 Supplemental FPEIR. **(Significant Unavoidable Impact)**

Envision San José General Plan

Both project options are consistent with the General Plan and would meet the requirements of City Greenhouse Gas Reduction Strategy. The project would also be required to comply with the City's Green Building measures and would provide bicycle parking. Therefore, the project is consistent with General Plan Policies CD-2.10, CD-2.11, CD-3.2, CD-5.1, LU-5.4, MS-2.3, MS-2.11, MS-14.4, TR-2.18, and TR-3.3. **(Less than Significant Impact)**

3.7.2.4 Greenhouse Gas Emissions Construction Impacts

The proposed development would result in temporary increases in GHG emissions associated with construction activities including operation of construction equipment and emissions from construction workers' personal vehicles traveling to and from the project site. Construction-related GHG emissions vary depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel. Neither the City of San José nor BAAQMD has established a quantitative threshold or standard for determining whether a project's construction-related GHG emissions are significant. Because project construction will be a temporary condition and would not result in a permanent increase in emissions that would interfere with the implementation of AB 32, the increase in emissions would be less than significant. **(Less Than Significant Impact)**

3.7.3 Mitigation and Avoidance Measures

No mitigation is required or proposed.

3.7.4 Conclusion

Implementation of the proposed project would result in a less than significant GHG emission impact for development through 2020. **(Less Than Significant Impact)**

Beyond 2020, implementation of the project would not result in any new or greater GHG emission impacts than were previously identified in the Envision San José 2040 Final Supplemental PEIR. **(Significant Unavoidable Impact)**

Construction of the proposed project would result in a less than significant GHG construction impact. **(Less Than Significant Impact)**

3.8 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based, in part, on a Phase I Environmental Site Assessment prepared by *Cornerstone Earth Group, Inc.* in October 2015. The Phase 1 ESA was updated in April 2016. These reports are attached as Appendix I and Appendix J of this EIR, respectively.

3.8.1 Environmental Setting

3.8.1.1 *Regulatory Framework*

Hazardous materials encompass a wide range of substances, some of which are naturally-occurring and some of which are man-made. Examples include pesticides, herbicides, petroleum products, metals (lead, mercury, arsenic, etc.), asbestos, and chemical compounds used in manufacturing and industrial processes. Due to the fact that hazardous substances have properties that are toxic to humans and/or the ecosystem, there are multiple regulatory programs designed to minimize the chance for unintended releases and/or exposures to occur. Other programs establish remediation requirements where soils and/or groundwater contamination has occurred. The net result of regulatory control programs and institutional controls is the reduced likelihood of chemical releases and reduced likelihood of off-site migration of hazardous materials in the event of a release.

The United States Environmental Protection Agency (EPA) is the federal administering agency for hazardous waste programs. State agencies include the California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC), State Water Resources Control Board (SWRCB), and the California Air Resources Board (CARB). Regional agencies include the San Francisco Bay Regional Water Quality Control Board (RWQCB), and the Bay Area Air Quality Management District (BAAQMD). Local agencies including the San José Fire Department (SJFD) and the Santa Clara County Department of Environmental Health (SCCDEH) have been granted the responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program. The Santa Clara Valley Water District (SCVWD) monitors groundwater quality and supports groundwater clean-up efforts.

Existing City regulations that reduce or avoid impacts with hazards and hazardous materials include:

- City of San José Hazardous Materials Release Response Plans and Inventory
- City of San José Hazardous Materials Storage Ordinance and Toxic Gas Ordinance
- City of San José Building and Fire Codes
- City of San José Municipal Code (Chapters 6.14, 17.12, 17.88, and 20.80)

U.S. Environmental Protection Agency

The USEPA is the federal agency responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. The legislation includes the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (commonly referred to as “Superfund”), the Superfund Amendments and Reauthorization Acts of 1986, and the Resource Conservation and Recovery Act of 1986. The USEPA provides oversight and supervision for site investigations and remediation projects, and has developed land disposal restrictions and treatment standards for the disposal of certain hazardous wastes.

3.8.1.2 State and Regional

California Environmental Protection Agency

The California Environmental Protection Agency (Cal/EPA) serves as the umbrella agency for the Department of Toxic Substances Control (DTSC), the Office of Environmental Health Hazard Assessment (OEHHA), and the SWRCB and its associated regional Water Boards.

Department of Toxic Substance Control

The DTSC regulates remediation of sites where discharges to land could potentially present a public health risk. California legislation, for which the DTSC has primary enforcement authority, includes the Hazardous Waste Control Act and the Hazardous Substance Account Act. The DTSC generally acts as the lead agency for soil and groundwater cleanup projects, and establishes cleanup and action levels for subsurface contamination that are equal to, or more restrictive than, federal levels.

Office of Environmental Health Hazard Assessment

The mission of the OEHHA is to protect and enhance public health and the environment by objective scientific evaluation of risks posed by hazardous substances.

State Water Resources Control Board

The SWRCB, through its nine regional boards, regulates discharge of potentially hazardous materials to waterways and aquifers and administers basin plans for groundwater resources in various regions of the State. The San Francisco Bay RWQCB is the regional board that has jurisdiction over the project area. The SWRCB provides oversight for sites at which the quality of groundwater or surface waters is threatened, and has the authority to require investigations and remedial actions.

Regional Water Quality Control Board

San Francisco Bay RWQCB regulates discharges and releases to surface and groundwater in the project area. The RWQCB generally oversees cases involving groundwater contamination. Within the San Francisco Bay RWQCB, the County of San Mateo Health Services Agency (CSMHSA) handles most leaking underground storage tank (LUST) cases, so the RWQCB may oversee cases involving other groundwater contaminants (i.e. Spills, Leaks, Incidents, and Clean-up cases). In the case of spills at a project site, the responsible party would notify the CSMHSA, and then a lead regulator (either the CSMHSA, RWQCB or DTSC) would be determined.

Envision San José General Plan Policies

The Envision San José 2040 General Plan includes policies applicable to all development projects in San José. The following are applicable to the proposed project:

Policy EC-7.1: For development and redevelopment projects, require evaluation of the proposed site's historical and present uses to determine if any potential environmental conditions exist that could adversely impact the community or environment.

Policy EC-7.2: Identify existing soil, soil vapor, groundwater, and indoor air contamination and mitigation for identified human health and environmental hazards to future users and provide as part of the environmental review process for all development and redevelopment projects. Mitigation measures for soil, soil vapor, and groundwater contamination shall be designed to avoid adverse human health or environmental risk, in conformance with regional, state, and federal laws, regulations, guidelines, and standards.

Policy EC-7.3: Where a property is located in near proximity of known groundwater contamination with volatile organic compounds or within 1,000 feet of an active or inactive landfill, evaluate and mitigate the potential for indoor air intrusion of hazardous compounds to the satisfaction of the City's Environmental Compliance Officer and appropriate regional, state and federal agencies prior to approval of a development or redevelopment project.

Policy EC-7.5: On development and redevelopment sites, require all sources of imported fill to have adequate documentation that it is clean and free of contamination and/or acceptable for the proposed land use considering appropriate environmental screening levels for contaminants. Disposal of groundwater from excavations on construction sites shall comply with local, regional, and state requirements.

Alviso Master Plan

The *Alviso Master Plan* includes policies applicable to all development projects within the plan area. The following policies are specific to hazardous materials and are applicable to the proposed project.

Industrial/Non-Industrial Relationships Policy 1: Industrial uses are not allowed to store, handle, dispose, and/or use acutely hazardous materials within one-quarter mile of residential uses, George Mayne School, New Chicago Marsh (I.e., National Wildlife Refuge) and other sensitive uses and habitats.

Industrial/Non-Industrial Relationships Policy 1: The Light Industrial areas located north of State Street and adjacent to Coyote Creek should mitigate potential negative environmental impacts to nearby natural resources.

3.8.1.3 Existing Conditions

Historical Uses of the Project Site

Based on the information presented in the Phase I ESA, the site has been historically used for agricultural purposes. The site was initially used as a pear orchard circa 1923. During that time, pesticides were applied by vehicle throughout the orchard. In later years, the site was used to cultivate row crops including lettuce and asparagus.

Current Uses of the Project Site

Since 2000, the land has been uncultivated agricultural land. There are two residences, a mobile home, and ancillary farm-related structures on-site.

3.8.1.4 *On-Site Sources of Contamination*

Recognized Environmental Conditions

Based on findings of the Phase I ESA, the following recognized environmental conditions are associated with the project site:

Pesticide Use

As noted above, the project site was historically used for agricultural purposes including orchards and row crops. Pesticides and herbicides were reportedly applied to crops in the normal course of farming operations. Soil sampling was completed on-site as part of the Phase 1 ESA Update. The sampling detected several organochlorine pesticides at levels below commercial environmental screening criteria. Soil samples taken near the former farm equipment storage area and in the northwestern corner of the site contained elevated lead and arsenic concentrations in excess of the Soluble Threshold Limit Concentration (STLC).

Aboveground Storage Tanks

The site once had five aboveground storage tanks (AST) that stored diesel, gasoline, and waste oil. One of the ASTs was estimated to have a capacity of approximately 250 gallons and was located in the east-central portion of the storage yard. A second AST storing waste oil was located in the northwestern section of the storage yard and had an estimated capacity of approximately 500 gallons. Soils underneath this storage tank were observed to be stained as part of the Phase I ESA prepared for the project.

Soil and groundwater sampling was performed in the general areas of the locations of former petroleum ASTs. VOCs or gasoline-range petroleum hydrocarbons were not detected above laboratory reporting limits. Diesel- and oil-range petroleum hydrocarbons were detected in some soil and/or groundwater samples but at concentrations that were less than their respective residential environmental screening criteria.

Based on the testing completed, former ASTs do not appear to have significantly impacted soil or groundwater quality.

Historically Recognized Environmental Conditions

Underground Storage Tank

A 3,000 gallon underground storage tank (UST) was removed from the site in 1988. In October 1991, an unidentified quantity of impacted soil was over-excavated from the former UST area. Soil samples were collected at this location to confirm the extent of the contamination. In December 1991, three ground water monitoring wells were installed in the area of the former UST and later destroyed under permit from the Santa Clara Valley Water District in 1998.

In August 1998, the Santa Clara Valley Water District issued a case closure letter and stated that no further action related to the underground tank release was required.

3.8.1.5 *Other On-Site Sources of Contamination*

Asbestos and Lead Based Paint

Friable asbestos is any asbestos-containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Non-friable ACMs are materials that contain a binder or hardening agent that does not allow the asbestos particles to become airborne easily. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl asbestos floor tiles, and transite siding made with cement. Non-friable ACMs can pose the same hazard as friable asbestos during remodeling, repairs, or other construction activities that would damage the material. Use of friable asbestos products was banned in 1978.

In 1978, the Consumer Products Safety Commission banned paint and other surface coating materials containing lead. The existing buildings on-site were constructed after 1980. Because the existing structures on the project site were constructed prior to 1980, it is likely that ACMs and/or lead based paints are present in the structures on-site. Additionally, soil adjacent to on-site structures that are painted with lead-containing paint can become impacted with lead as a result of the weathering and/or peeling of painted surfaces.

3.8.1.6 *Off-Site Sources of Contamination*

800 Thomas Foon Chew Way

The LECEF is located at 800 Thomas Foon Chew Way adjacent to the western boundary of the site. The facility was listed on the TCRA-SQG, RCRA-LQG, AST, CUPA listing, EMI, NPDES, and San José Hazmat databases. The site is also identified as a closed LUST case. Although these database listing indicate that hazardous materials are used and stored at LECEF, there are no recorded releases of hazardous materials except for the LUST case listing.

The three former USTs on the LECEF site, including a 300 gallon gasoline tank and two 10,000 gallon diesel tanks which were removed in November 2001, do not appear to have impacted the project site.

3.8.1.7 *Database Records Search*

A database search was completed to determine whether the project site is listed on any federal, state, local, historical, and/or brownfield databases as a known or suspected source of contamination, or a site that handles or stores hazardous materials.

A database search of leaking underground storage tanks (LUST) identified a 300 gallon gasoline UST, as previously discussed. The 300 gallon UST was removed from the site in 1988 and has since been listed as a closed case on the LUST database. The California State Water Resources Control Board's Geotracker database did not identify any active cases on or adjacent to the project site.

3.8.2 Hazards and Hazardous Materials Impacts

3.8.2.1 *Thresholds of Significance*

For the purposes of this EIR, a hazards and hazardous materials impact is considered significant if the project would:

- Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

3.8.2.2 *Consistency with Plans*

The project site is not located within an airport safety zone and is not within one-quarter mile of any school, residences, or New Chicago Marsh. As discussed below, there is a probability of asbestos and lead-based paint on the project site. Mitigation measures and standard abatement measures have been identified to reduce potential health risks associated with on-site contaminants to a less than significant level. Therefore, the project is consistent with General Plan Policies CD-EC-7.1, EC-7.2, EC-7.3, and EC-7.5, and Master Plan Policies Industrial/Non-Industrial Relationships Policy 1 and Industrial/Non-Industrial Relationships Policy 1.

3.8.2.3 *Hazardous Materials Impacts from the Project*

The project site is not listed as a hazardous waste or substances site on any regulatory database and, therefore, would not result in a significant hazards to the public or environmental due to accidental chemical releases. **(Less Than Significant Impact)**

The nearest school to the project site is George Mayne Elementary School, located approximately three miles east of the site at 5030 N. 1st Street, Alviso. Since the nearest school is more than one-quarter mile from the site, emissions and hazardous materials handling at the site, during project construction or operation, would not pose a significant health risk to nearby schools. **(No Impact)**

Project Operation Impacts

Operation of the proposed project would include the use and storage of cleaning supplies and maintenance chemicals. No other hazardous materials would be used or stored on-site. The small quantities of cleaning supplies and maintenance chemicals that would be transported, used and stored on-site, would not generate substantial hazardous emissions or accidental chemical releases that would pose a risk to site users. Compliance with applicable federal, state and local handling, storage, and disposal requirements would ensure that no significant hazards to future site users are created by the routine transport, use, or disposal of hazardous substances. **(Less Than Significant Impact)**

Project Construction Impacts

Soil Contamination Impacts

The project site is not listed as a hazardous waste or substances site on a regulatory database. Construction on the project site could, however, disturb on-site soils with residual agricultural pesticide contamination, and expose construction workers to elevated concentrations of pesticide chemicals.

Impact HAZ-1: Implementation of the proposed project could release pesticide chemicals from on-site soils into the environment, and expose construction workers to residual agricultural soil contamination. **(Significant Impact)**

Asbestos-Containing Materials and Lead-Based Paint

The project would demolish all existing structures on-site which include two residences, a mobile home, and farm-related accessory structures. Given the age of structures on-site, it is likely that these structures contain ACMs and/or lead-based paint. Demolition of these structures could release asbestos particles into the environment and expose construction workers to harmful levels of asbestos.

The project site would be required to conform to the following regulatory programs and to implement the following permit conditions, consistent with OSHA requirements, to reduce impacts due to the presence of ACMs and/or lead-based paint:

Permit Conditions:

- In conformance with state and local laws, a visual inspection/pre-demolition survey, and possible sampling, shall be conducted prior to the demolition of on-site structures to determine the presence of asbestos-containing materials and/or lead-based paint.
- During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, Title 8, California Code Regulations 1532.1, including employee training, employee air monitoring, and dust control. Any debris or soil containing lead-based paint or coatings would be disposal of at landfills that meet acceptance criteria for the waste being disposed.

- All potentially friable ACMs shall be removed in accordance with ENSHAP guidelines prior to structure demolition that may disturb the materials. All demolition activities will be undertaken in accordance with Cal/OSHA standards contained in Title 8 of CCR, Section 1529, to protect workers from asbestos exposure.
- A registered asbestos abatement contractor shall be retained to remove and dispose of ACMs identified in the asbestos survey performed for the site in accordance with the standards stated above.
- Materials containing more than one percent asbestos are also subject to BAAQMD regulations. Removal of materials containing more than one percent asbestos shall be completed in accordance with BAAQMD requirements and notifications.

The General Plan FPEIR concluded that conformance with the federal, state, and local regulatory requirements would result in a less than significant impact from ACMs and Lead. **(Less Than Significant Impact)**

3.8.2.4 Other Hazards

The project site is not located within the Airport Land Use Plan of the Norman Y. Mineta San José International Airport nor located within the vicinity of a private airstrip. Project implementation would not, therefore, interfere with airport operations. **(No Impact)**

Emergency Response

Access to the site would be provided by two new public streets from Zanker Road. Existing access from Ranch Drive near the southeast corner of the site would be maintained over Coyote Creek for trucks accessing the LECEF site west of the project site, emergency vehicle access, and bicycles and pedestrians on the Coyote Creek Trail. Under Option 1, both streets would be public streets utilized to access the light industrial uses from Zanker Road. Under Option 2, the data center portion of the project site would be accessed through a secured entry adjacent to the substation on the northern side of the site. Emergency vehicle access under Option 2 would be provided by the Ranch Drive access route. The project would, therefore, not interfere with any emergency response or evacuation plans. **(No Impact)**

According to CAL FIRE, the project site is not located within an area subject to wildfires. Implementation of the proposed project would not, therefore, expose people to natural hazards from wildfire risk.⁵¹ **(No Impact)**

3.8.2.5 Existing Hazardous Materials Conditions Affecting the Project

On December 17, 2015, the California Supreme Court issued an opinion in “CBIA vs. BAAQMD” holding that CEQA is primarily concerned with the impacts of a project on the environment and generally does not require agencies to analyze the impact of existing conditions on a project’s future users unless the project risks exacerbating those environmental hazards or risks that already exist.

⁵¹ CAL FIRE. *Very High Fire Hazard Severity Cones in LRA, Santa Clara County*. http://frap.fire.ca.gov/webdata/maps/santa_clara/fhszl_map.43.pdf. Accessed on November 21, 2016.

As described in *Section 3.8.1.4* and *Section 3.8.2.3*, soils on-site are contaminated with residual pesticide chemicals from former agricultural operations. Limited sampling previously conducted on a portion of the project site identified concentrations of organochlorine pesticides (i.e. DDT, DDE, and DDD) at concentrations less than the residential or industrial regional screening levels in soils on-site. Additional sampling in areas where agricultural equipment was stored detected elevated levels of lead and arsenic above STLC limits. Additional soil sampling is recommended for these portions of the site. Since contaminated soils would be hauled off-site and/or contained and capped with asphalt in accordance with the proposed soil management plan (see mitigation measures in *Section 3.8.3*), on-site soil contamination would not pose a health risk to future park users or future occupants of the project site. Therefore, the project would be consistent with Policy EC-7.2.

Impacts of Off-Site Facilities to the Project

As mentioned previously in *Section 4.9.1.4*, off-site sources of contamination, including the USTs located on the adjacent LECEF property and soil and groundwater contamination on the easterly adjacent property would not impacts soils and/or groundwater on the project site.

3.8.3 Mitigation and Avoidance Measures

The following mitigation measures are included in the proposed project to reduce soil contamination impacts to a less than significant level.

MM HAZ-1.1: A Site Management Plan (SMP) shall be prepared and implemented (as outlined below) and any contaminated soils found in concentrations above established thresholds shall be removed and disposed of according to California Hazardous Waste Regulations or the contaminated portions of the site shall be capped beneath the planned development under the regulatory oversight of the Santa Clara County Department of Environmental Health (SCCDEH) or State Department of Toxic Substances Control (DTSC). The contaminated soil removed from the site shall be hauled off-site and disposed of at a licensed hazardous materials disposal site.

Components of the SMP shall include, but shall not be limited to:

- A detailed discussion of the site background;
- Preparation of a Health and Safety Plan by an industrial hygienist;
- Notification procedures if previously undiscovered significantly impacted soil or free fuel product is encountered during construction;
- On-site soil reuse guidelines based on the California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region's reuse policy;
- Sampling and laboratory analyses of excess soil requiring disposal at an appropriate off-site waste disposal facility;
- Soil stockpiling protocols; and
- Protocols to manage ground-water that may be encountered during trenching and/or subsurface excavation activities.

MM HAZ-1.2: All contractors and subcontractors at the project site shall develop a Health and Safety Plan (HSP) specific to their scope of work and based upon the known environmental conditions for the site. The HSP shall be approved by the PBCE Supervising Environmental Planner and Environmental Services Department (ESD) and implemented under the direction of a Site Safety and Health Officer. The HSP shall include, but shall not be limited to, the following elements, as applicable:

- Provisions for personal protection and monitoring exposure to construction workers;
- Procedures to be undertaken in the event that contamination is identified above action levels or previously unknown contamination is discovered;
- Procedures for the safe storage, stockpiling, and disposal of contaminated soils;
- Provisions for the on-site management and/or treatment of contaminated groundwater during extraction or dewatering activities; and
- Emergency procedures and responsible personnel.

The SMP shall be submitted to SCCDEH, DTSC, or equivalent regulatory agency for review and approval. Copies of the approved SMP shall be provided to the PBCE Supervising Environmental Planner and Environmental Services Department (ESD) prior to issuance of grading permits.

With implementation of the identified mitigation measures, impacts from contaminated soils on-site would be reduced to a less than significant level.

3.8.4 Conclusion

With implementation of identified mitigation measures, applicable General Plan policies, and existing regulations, the proposed development would have a less than significant hazardous materials impact. **(Less than Significant Impact With Mitigation)**

3.9 HYDROLOGY AND WATER QUALITY

3.9.1 Environmental Setting

3.9.1.1 *Regulatory Framework*

Federal Emergency Management Agency

In 1968, Congress created the National Flood Insurance Program (NFIP) in response to the rising cost of taxpayer funded disaster relief for flood victims and the increasing amount of damage caused by floods. The NFIP makes federally-backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage.

Federal Emergency Management Agency (FEMA) manages the NFIP and creates Flood Insurance Rate Maps (FIRMs) that designate 100-year floodplain zones and delineate other flood hazard areas. A 100-year floodplain zone is the area that has a one in one hundred (one percent) chance of being flooded in any one year based on historical data.

Clean Water Act and Porter-Cologne Water Quality Control Act

The federal Clean Water Act (CWA) and California's Porter-Cologne Water Quality Control Act are the primary laws that govern water quality. Its objective is to reduce or eliminate water pollution in the nation's rivers, streams, lakes, and coastal waters. The CWA outlines the Federal laws for regulating discharges of pollutants, as well as sets minimum water quality standards for all Waters of the United States. At the Federal level, the Environmental Protection Agency (EPA) implements pollutant control programs to regulate quality standards for surface waters. The Porter-Cologne Act established the State Water Resources Control Board (SWRCB) which implements water quality regulations on a state-wide level.

Several mechanisms are employed to control domestic, industrial, and agricultural pollution under the CWA. At the federal level, the CWA is administered by the United States Environmental Protection Agency. At the state and regional level, the CWA is administered and enforced by the SWRCB and the nine Regional Water Quality Control Boards (RWQCB). The State of California has developed a number of water quality laws, rules, and regulations to assist in the implementation of the CWA and related federally mandated water quality requirements. In many cases, the federal requirements set minimum standards and policies and the laws, rules, and regulations adopted by the state and regional boards exceed the federal requirements.

CWA Section 303(d) requires states to list all polluted water bodies that require further attention to support future uses. Currently, Coyote Creek is listed on the California 303(d) list⁵² for Diazinon and trash with a Total Maximum Daily Load (TMDL)⁵³ and the implementation plans are in place.⁵⁴

⁵² The Clean Water Act, section 303, establishes water quality standards and TMDL programs. The 303(d) list is a list of impaired water bodies.

⁵³ A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards.

⁵⁴ California State Water Quality Control Board website. Accessed November 17, 2016.

http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml?wbid=CAR2055004019990218133956

Nonpoint Source Pollution Program

In 1988, the SWRCB adopted the Nonpoint Source Management Plan in an effort to control nonpoint source pollution in California. In December 1999, the Plan was updated to comply with the requirements of Section 319 of the Clean Water Act and Section 6217 of the Coastal Zone Act Reauthorization Amendment (CZARA) of 1990. The Nonpoint Source Program requires individual permits to control discharge associated with construction activities. The Nonpoint Source Program is administered by the RWQCB under the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activities. Projects must comply with the requirements of the Nonpoint Source Program if:

- They disturb one acre or more of soil; or
- They disturb less than one acre of soil but are part of a larger development that, in total, disturbs one acre or more of soil.

The NPDES General Permit for Construction Activity requires the developer to submit a Notice of Intent (NOI) to the RWQCB and to develop a Stormwater Pollution Prevention Plan (SWPPP) to control discharge associated with construction activities.

Statewide Construction General Permit

The SWRCB has implemented a NPDES General Construction Permit for the State of California. For any projects that disturb one or more acres of land, the project applicant is required to submit a Notice of Intent (NOI) to the State Board and a Storm Water Pollution Prevention Plan (SWPPP) must be prepared prior to commencement of construction. The SWPPP addresses appropriate measures for reducing construction and post-construction impacts.

All development projects, whether subject to the Construction General Permit or not, shall comply with the City of San José's Grading Ordinance, which requires the use of erosion and sediment controls to protect water quality while the site is under construction. Prior to the issuance of a permit for grading activity occurring during the rainy season (October 1 to April 30), the project will submit to the Director of Public Works an Erosion Control Plan detailing BMPs that will prevent the discharge of stormwater pollutants.

Municipal Regional Stormwater NPDES Permit (MRP)/C.3 Requirement

The San Francisco Bay RWQCB also has issued a Municipal Regional Stormwater NPDES Permit (MRP) for the region. In an effort to standardize stormwater management requirements, this permit replaces the formerly separate countywide municipal stormwater permits with a regional permit for 77 Bay Area municipalities, including the City of San José. Under provisions of the NPDES MRP, projects that add and/or replace more than 10,000 square feet of impervious surface, or 5,000 square feet of uncovered parking area, are required to design and construct stormwater treatment controls to treat post-construction stormwater runoff.

The MRP requires regulated projects to include Low Impact Development (LID) practices, such as pollutant source control measures and stormwater treatment features aimed to maintain or restore the site's natural hydrologic functions. The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

Santa Clara Valley Urban Runoff Pollution Prevention Program

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) was developed in accordance with the requirements of the 1986 San Francisco Bay Basin Water Quality Control Plan, for the purpose of reducing water pollution associated with urban stormwater runoff. This program was also designed to fulfill the requirements of Section 304(1) of the federal Clean Water Act, which mandated that the Federal Environmental Protection Agency develop NPDES application requirements for storm water runoff.

City of San José Post-Construction Urban Runoff Management (Policy 6-29)

The City of San José's Policy No. 6-29 implements the stormwater treatment requirements of Provision C.3 of the Municipal Regional Stormwater NPDES Permit. The City's Policy No. 6-29 requires all new and redevelopment projects regardless of size and land use to implement post-construction Best Management Practices (BMPs) and Treatment Control Measures (TCM) to the maximum extent practicable. This policy also established specific design standards for post-construction TCMs for projects that create, add, or replace 10,000 square feet or more of impervious surface area to use site design and source control measures and numerically-sized Low Impact Development (LID) stormwater treatment measures in accordance with the strategies set forth in the policy.

City of San José Hydromodification Management (Policy 8-14)

The City of San José's Policy No. 8-14 implements the stormwater treatment requirements of Provision C.3 of the Municipal Regional Stormwater NPDES Permit. Policy No. 8-14 requires all new and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams, and creeks. The policy requires these projects to be designed to control project-related hydromodification through a Hydromodification Management Plan (HMP).

Based on the SCVUPPP watershed map for the City of San José, the project site is exempt from the NPDES hydromodification requirements because it is located in a catchment to hardened channel and/or tidal area.^{55,56} The project shall comply with Policy 8-14 as it is applicable at the Development Permit stage for any future development on-site.

Envision San José 2040 General Plan

The *Envision San José 2040 General Plan* includes policies applicable to all development projects in San José.

Policy ER-8.1: Manage stormwater runoff in compliance with the City's Post-Construction Urban Runoff (6-29) and Hydromodification Management (8-14) Policies.

⁵⁵ Santa Clara Valley Urban Runoff Pollution Prevention Program. http://www.scvurppp-w2k.com/hmp_maps.htm Accessed November 11, 2016.

⁵⁶ City of San José Council Policy. *Post-Construction Hydromodification Management*. <https://www.sanjoseca.gov/DocumentCenter/View/3916> Accessed November 30, 2016.

Policy ER-8.3: Ensure that private development in San José includes adequate measures to treat stormwater runoff.

Policy ER-8.5: Ensure that all development projects in San José maximize opportunities to filter, infiltrate, store and reuse or evaporate stormwater runoff onsite.

Policy EC-4.1: Design and build all new or remodeled habitable structures in accordance with the most recent California Building Code and municipal code requirements as amended and adopted by the City of San José, including provisions for expansive soil, and grading and storm water controls.

Policy EC-5.16: Implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites.

Action EC-7.10: Require review and approval of grading, erosion control and dust control plans prior to issuance of a grading permit by the Director of Public Works on sites with known soil contamination. Construction operations shall be conducted to limit the creation and dispersion of dust and sediment runoff.

Alviso Master Plan

The following policies are specific to hydrology and water quality and are specific to the proposed project.

Environmental Protection Policy 1: All new parking, circulation, loading, outdoor storage, utility, and other similar activity areas must be located on paved surfaces with proper drainage to avoid potential pollutants from entering the groundwater, Guadalupe River, Coyote Creek, or San Francisco Bay.

Storm Drainage Policy 1: All new development projects should be evaluated to determine the possible need for additional storm drainage facilities.

3.9.1.2 Existing Conditions

Flooding

Based on the FEMA Flood Insurance Rate Maps (Map 06085C0066J, dated February 19, 2014), the project site is located in Flood Zone X. Zone X is designated as areas of 0.2 annual chance flood, areas of one percent annual chance flood with average depths of less than one foot or with drainage areas of less than one square mile, and areas protected by levees from one percent annual chance floods.⁵⁷

Levees are located on both sides of Coyote Creek in the project area, including along the eastern boundary of the site. The levees were constructed by the US Army Corps of Engineers with the SCVWD as the local sponsor. The levees function as critical flood protection structures, providing the surrounding area and project site from 100-year flood events.

⁵⁷ Federal Emergency Management Agency. *Flood Insurance Rate Map. Map Number 06085C0066J.* February 19, 2014.

Dam Failure

Based on the SCVWD dam failure inundation hazard maps, the project site is located within the Anderson Dam failure inundation hazard zone but outside the Lexington Dam failure inundation zone.^{58,59}

Seiches, Tsunamis, and Mudflows

There are no landlocked bodies of water near the project site that would affect the site in the event of a seiche. There are no bodies of water near the project site that would affect the site in the event of a tsunami.⁶⁰ The site is located on the nearly flat Santa Clara Valley floor and is not subject to the risk of mudflows.

Storm Drainage System

There is currently no formal drainage system on-site. Stormwater runoff is assumed to sheet flow from the site towards Zanker Road, and empties into Coyote Creek which flows to the Bay. The adjacent LECEF facility discharges into Coyote Creek via an existing private storm drain force main, which crosses through the project site, and connects to a 48-inch creek outfall located at the southern end of the project site.

Stormwater Runoff

The water quality of Coyote Creek is directly affected by pollutants contained in stormwater runoff from a variety of urban and non-urban uses. Stormwater from urban uses contain metals, pesticides, herbicides, and other contaminants, including oil, grease, asbestos, lead, and animal wastes. Based on the data from the EPA⁶¹, the Coyote Creek is currently listed on the California 303(d)⁶² list for trash and Diazinon.

3.9.2 Hydrology and Water Quality Impacts

3.9.2.1 *Thresholds of Significance*

For the purposes of this EIR, a hydrology and water quality impact is considered significant if the project would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local

⁵⁸ Santa Clara Valley Water District. *Lexington Reservoir 2009 Flood Inundation Maps*. 2009.

<http://www.valleywater.org/Services/LexingtonReservoirAndLenihanDam.aspx> Accessed November 17, 2016.

⁵⁹ Santa Clara Valley Water District. *Anderson Dam and Reservoir 2009 Flood Inundation Maps*. 2009.

<http://www.valleywater.org/Services/AndersonDamAndReservoir.aspx> Accessed November 17, 2016.

⁶⁰ Association of Bay Area Governments. *Tsunami Inundation Emergency Planning Map for the San Francisco Bay Region*. <<http://quake.abag.ca.gov/tsunamis>>. Accessed November 17, 2016.

⁶¹ United States Environmental Protection Agency. *California 303(d) Listed Waters*.

http://iaspub.epa.gov/tmdl_waters10/attains_impaired_waters.impaired_waters_list?p_state=CA&p_cycle=2012

Accessed December 8, 2016.

⁶² The Clean Water Act, section 303, establishes water quality standards and TMDL programs. The 303(d) list is a list of impaired water bodies.

groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impeded or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- Inundation by seiche, tsunami, or mudflow.

3.9.2.2 *Consistency with Plans*

The project would be required to comply with all applicable federal, state, and local water quality and stormwater control standards and permits, as well as all regulations pertaining to flood zones. The project would be consistent with FEMA regulations, the federal CWA, the SWRCB NPDES programs for construction and post-construction, San José Council Policies 6-29 and 8-14, and General Plan Policies ER-8.1, ER-8.3, ER-8.5, EC-4.1, and EC-5.16. In addition, the project would be consistent with Environmental Protection Policy 1 and Storm Drainage Policy 1 from the Alviso Master Plan.

3.9.2.3 *Water Quality Impacts*

Construction Impacts

Implementation of the proposed project would involve demolition of the existing structures, trenching for on- and off-site utilities, and grading of the project site. The project could also include the installation of a stormwater outfall to Coyote Creek if it is determined that connection to the Oakmead Pump Station on the Guadalupe River is not feasible. Because construction activities on- and off-site would disturb more than one acre of land, the project would be required to comply with the General Construction Permit and prepare a SWPPP for construction activities.

Pursuant to the City's requirements, the following measures, based on RWQCB recommendations, have been included in the project as permit conditions to reduce potential construction-related water quality impacts:

Permit Conditions

- Burlap bags filled with drain rock shall be installed around storm drains to route sediment and other debris away from the drains.
- Earthmoving or other dust-producing activities would be suspended during periods of high winds.
- All exposed or disturbed soil surfaces would be watered at least twice daily to control dust as necessary.
- Stockpiles of soil or other materials that can be blown by the wind would be watered or covered.
- All trucks hauling soil, sand, and other loose materials would be covered and all trucks would be required to maintain at least two feet of freeboard.
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites would be swept daily (with water sweepers).
- Vegetation in disturbed areas would be replanted as quickly as possible.
- All unpaved entrances to the site shall be filled with rock to remove mud from tires prior to entering City streets. A tire wash system may also be installed at the request of the City.

With implementation of the identified construction measures and compliance with the NPDES General Construction Permit, construction of the proposed project would have a less than significant impact on water quality. **(Less Than Significant Impact)**

Post-Construction Impacts

Under existing conditions, the site has approximately 42,887 square feet (two percent) of impervious surfaces. Implementation of the project would increase impervious surfaces on-site by approximately 75 percent (2,102,204 square feet). The increase in impervious surfaces would increase stormwater runoff generated from the project site, which could impact water quality.

The project would be required to comply with the City of San José's Post-Construction Urban Runoff Policy 6-29 and the RWQCB Municipal Regional Stormwater NPDES permit. The City's Post-Construction Urban Runoff Policy 6-29 establishes specific requirements to reduce stormwater pollution from new and redevelopment projects. The RWQCB Municipal Regional Stormwater NPDES permit requires all post-construction stormwater runoff to be treated by numerically sized Low Impact Development (LID) treatment controls.

In order to meet these requirements, the following design measures have been incorporated into the project to reduce stormwater runoff:

- A 100-foot buffer zone from the toe of the Coyote Creek levee would be established along the eastern boundary of the site to minimize any impacts to Coyote Creek or the existing levee.
- Landscaping would be designed to minimize irrigation and runoff, and to maintain surface infiltration (where practical).
- Runoff from parking lots and sidewalks would be directed through landscaped areas.

- All runoff from access roads and sidewalks would be directed via a piped network into a bioretention area (to be constructed along the eastern boundary of the site) or a flow-through planter located on the western boundary of the site.

The on-site treatment facilities would be numerically sized and would have sufficient capacity to treat runoff entering the storm drainage system, consistent with the NPDES requirements. Details of the specific site design, pollutant source control, and stormwater treatment control measures demonstrating compliance with Provision C.3 of the Municipal Regional Permit shall be included in the project design to the satisfaction of the Director of PBCE. The stormwater runoff could be discharged into a new outfall pipe into Coyote Creek or conveyed to the existing Oakmead Pump Station on the Guadalupe River, approximately two miles southwest of the project site. The outfall, if required, would be sized appropriately to convey stormwater from the project site as well as City held lands east of Zanker Road.

The General Plan FPEIR concluded that with the regulatory programs currently in place, stormwater runoff from new development would have a less than significant impact on stormwater quality. With implementation of a Stormwater Control Plan consistent with RWQCB and compliance with the City's regulatory policies pertaining to stormwater runoff, operation of the proposed project would have a less than significant water quality impact. **(Less Than Significant Impact)**

3.9.2.4 *Groundwater Impacts*

The conversion of existing pervious surfaces to impervious surfaces may decrease stormwater infiltration into an underlying groundwater basin. The project site does not, however, substantially contribute to recharging of the groundwater aquifers and is not a former recharge area. Development of new industrial land uses allowed under the General Plan would not occur within any SCVWD's percolation facilities for groundwater recharge nor would it affect the operation of existing percolation or recharge facilities. Therefore, implementation of the project would not interfere with groundwater recharge or cause a reduction in overall groundwater supply. **(Less Than Significant Impact)**

Groundwater depth in the immediate project area ranges from approximately 8.5 feet below ground surface (bgs) to 11 feet bgs.⁶³ The project would not require any substantial excavations and, as a result, the proposed project would not interfere with groundwater flow or impact any groundwater aquifers. **(Less Than Significant Impact)**

3.9.2.5 *Drainage Pattern Impacts*

The proposed project would not substantially alter the existing drainage pattern of the site or area through the alteration of any waterway. As a result, the project would not substantially increase erosion or increase the rate or amount of stormwater runoff. **(Less Than Significant Impact)**

⁶³ Cardno ATC. *Phase I Environmental Site Assessment of Agricultural Land Adjacent to 800 Thomas Foon Chew Way*. March 20, 2015 (Appendix I).

3.9.2.6 Storm Drainage Impacts

The approximate existing and proposed square footages of impervious and pervious surfaces on-site for Option 1 (light industrial and data center uses) are summarized in Table 3.9-1 below.

Table 3.9-1: Pervious and Impervious Surfaces On-Site (Option 1)						
Site Surface	Existing/Pre-Construction (sf)	%	Project/Post-Construction (sf)	%	Difference (sf)	%
Impervious						
Building Footprint	20,288	1	829,925	30	+809,637	+16
Hardscape	22,599	1	1,272,279	45	+773,945	+28
<i>Subtotal</i>	42,887	2	2,102,204	75	+1,222,188	+44
Pervious						
Landscaped Areas	0	0	459,015	16		
Other Pervious Surfaces (Vacant Land)	2,770,452	98	1,523,257	54	-1,222,188	-44
<i>Subtotal</i>	2,770,452	98				
Total	2,813,135	100	2,813,135	100		
Note: Minor discrepancies may occur due to rounding. The above is for the project site only. Off-site roadways will be calculated as roadways are constructed. Applicable C3 provisions shall apply.						

Under existing conditions, the project site is approximately 98 percent pervious. Implementation of the project would decrease pervious surfaces by approximately 75 percent (2,102,204 square feet), which would result in a substantial increase in stormwater runoff when compared to the existing condition on-site

The General Plan FPEIR concluded that although new development and redevelopment allowed under the General Plan may result in an increase in impervious surfaces, implementation of applicable City policies and existing regulations would result in a less than significant impact on the existing storm drainage system. **(Less Than Significant Impact)**

3.9.2.7 Seiches, Tsunamis, and Mudflows

There are no bodies of water near the project site that would affect the project area in the event of a seiche or tsunami. The project area is flat and there are no mountains in proximity. Therefore, development of the project would not cause mudflows that would impact adjacent properties. **(Less Than Significant Impact)**

3.9.2.8 Existing Flood Conditions Affecting the Project

The California Supreme Court in a December 2015 opinion (*BIA v. BAAQMD*) confirmed CEQA is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project, which are discussed below.

Based on the FEMA Flood Insurance Rate Maps, the project site is located in Flood Zone X; areas determined to be outside the one percent annual chance floodplains. Implementation of the proposed project would not redirect flood flows or expose people or structures to significant flood hazards. The project site is located within the Anderson Dam failure inundation zone. The California Division of Safety of Dams (DSOD) is responsible for inspecting dams on an annual basis to ensure the dams are safe, performing as intended, and not developing problems. As part of its comprehensive dam safety program, the SCVWD routinely monitors and studies the condition of each of its 10 dams, including Anderson Dam.

The General Plan FPEIR concluded that new development and redevelopment under the General Plan could result in placement of new development in Special Flood Hazard Areas and dam failure inundation zone; however, implementation of the City's policies and regulations would substantially reduce flooding and drainage hazards.

3.9.3 Conclusion

Implementation of the proposed project would have a less than significant impact to hydrology and water quality. **(Less Than Significant Impact)**

3.10 LAND USE AND PLANNING, POPULATION/HOUSING, AND AGRICULTURAL/FORESTRY RESOURCES

3.10.1 Environmental Setting

3.10.1.1 *Regulatory Framework*

Local land use is governed by the City of San José 2040 General Plan. The current General Plan and zoning designation, as they relate to the project site, are described below.

Envision San José 2040 General Plan

The project site is currently designated *LI – Light Industrial* under the City’s General Plan. This land use designation is defined as follows:

This designation is intended for a wide variety of industrial uses and excludes uses with unmitigated hazardous or nuisance effects. Warehousing, wholesaling, and light manufacturing are examples or typical uses in this designation. Light Industrial designated properties may also contain service establishments that serve only employees of businesses located in the immediate industrial area. Office and higher-end industrial uses such as research and development, are discouraged in order to preserve the scarce, lower cost land resources that are available for companies with limited operation history (start-up companies) or lower cost industrial operations.

Because of the limited supply of land available for industrial/suppliers/services firms in the City, Land Use Policies in the General Plan restrict land use changes on sites designated Light Industrial.

The City’s General Plan includes the following policies applicable to the proposed project:

Policy CD-1.1: Require the highest standards of architectural and site design, and apply strong design controls for all development projects, both public and private, for the enhancement and development of community character and for the proper transition between areas with different types of land uses.

Policy CD-4.9: For development subject to design review, ensure the design of new or remodeled structures is consistent or complementary with the surrounding neighborhood fabric (including but not limited to prevalent building scale, building materials, and orientation of structures to the street).

Policy ER-2.1: Ensure that new public and private development adjacent to riparian corridors in San José are consistent with the provisions of the City’s Riparian Corridor Policy Study and any adopted Santa Clara Valley Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP).

Policy ER-2.2: Ensure that a 100-foot setback from riparian habitat is the standard to be achieved in all but a limited number of instances, only where no significant impacts would occur.

Policy ER-2.3: Design new development to protect adjacent riparian corridors from encroachment of lighting, exotic landscaping, noise and toxic substances into the riparian zone.

San José Zoning Code

The project site is zoned *Agricultural (Planned Development)* or A(PD). Under the A(PD) zoning district, no building, structure or land shall be used and no building or structure shall be erected, enlarged or structurally altered, or demolished in any planned development district, except in accordance with the provisions set forth in Chapter 20.60 of the Municipal Code.

Alviso Master Plan

The project site is located within the boundaries of the Alviso Master Plan area. Under the Alviso Master Plan, the project site has a land use designation of *Light Industrial*. The *Light Industrial* designation allows for a wide variety of industrial uses, excluding any uses with unmitigated hazardous or nuisance effects. Light industrial uses include warehousing, wholesaling, light manufacturing, and industrial supplier/service businesses. Only low intensity uses (i.e., those with low employment densities) are allowed in the Light Industrial area near Coyote Creek.

The following Alviso Master Plan policies are applicable to the proposed project.

Environmental Protection Policy 3: The riparian corridors adjacent to Coyote Creek and Guadalupe River should be preserved intact. Any development adjacent to the waterways should follow the City's Riparian Corridor policies.

3.10.1.2 Existing Conditions

The 64.5-acre project site is located north of Highway 237 between Zanker Road and Coyote Creek in the City of San José. The site is primarily fallow farmland with two residences, a mobile home, and farm-related accessory structures located near the southern boundary of the site. Site access is limited to Alviso Milpitas Road along the southern boundary of the project site (adjacent to SR 237), which crosses Coyote Creek, becomes Ranch Drive in the City of Milpitas, and connects to McCarthy Boulevard.

The *Santa Clara County Important Farmlands 2012 Map* designates the project site as Prime Farmland. Prime Farmland is defined as land with the combination of physical and chemical features able to sustain long-term agricultural production.

3.10.1.3 Surrounding Land Uses

The project area west of Coyote Creek is primarily undeveloped. The site is generally an L-shaped parcel, as shown on Figure 2.0-3. To the south and west of the site is the LECEF facility, a power plant that consists of four natural gas turbines, four heat recovery steam generators, and one steam turbine. A PG&E electrical substation is located north of the LECEF facility, and west and south of the project site. High power transmission lines run north to south through this area, near the LECEF facility.

The San José-Santa Clara Regional Wastewater Facility (RWF) is located northwest of the project site, on the west side of Zanker Road. The drying beds for the RWF are located immediately north of the project site. The South Bay Water Recycling Facility (SBWR) is located northwest of the project site. The eastern boundary of the site is adjacent to Coyote Creek. The site is separated from the creek by an eight-foot SCVWD levee. East of Coyote Creek is a small office development and the McCarthy Ranch Marketplace in the City of Milpitas.

As previously mentioned, Alviso Milpitas Road is immediately south of the project site. South of the roadway is SR 237. The project site is generally at the same elevation as SR 237 where it runs adjacent to the site.

3.10.2 Land Use and Planning Impacts

3.10.2.1 *Thresholds of Significance*

For the purposes of this EIR, a land use and planning impact is considered significant if the project would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.
- Convert prime farmland, unique farmland, or farmland of statewide importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use;
- Induce substantial population growth in an area, either directly or indirectly;
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Land use conflicts can arise from two basic causes: 1) a new development or land use may cause impacts to persons or the physical environment in the vicinity of the project site or elsewhere; or 2) conditions on or near the project site may have impacts on the persons or development introduced onto the site by the new project. Both of these circumstances are aspects of land use compatibility. Potential incompatibility may arise from placing a particular development or land use at an inappropriate location, or from some aspect of the project's design or scope. Depending on the nature of the impact and its severity, land use compatibility conflicts can range from minor irritations and nuisance to potentially significant effects on human health and safety. The discussion below distinguishes between potential impacts *from* the proposed project *upon* persons and the physical environment, and potential impacts *from* the existing surroundings *upon* the project itself.

3.10.2.2 *Consistency with Plans*

The proposed project would be designed in accordance with applicable design standards and the City’s Riparian Corridor policies. Therefore, the project would be consistent with General Plan Policies CD-1.1, CD-4.9, ER-2.1, ER-2.2, and ER-2.3 and Master Plan Policy Environmental Protection Policy 3.

3.10.2.3 *Consistency with the General Plan and Zoning*

The project site is currently designated *LI – Light Industrial* under the City’s General Plan and zoned A(PD). Implementation of either development option would allow for redevelopment of the site with light industrial land uses which would provide both local and regional jobs along a major transportation corridor and in proximity to existing housing and services. Therefore, the project site is consistent with the General Plan land use designation.

The project proposes to rezone the site to *LI - Light Industrial*, consistent with the current General Plan designation. Both development options would be subject to the development standards and uses allowed under the LI zoning, which are shown in Table 3.10-1. As such, the data center/light industrial development option would require a Special Use Permit for the data center (Table 20-110 of the San José Municipal Code).

Table 3.10-1: Light Industrial Zoning Development Standards	
Requirement	Development Standard
Front Setback	15 feet to building
	20 feet to parking
Side Setback	0 or 25 feet from a residential district
Rear	0 or 25 feet from a residential district
Maximum Height	50 feet

The project, under either development option, is consistent with the City’s General Plan and zoning code. **(Less Than Significant Impact)**

3.10.2.4 *Land Use Impacts*

Changes in land use are not adverse environmental impacts in and of themselves, but they may create conditions that adversely affect existing uses in the immediate vicinity. The proposed project is an industrial development located within an area of mixed development (vacant lands, office, commercial, and infrastructure), just off a major transportation corridor (SR 237).

Both project options are consistent with the General Plan. The General Plan FPEIR concluded that land use conflicts, including impacts to existing businesses and other land uses, can be substantially limited or precluded with implementation of applicable General Plan policies and actions for planning and implementation as well as conformance with identified ordinances and adopted design guidelines. The proposed project would comply with all applicable City policies, actions and ordinances, and would be consistent with adopted design guidelines. Therefore, the proposed project

would have a less than significant impact on surrounding land uses. (**Less Than Significant Impact**)

The project proposes to construct new access roads to provide access to the site from Zanker Road. The new roadways would be built to current City of San José standards and would provide direct access to SR 237 without routing traffic through Milpitas or Alviso. The road would be constructed on City-held land and would benefit future planned development in the immediate project area. The construction of the new roads and development of the project site would not physically divide an established community. (**Less Than Significant Impact**)

The project site is in a sparsely developed urban area and is subject to an adopted Habitat Conservation Plan (HCP). Please see Section 3.3 *Biological Resources*, for a complete discussion of the projects consistency with the Santa Clara Valley Habitat Plan. (**Less Than Significant Impact**)

3.10.2.5 *Agricultural and Forestry Impacts*

The *Santa Clara County Important Farmlands 2012 Map* designates the project site as Prime Farmland. Prime Farmland is defined as land with the combination of physical and chemical features able to sustain long-term agricultural production. This land may have been previously used for irrigated agricultural production prior to the mapping date.⁶⁴ Implementation of the proposed project would result in the conversion of land designated as Prime Farmland to non-agricultural use.

Impact AGR-1: The proposed project would result in the loss of land designated as Prime Farmland. (**Significant Impact**)

3.10.2.6 *Population and Housing Impacts*

According to California Department of Finance 2010 census data estimates for 2012, San José has a population of 957,405 persons. As of 2012 the City of San José had approximately 305,711 households with an average 3.13 persons per household and 1.6 employed residents per household.⁶⁵ By comparison, Santa Clara County has an average household size of approximately 2.9 persons. According to the City's General Plan, the projected population in 2035 will be 1.3 million persons occupying 429,350 households.

The jobs/housing balance refers to the ratio of employed residents to jobs in a given community or area. When the ratio reaches 1.0, a balance is struck between the supply of local housing and jobs. The jobs/housing resident ratio is determined by dividing the number of local jobs by the number of employed residents that can be housed in local housing. Currently, San José has a higher number of employed residents than jobs (approximately 0.8 jobs per employed resident) but this trend is projected to reverse with full build-out under the current General Plan.

⁶⁴ California Natural Resources Agency. *Santa Clara County Important Farmlands 2012*. Accessed November 17, 2016. <<ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/scl12.pdf>>

⁶⁵ State of California Department of Finance. *Census 2010*. 2010. <http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1&prodTy pe=table> Accessed December 8, 2016.

Construction of the proposed project would result in demolition of the two single-family houses, a mobile home, and farm-related accessory structures located near the southern end of the site. The project would permanently displace the current occupants on-site; however, the loss of two single-family houses and a mobile home would not substantially reduce the total number of housing within the City or necessitate the construction of housing elsewhere. **(Less Than Significant Impact)**

3.10.3 Mitigation and Avoidance Measures

As discussed in the Envision San José 2040 General Plan FPEIR, there are no feasible mitigation measures available to reduce the loss of agricultural land within areas previously planned and designated for development within the City's Urban Growth Boundary. The General Plan FPEIR concluded that the loss of agricultural land in the City is significant and unavoidable.

3.10.4 Conclusion

The proposed project would convert Prime Farmland to non-agricultural use, which would result in a significant and unavoidable impact. The impact would be significant and unavoidable as disclosed in the Envision San José 2040 Supplemental FPEIR. **(Significant Unavoidable Impact)**

Implementation of the project would not substantially reduce the total number of housing units in San José or necessitate the construction of housing elsewhere. **(Less Than Significant Impact)**

The proposed project would be compatible with all adjacent and nearby land uses, would not displace a substantive number of existing residences, and would not contribute to the jobs/housing imbalance in the City. With approval of the proposed rezoning, the proposed project would comply with relevant land use policies and regulations. **(Less Than Significant Impact)**

3.11 NOISE AND VIBRATION

3.11.1 Environmental Setting

3.11.1.1 *Regulatory Framework*

State CEQA Guidelines

CEQA contains guidelines to evaluate the significance of effects resulting from a proposed project. These guidelines have been used in this EIR as thresholds for establishing potentially significant noise impacts and are listed under *Thresholds of Significance*.

CEQA does not define what noise level increase would be considered substantial. Typically, project-generated permanent noise level increases of three Ldn or greater would be considered significant where exterior noise levels would exceed the normally acceptable noise level standard (60 Ldn). Where noise levels would remain below the normally acceptable noise level standard with the project, permanent noise level increases of five Ldn or greater would be considered significant.

Envision San José 2040 General Plan

The Envision San José 2040 General Plan includes policies applicable to all development projects in San José. The City’s noise and land use compatibility guidelines are shown in Table 3.11-1, below. Relevant City policies and municipal code standards are also listed.

Table 3.11-1: Proposed General Plan Land Use Compatibility Guidelines (GP Table EC-1)

Land Use Category	Exterior DNL Value in Decibels					
	55	60	65	70	75	80
1. Residential, Hotels and Motels, Hospitals and Residential Care ¹						
2. Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds						
3. Schools, Libraries, Museums, Meeting Halls, and Churches						
4. Office Buildings, Business Commercial, and Professional Offices						
5. Sports Arena, Outdoor Spectator Sports						
6. Public and Quasi-Public Auditoriums, Concert Halls, and Amphitheaters						

¹Noise mitigation to reduce interior noise levels pursuant to Policy EC-1.1 is required.

Normally Acceptable:
 Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable:
 Specified land use may be permitted only after detailed analysis of the noise reduction requirements and noise mitigation features included in the design.

Unacceptable:
 New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies. Development will only be considered when technically feasible mitigation is identified that is also compatible with relevant design guidelines.

Policy EC-1.1: Locate new development in areas where noise levels are appropriate for the proposed uses. Consider federal, state and City noise standards and guidelines as a part of new development review.

Policy EC-1.2: Minimize the noise impacts of new development on land uses sensitive to increased noise levels (Categories 1, 2, 3 and 6) by limiting noise generation and by requiring use of noise attenuation measures such as acoustical enclosures and sound barriers, where feasible. The City considers significant noise impacts to occur if a project would:

- Cause the DNL at noise sensitive receptors to increase by five dBA DNL or more where the noise levels would remain “Normally Acceptable”; or
- Cause the DNL at noise sensitive receptors to increase by three dBA DNL or more where noise levels would equal or exceed the “Normally Acceptable” level.

Policy EC-1.3: Mitigate noise generation of new non-residential land uses to 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses.

Policy EC-1.6: Regulate the effects of operational noise from existing and new industrial and commercial development on adjacent uses through noise standards in the City’s Municipal Code.

Policy EC-2.3: Require new development to minimize vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, a vibration limit of 0.08 in/sec PPV will be used to minimize the potential for cosmetic damage to a building. A vibration limit of 0.20 in/sec PPV will be used to minimize the potential for cosmetic damage at buildings of normal conventional construction.

Municipal Code – Construction Standards

According to San José Municipal Code, construction hours within 500 feet of a residential unit are limited to the hours of 7:00 a.m. to 7:00 p.m. on Monday through Friday, unless otherwise expressly allowed in a Development Permit or other planning approval. The Municipal Code does not establish quantitative noise limits for demolition or construction activities occurring in the City.

3.11.1.2 Background

Noise is typically defined as unwanted sound and is subjective due to varying tolerances. Acceptable levels of noise also vary from land use to land use. In any one location, the noise level will vary over time, from the lowest background or ambient noise level to temporary increases caused by traffic or other sources. State and federal standards have been established as guidelines for determining the compatibility of a particular land use with its noise environment.

Sound levels are usually measured in decibels (dB) with dB corresponding roughly to the threshold of hearing. Most of the sounds we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. The method commonly used to quantify environmental sounds consists of evaluating all of the frequencies of a sound in accordance with a

weighting that reflects the fact that human hearing is less sensitive at low frequencies and extreme high frequencies than in the frequency mid-range. This is called “A” weighting, and the dB level so measured is called the *A-weighted sound level* (dBA).

Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called L_{eq} . The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources which create a relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors, L_{01} , L_{10} , L_{50} , and L_{90} , are commonly used. They are the A-weighted noise levels equaled or exceeded during 1, 10, 50, and 90 percent of a stated time period. Sound level meters can accurately measure environmental noise levels to within about plus or minus one dBA. Since the sensitivity to noise increases during the evening hours, 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Day/Night Average Sound Level, Ldn*, is the average A-weighted noise level during a 24-hour day, obtained after the addition of 10 dB to noise levels measured in the nighttime between 10:00 PM and 7:00 AM.

The most widespread and continual sources of noise in San José are transportation and transportation-related facilities. Freeways, local arterials, the Norman Y. Mineta San José International Airport, railroads, and Light Rail Transit are all major contributors to noise in San José.

Construction Noise

Construction is a temporary source of noise impacting residences and businesses located near construction sites. Construction noise can be significant for short periods of time at any particular location and generates the highest noise levels during grading and excavation, with lower noise levels occurring during building construction. Large pieces of earth-moving equipment, such as graders, scrapers, and bulldozers, generate maximum noise levels of 85 to 90 dBA at a distance of 50 feet. Typical hourly average construction-generated noise levels are approximately 80 to 85 dBA measured at a distance of 50 feet from the site during busy construction periods. Some construction techniques, such as pile driving, can generate noise levels up to 105 dBA at 50 feet that are difficult to control. Construction activities can elevate noise levels at adjacent businesses and residences by 15 to 20 dBA or more during construction hours.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the Peak Particle Velocity (PPV) and another is the Root Mean Square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are

used to evaluate human response to vibration. In this section, a PPV descriptor with units of inches per second (in/sec) is used to evaluate construction generated vibration for building damage and human complaints. Table 3.11-2 shows the general reactions of people and the effects on building that continuous vibration levels produce. As with noise, the effects of vibration on individuals is subjective due to varying tolerances.

Table 3.11-2: Effects of Vibration		
PPV (in/sec)	Human Reaction	Effect on Buildings
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.1	Strongly perceptible	Virtually no risk of damage to normal buildings
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential dwellings such as plastered walls or ceilings.
0.5	Severe – vibration considered unpleasant	Threshold at which there is a risk of damage to newer residential structures.

Source: Transportation and Construction-Induced Vibration Guidance Manual, California Department of Transportation, June 2004.

Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, etc. The rattling sound can give rise to exaggerated vibration complaints, even though there is little risk of actual structural damage. In high noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to induce structural damage and the degree of annoyance for humans. The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life are evaluated against different vibration limits. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 in/sec PPV. Human perception to vibration varies with the individual and is a function of the physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels such as people in an urban environment may tolerate higher vibration levels.

Structural damage can be classified as cosmetic, such as minor cracking of building elements, or may threaten the integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher and there is no general consensus as to what amount of vibration may pose a threat for structure damage to a building. Construction-induced vibration that can be detrimental to a building is very rare and has only been observed in instances where the structure is in a high state of disrepair and the construction activities occur immediately adjacent to the structure.

3.11.1.3 Existing Conditions

Based on the San José 2040 General Plan Final Program Environmental Impact Report (FPEIR), the project site currently experiences noise levels from 55 to 75 dBA.⁶⁶ The primary noise source in the immediate project area is traffic on SR 237. As such, noise levels on the southern end of the site are substantially greater than noise levels on the northern end of the site.

Sensitive Receptors

The closest sensitive receptors to the project site are the existing residences along Murphy Ranch Road in Milpitas, about 1,650 feet south of the project site. Other sensitive receptors are the residences located approximately 3,100 feet east in Milpitas and mobile homes located approximately 3,400 feet southwest in San José. There is a daycare facility along Barber Lane, about 3,500 feet southeast of the site.

3.11.2 Noise and Vibration Impacts

3.11.2.1 Thresholds of Significance

For the purposes of this EIR, a noise and vibration impact is considered significant if the project would result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; or
- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

The CEQA Guidelines state that a project will normally be considered to have a significant impact if noise levels conflict with adopted environmental standards or plans, or if noise levels generated by the project will substantially increase existing noise levels at noise-sensitive receivers on a permanent or temporary basis. CEQA does not define what noise level increase would be substantial. A three dBA noise level increase is considered the minimum increase that is perceptible to the human ear. Typically, project generated noise level increases of three dBA DNL or greater are considered significant where resulting exterior noise levels will exceed the normally acceptable noise level standard. Where noise levels will remain at or below the normally acceptable noise level standard with the project, a noise level increase of five dBA DNL or greater is considered significant.

⁶⁶ San José 2040 General Plan FPEIR, Figure 3.3-1, page 312.

City of San José Standards

Based on the Municipal Code and policies identified above, the City of San José relies on the following guidelines for new development to avoid impacts above the CEQA thresholds of significance outlined above.

Construction Noise

For temporary construction-related noise to be considered significant, construction noise levels would have to exceed ambient noise levels by five dBA L_{eq} or more and exceed the normally acceptable levels of 60 dBA L_{eq} at the nearest noise-sensitive land uses or 70 dBA L_{eq} at office or commercial land uses for a period of more than 12 months.

Traffic-Generated Noise

Development allowed by the General Plan would result in increased traffic volumes along roadway throughout San José. The City of San José considers a significant noise impact to occur where existing noise sensitive land uses would be subject to permanent noise level increases of three dBA DNL or more where noise levels would equal or exceed the “Normally Acceptable” level, or five dBA DNL or more where noise levels would remain “Normally Acceptable”.

Construction Vibration

The City of San José relies on guidance developed by Caltrans to address vibration impacts from development projects in San José. A vibration limit of 12.7 mm/sec (0.5 inches/sec), PPV for buildings structurally sound and designed to modern engineering standards. A conservative vibration limit of 5.0 mm/sec (0.2 inches/sec) PPV has been used for buildings that are found to be structure sounds but structural damage is a major concern. For historic buildings or buildings that are documented to be structurally weakened, a conservative limit of 2.0 mm/sec (0.08 inches/sec), PPV is used to provide the highest level of protection.

3.11.2.2 *Consistency with Plans*

The proposed project would be a light industrial development or a combined data center and light industrial development. These land uses are not considered noise sensitive. Furthermore, there are no noise sensitive land uses in proximity to the project site. As such, the project would be consistent with Policies EC-1.1, EC-1.2, EC-1.3, EC-1.6, and EC-2.3.

3.11.2.3 *Noise Impacts from the Project Site*

Project-Generated Traffic Noise

Based upon the traffic study prepared by *Hexagon Transportation Consultants* (see Section 3.14), the proposed maximum development would generate approximately 8,364 daily trips.

A noise increase is considered substantial if it would 1) increase the ambient noise level by five dBA DNL or more when future noise levels would be less than 60 dBA DNL, or 2) increase the ambient noise level by three dBA DNL or more when future noise levels would be 60 dBA DNL or greater.

As shown on Figure 3.3-1 of the Envision San José 2040 General Plan FPEIR, noise volumes on the adjacent and nearby roadways range from a low of 65 dBA (Zanker Road) to above 75 dBA (SR 237). While the project would result in an increase in traffic trips on these roadways, the volume of traffic would not be sufficient to increase existing noise levels by three dBA or more. As a result, the proposed project would not result in a significant noise impact from traffic. **(Less Than Significant Impact)**

Mechanical Equipment

The proposed light industrial buildings would have rooftop mechanical equipment including HVAC systems and elevator operating systems. The data center would have generators and cooling towers which would also generate noise when in operation or during testing and maintenance. The General Plan Policy EC-1.6 requires existing and new industrial development to reduce the effects of operational noise on adjacent industrial uses through compliance with noise standards⁶⁷ in the City's Municipal Code (Sections 20.40.600 and 20.50.300). The project is not, however, adjacent to or in proximity to residential land uses. As such, mechanical equipment screening would not be required and operation of the project under either development option would have a less than significant impact from mechanical equipment noise. **(Less Than Significant Impact)**

3.11.2.4 Construction Impacts

Construction Noise

Construction activities associated with implementation of the proposed project would temporarily increase noise levels in the project area. The duration of the noise is dependent on which development option is constructed. For the light industrial development option, the construction period would be approximately 21 months. For the data center/light industrial development option, the overall construction period could extend beyond 21 months, but would occur in two separate phases. Construction activities generate considerable amounts of noise, especially during the construction of project infrastructure when heavy equipment is used.

There are no noise-sensitive land uses in the immediate vicinity of the project. As a result, while construction of the proposed project would temporarily increase noise levels in the immediate area of the project site, construction activities would result in a less than significant noise impact. **(Less Than Significant Impact)**

Construction Vibration

Construction activities would include demolition of three existing residences and accessory structures, site preparation work, foundation work, and construction of the new buildings. General Plan policy EC-2.3 states the following regarding vibration from demolition and construction:

“EC-2.3: Require new development to minimize vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, a vibration limit of 0.08 in/sec PPV (peak particle velocity) will be used to minimize the potential for cosmetic damage to a

⁶⁷ Per the Municipal Code, the industrial buildings cannot generate noise greater than 70 dBA at the shared property line with the adjacent industrial development.

building. A vibration limit of 0.20 in/sec PPV will be used to minimize the potential for cosmetic damage at buildings of normal conventional construction.”

Construction activities such as drilling, use of jackhammers (approximately 0.035 in/sec PPV at 25 feet), rock drills and other high-power or vibratory tools (approximately 0.09 in/sec PPV at 25 feet), and rolling stock equipment such as tracked vehicles, compactors, etc. (approximately 0.89 in/sec PPV at 25 feet) may generate substantial vibration in the immediate site vicinity. Construction of the buildings is not anticipated to be a source of substantial vibration with the exception of sporadic events such as dropping of heavy objects, which should be avoided to the extent possible.

The adjacent LECEF facility has a few small structure, but all of the structure are more than 200 feet from the adjacent property lines. As such, use of heavy equipment on-site would not cause vibration levels above the 0.20 in/sec PPV criteria established by the City. **(Less Than Significant Impact)**

3.11.2.5 *Existing Noise Conditions Affecting the Project*

The California Supreme Court in a December 2015 opinion (*BIA v. BAAQMD*) confirmed CEQA is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project; nevertheless the City has policies that address existing conditions (e.g. noise) affecting a proposed project, which are addressed below.

The policies of the City of San José 2040 General Plan have been adopted for the purpose of avoiding or mitigating environmental effects resulting from planned development within the City. Based on the General Plan noise and land use compatibility guidelines, commercial/office development is allowed in areas with ambient noise levels up to 70 dBA DNL and is conditionally allowed in areas with noise levels up to 80 dBA DNL.

The light industrial buildings nearest SR 237 would be exposed to ambient noise levels of up to 75 dBA. The California Green Building Code requires that industrial buildings be constructed to provide an interior noise environment of 50 dBA in occupied areas during any hour of operation. A typical commercial building envelope provides at least a 30 dBA reduction in traffic noise. The noise exposure at the proposed building façades along SR 237 would be up to 75 dBA DNL. With exterior noise levels up to 75 dBA DNL, the interior noise levels would be 45 dBA with standard construction techniques. As a result, interior noise levels would comply with Green Building Code standards.

The project site is located approximately 3.4 miles northeast of Mineta San José International Airport and is not within the Airport Influence Area or the Airport Noise Contours.

3.11.3 Mitigation and Avoidance Measures for Noise Impacts

No mitigation is required or proposed.

3.11.4 Conclusion

Construction and operation of the project will have a less than significant noise and vibration impact. **(Less Than Significant Impact)**

3.12 PUBLIC SERVICES/RECREATION

3.12.1 Environmental Setting

Unlike utility services, public services are provided to the community as a whole, usually from a central location or from a defined set of nodes. The resource base for delivery of the services, including the physical service delivery mechanisms, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery agency can be a city, county, service or other special district. Typically, new development would create an incremental increase in the demand for these services. The amount of demand would vary widely, depending on both the nature of the development (residential vs. industrial, for instance) and the type of services, as well as on the specific characteristics of the development (such as senior housing vs. multi- or single-family housing).

The impact of a particular project on public services and facilities is generally a fiscal impact. By increasing the demand for a type of service, a project could cause an eventual increase in the cost of providing the service (e.g., more personnel hours to patrol an area, additional fire equipment needed to service a tall building, etc.). This is a fiscal impact; not an environmental one.

CEQA does not require an analysis of fiscal impacts unless the increased demand triggers the need for a new facility (such as a school or fire station), since the new facility would have a physical impact on the environment.

3.12.1.1 *Regulatory Framework*

San José General Plan

The following General Plan policies related to the public services and recreational facilities are applicable to the proposed project:

Policy PR-1.1: Provide 3.5 acres per 1,000 population of neighborhood/community serving parkland through a combination of 1.5 acres of public parks and 2.0 acres of recreational school grounds open to the public per 1,000 San José residents.

Policy PR-1.2: Provide 7.5 acres per 1,000 population of citywide/regional park and open space lands through a combination of facilities provided by the City of San José and other public land agencies.

Policy CD-5.5: Include design elements during the development review process that address security, aesthetics, and safety. Safety issues include, but are not limited to, minimum clearances around buildings, fire protection measures such as peak load water requirements, construction techniques, and minimum standards for vehicular and pedestrian facilities and other standards set forth in local, state, and federal regulations.

Policy ES-3.1: Provide rapid and timely Level of Service response time to all emergencies:

- a. For police protection, achieve a response time of six minutes or less for 60 percent of all Priority 1 calls, and of eleven minutes or less for 60 percent of all Priority 2 calls.

- b. For fire protection, achieve a total response time (reflex) of eight minutes and a total travel time of four minutes for 80 percent of emergency incidents.
- c. Enhance service delivery through the adoption and effective use of innovative, emerging techniques, technologies and operating models.
- d. Measure service delivery to identify the degree to which services are meeting the needs of San José's community.
- e. Ensure that development of police and fire service facilities and delivery of services keeps pace with development and growth in the city.

Policy ES-3.9: Implement urban design techniques that promote public and property safety in new development through safe, durable construction and publically-visible and accessible spaces.

Policy ES-3.11: Ensure that adequate water supplies are available for fire-suppression throughout the City. Require development to construct and include all fire suppression infrastructure and equipment needed for their projects.

Alviso Master Plan

The following policies are specific to public services and are specific to the proposed project.

Police Policy 1: As development occurs in Alviso, police services should be evaluated for possible expansion.

Fire Policy 1: As development occurs in Alviso, fire service should be evaluated to determine if an expansion of services is warranted.

3.12.1.2 Existing Conditions

Fire Projection Services

Fire protection services for the project would be provided by the SJFD. Fire stations are located throughout the City to provide adequate response times to calls for service. SJFD responds to all fires, hazardous materials spills, and medical emergencies (including injury accidents) in the City. The closest station to the project site is Station No. 25, located at 1525 Wilson Way. The fire station is located approximately 3.4 miles west of the project site.

For fire protection services, the General Plan identifies a service goal of eight minutes and a total travel time of four minutes or less for 80 percent of emergency incidents.

Police Projection Services

Police protection services for the project site are provided by the San José Police Department (SJPD). Officers are dispatched from police headquarters, located at 201 West Mission Street. The police headquarters is located approximately 6.7 miles south of the project site.

The General Plan identifies a service goal of six minutes or less for 60 percent of all Priority 1 (emergency) calls and 11 minutes or less for 60 percent of all Priority 2 (nonemergency) calls.

Schools

The project proposes light industrial development. The project does not include any residential land uses that would generate school age children.

Parks/Trails

The City's Departments of Parks, Recreation, and Neighborhood Services is responsible for the development, operation, and maintenance of all City park facilities. The City of San José owns and maintains approximately 3,486 acres of parkland, including neighborhood parks, community parks, regional parks, golf courses, and open space. The City also has 25 community centers, 12 senior centers, and 14 youth centers, though some are temporarily closed due to budget constraints. Other recreational facilities include six public skate parks and over 70.5 miles of trails.

The City's goal is to provide 3.5 acres of neighborhood/community serving parkland per 1,000 population, 7.5 acres of citywide/regional park and open space lands per 1,000 population, and 500 square feet of community center facilities per 1,000 population. There are no parks within the City of San José located within a 10 minute walk of the project site.

The Class I Coyote Creek Trail is located on the east side of the creek, east of the project site in the City of Milpitas. The trail is identified as a Regional Trail on the Santa Clara County Trails Master Plan.⁶⁸

Libraries

The San José Public Library is the largest public library system between San Francisco and Los Angeles. The San José Public Library System consists of one main library and 22 branch libraries. The nearest branch library is the Alviso Branch Library located at 5050 North First Street, approximately 3.2 miles west of the site.

3.12.2 Public Services Impacts

3.12.2.1 *Thresholds of Significance*

For the purposes of this EIR, a public services impact is considered significant if the impacts are associated with:

- The provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
 - Fire protection
 - Police protection
 - Schools
 - Parks
 - Other public facilities.

⁶⁸ Santa Clara County Parks. *Countywide Trails Master Plan*. Accessed March 15, 2017. <<https://www.sccgov.org/sites/parks/PlansProjects/Pages/countywide-trails-mstr-pln.aspx>>.

- An increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- Include recreational facilities or require the construction of expansion of recreational facilities which might have an adverse physical effect on the environment.

3.12.2.2 *Consistency with Plans*

The proposed project would be built to current code and safety standards. Therefore, the project would be consistent with General Plan Policies PR-1.1, PR-1.2, CD-5.5, ES-3.1, ES-3.9, ES-3.11 and Alviso Master Plan Police Policy 1 and Fire Policy 1.

3.12.2.3 *Fire and Police Protection Services*

The proposed development would result in a dense industrial development on a mostly vacant site and would place more people on-site during regular business hours than exist currently. As a result, the project would increase demand for fire and police services. The project is consistent with the planned growth in the General Plan and construction of new fire and police stations, other than those already planned, would not be required to provide service to the site consistent with the City's service goals.

The proposed project would be constructed in accordance with current building codes and would be required to be maintained in accordance with applicable City policies identified in the General Plan FPEIR to avoid unsafe building conditions and promote public safety. **(Less Than Significant Impact)**

3.12.2.4 *Schools*

The project proposes to construct light industrial development. No new students would be generated by implementation of the proposed project. Therefore, the proposed project would have no impact on school facilities or capacities in the City. **(No Impact)**

3.12.2.5 *Other Recreational Facilities*

Parks/Trails

The proposed development would place more people on-site during regular business hours than exist currently; however, an increase in the daily employee population in the City would not result in a substantial increase in usage of local recreational facilities. Although future employees on-site may use City parks, County trails, or community centers, weekday employees are unlikely to place a major physical burden on these facilities which would necessitate the construction of new facilities to meet City service goals. The proposed project includes a Class I trail connection on the south side of the site, along Alviso-Milpitas Road to provide a trail connection to the Coyote Creek Trail on the east side of the creek. Therefore, the proposed project would not have a significant impact on recreational facilities in the City. **(Less Than Significant Impact)**

Libraries

The General Plan FPEIR concluded that development and redevelopment allowed under the General Plan would be adequately served by existing and planned library facilities. The proposed development would not include any residential uses and, as a result, the proposed project would have minimal impact on library facilities in the City of San José. **(Less Than Significant Impact)**

3.12.3 Conclusion

Implementation of the proposed project would incrementally increase the demand for police and fire protection services in the project area. The proposed development is consistent with the planned growth in the Envision San José 2040 General Plan and, would not result in the need to construct new police or fire facilities. Due to the nature of the proposed development, the project would not impact existing school, recreational, or library facilities. **(Less Than Significant Impact)**

3.13 TRANSPORTATION/TRAFFIC

The following discussion is based on a transportation impact analysis prepared by *Hexagon Transportation Consultants* in March 2017. The report can be found in Appendix K.

3.13.1 Environmental Setting

3.13.1.1 *Regulatory Framework*

Metropolitan Transportation Commission

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and the Association of Bay Area Governments (ABAG) adopted the final *Plan Bay Area* in July 2013 which includes the region's Sustainable Communities Strategy and the most recently adopted Regional Transportation Plan (2040).

Congestion Management Program

The Santa Clara Valley Transportation Authority (VTA) oversees the Congestion Management Program (CMP). The relevant state legislation requires that all urbanized counties in California prepare a CMP in order to obtain each county's share of the increased gas tax revenues. The CMP legislation requires that each CMP contain the following five mandatory elements: 1) a system definition and traffic level of service standard element; 2) a transit service and standards element; 3) a trip reduction and transportation demand management element; 4) a land use impact analysis program element; and 5) a capital improvement element. The Santa Clara County CMP includes the five mandated elements and three additional elements, including: a county-wide transportation model and data base element, an annual monitoring and conformance element, and a deficiency plan element.

Level of Service Standards and City Council Policy 5-3

As established in City Council Policy 5-3 Transportation Impact Policy (2005), the City of San José uses the same LOS method as the CMP, although the City's standard is LOS D rather than LOS E. According to this policy and GP Policy TR-5.3, an intersection impact would be satisfactorily mitigated if the implementation of measures would restore level of service to existing conditions or better, unless the mitigation measures would have an unacceptable impact on the neighborhood or on other transportation facilities (such as pedestrian, bicycle, and transit facilities). The City's Transportation Impact Policy (also referred to as the Level of Service Policy) protects pedestrian and bicycle facilities from undue encroachment by automobiles.

The Envision San José 2040 General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development projects with the City. The following policies are specific to transportation and are applicable to the proposed project.

Policy TR-1.1: Accommodate and encourage use of non-automobile transportation modes to achieve San José's mobility goals and reduce vehicle trip generation and vehicle miles traveled (VMT).

Policy TR-1.2: Consider impacts on overall mobility and all travel modes when evaluating transportation impacts of new developments or infrastructure projects.

Policy TR-1.4: Through the entitlement process for new development, fund needed transportation improvements for all transportation modes, giving first consideration to improvement of bicycling, walking and transit facilities. Encourage investments that reduce vehicle travel demand.

Policy TR-5.3: The minimum overall roadway performance during peak travel periods should be level of service “D” except for designated areas.

Policy TR-8.4: Discourage, as part of the entitlement process, the provision of parking spaces significantly above the number of spaces required by code for a given use.

Policy TR-8.6: Allow reduced parking requirements for mixed-use developments and for developments providing shared parking or a comprehensive TDM program, or developments located near major transit hubs or within Villages and Corridors and other growth areas.

Policy TR-8.9: Consider adjacent on-street and City-owned off-street parking spaces in assessing need for additional parking required for a given land use or new development.

Policy TR-9.1: Enhance, expand and maintain facilities for walking and bicycling, particularly to connect with and ensure access to transit and to provide a safe and complete alternative transportation network that facilitates non-automobile trips.

Policy CD-3.4: Encourage pedestrian cross-access connections between adjacent properties and require pedestrian and bicycle connections to streets and other public spaces, with particular attention and priority given to providing convenient access to transit facilities. Provide pedestrian and vehicular connections with cross-access easements within and between new and existing developments to encourage walking and minimize interruptions by parking areas and curb cuts.

Alviso Master Plan

The *Alviso Master Plan* includes policies applicable to all development projects within the plan area. The following policies are specific to transportation and are applicable to the proposed project.

Vehicular Circulation Policy 3: New streets serving future industrial and commercial land uses should minimize potential negative impacts to residential and sensitive environmental areas.

Bicycle Policy 3: New commercial and industrial development should accommodate safe bicycle travel by their employees and customers.

3.13.1.2 Existing Conditions

This section summarizes the existing conditions for the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities. Also included are the existing levels of service of the key intersections and freeway segments in the study area.

Regional Access

Regional access to the project site is provided via State Route (SR) 237 and Interstate (I) 880.

SR 237 is a six-lane, east-west freeway that extends between Sunnyvale and Milpitas and provides access to I-880 and Highway 101 (US 101). One lane in each direction is designated as a high occupancy vehicle (HOV)/toll lane. There is a toll lane in the westbound direction between I-880 and North First Street. The freeway terminates at I-880 and transitions to Calaveras Boulevard into Milpitas. Access to the site is provided via the SR 237 interchange with Zanker Road.

I-880 is a six-lane, north-south freeway that extends north to Oakland and south to I-280 in San José, at which point it makes a transition to SR 17 to Santa Cruz. Access to the site is provided via the I-880 interchange with SR 237 and Tasman Drive.

Local Access

Local access to the site is provided via Zanker Road, North First Street, Tasman Drive, and Montague Expressway.

Zanker Road is a north-south roadway that extends south from Alviso to its termination at Old Bayshore Highway. From Los Esteros Road to SR 237, Zanker Road is a two lane roadway and is a designated Class III bike route. Between SR 237 and River Oaks Parkway, Zanker Road is a six-lane roadway. Five travel lanes, three northbound and two southbound, are provided between River Oaks Parkway and Montague Expressway. The roadway narrows to four lanes south of Montague Expressway. Access to the project site would be provided via two new roadway connections along Zanker Road. Freeway access from the project site is provided via the Zanker Road interchange with SR 237.

North First Street is a four to six-lane arterial that extends from Downtown San José to Alviso. North First Street is six-lanes between SR 237 and Tasman Drive. South of Tasman Drive, North First Street narrows to four lanes. The Santa Clara County Light Rail Transit (LRT) system operates in the median of the roadway between Downtown San José and Tasman Drive.

Tasman Drive is an east-west arterial that extends from Lawrence Expressway to I-880. The roadway is generally four lanes in the North San José area and widens to six-lanes east of McCarthy Boulevard to I-880 in Milpitas. East of I-880, the roadway transitions to Great Mall Parkway into Milpitas. The Santa Clara County LRT system operates in the median of the roadway between Sunnyvale and Milpitas.

Montague Expressway is an eight-lane, east-west expressway that extends between I-880 and US 101. Full interchanges are located at I-680, I-880, and US 101. Montague Expressway serves as the primary east-west arterial through the North San José area. In the project area, Montague Expressway includes HOV lanes. The HOV lane designation is in effect in both directions of travel during both the AM and PM peak commute hours. During other times, the lane is open to all users.

Existing Pedestrian and Bicycle Facilities

Bicycle Facilities

Bicycle facilities are comprised of paths (Class I), lanes (Class II), and routes (Class III). Bicycle paths are paved trails that are separate from roadways. Bicycle lanes are lanes on roadways designed for bicycle use by striping, pavement legends, and signs. Bicycle routes are roadways designated for bicycle use by signs only. Currently, there are Class II bike lanes on the following roadways:

- Tasman Drive – Between I-880 and Lafayette Street
- Zanker Road – Between Holger Way and Old Bayshore Highway
- Holger Way – Between North First Street and Zanker Road
- North First Street – Between Alviso Road and Brokaw Road
- McCarthy Boulevard – Between SR 237 and Dixon Landing Road

Zanker Road is also a Class III route between SR 237 and Spreckles Road in Alviso. The Coyote Creek Trail, located on the east side of Coyote Creek, is a bike path that extends from McCarthy Boulevard south to Zanker Road. Bike paths are also located on both sides of SR 237. On the north side of the roadway, the path extends from Zanker Road to Ranch Drive, which is part of the Highway 237 Bikeway Trail Program and designated as part of the San Francisco Bay Trail, the Juan Bautista De Anza National Historic Trail, and the National Recreation Trail. On the south side SR 237, the path extends from Zanker Road to McCarthy Boulevard. All existing bicycle facilities are shown in Figure 3.13-1.

Pedestrian Facilities

Pedestrian facilities in the immediate project area are limited. There are sidewalks on both sides of Zanker Road south of the SR 237 eastbound ramps. There are no sidewalks on Zanker Road north of the SR 237 westbound ramps. There are also no sidewalks on Ranch Drive between the project site and McCarthy Boulevard. The Coyote Creek Trail is located on the east side of the creek, east of the project site. San José access to the trail is currently provided on Alviso-Milpitas Road along the southern border of the site.

Existing Transit Service

Existing transit service (bus and rail) in the project area is provided by the VTA, though there is no direct transit service to the project site. VTA bus services are described in Table 3.13-1 below.



EXISTING BICYCLE FACILITIES

FIGURE 3.13-1

Table 3.13-1: VTA Bus Service in the Project Area

Route	Route Description	Daily Headway
58	West Valley College to Alviso via North First Street.	30 min
47	Great Mall Transit Center to McCarthy Ranch via Calaveras Boulevard and McCarthy Ranch Boulevard.	30 min
140	Express Route from Fremont BART Station to Mission College via Tasman Drive.	50 min
330	Express Route from Almaden Expressway/Camden Avenue to I-880/Milpitas Light Rail Station via Tasman Drive.	30-55 min

The nearest transit facilities are located at the McCarthy Boulevard/Ranch Drive intersection (approximately 0.5 mile from the project) and the Zanker Road/Tasman Drive intersection (approximately 1.5 miles from the project site).

The nearest Light Rail Transit (LRT) station, the Baypointe LRT Station, is located along Tasman Drive at its intersection with Baypointe Parkway, approximately 1.5 miles south of the project site, and serves the Alum Rock-Santa Teresa LRT line. The Alum Rock-Santa Teresa LRT line, operates nearly 24 hours a day (4:00 AM to 2:00 AM) with 10-15-minute headways during peak commute and midday hours. The Alum Rock-Santa Teresa LRT line provides service from the Santa Teresa station in south San José, through downtown San José to North San José where it curves east and operates along the Tasman Corridor, bends south and runs along the Capitol Corridor, and ultimately terminates in east San José just south of Alum Rock Avenue.

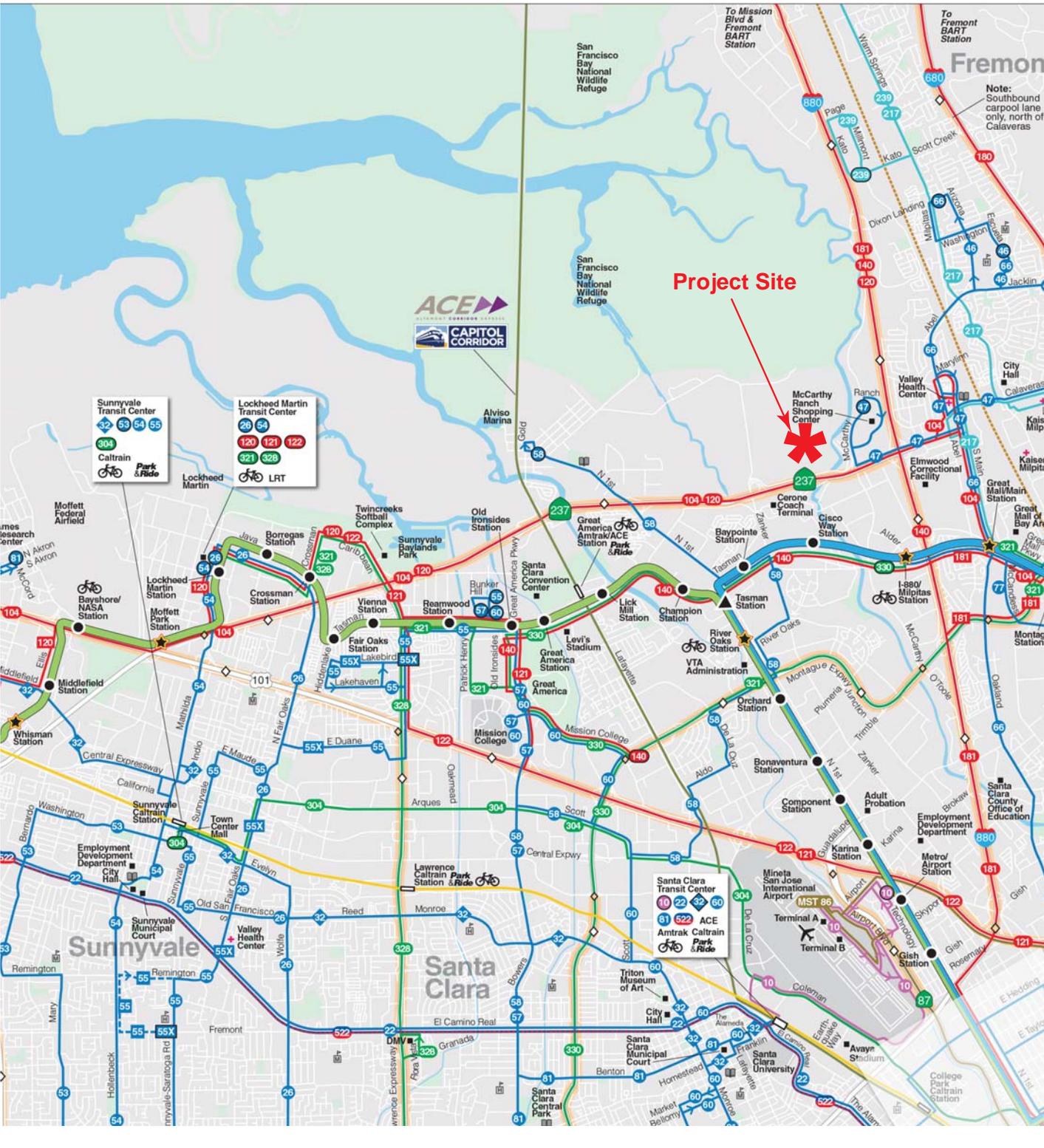
The location of area bus and train transit services are shown on Figure 3.13-2.

3.13.1.3 Methodology

The impacts of the proposed development were evaluated following the methodologies established by the City of San José and the Santa Clara County Congestion Management Program (CMP). Intersections were selected for study if project traffic would add at least 10 trips per lane per hour during one or more peak hours, consistent with adopted CMP methodology. Traffic conditions at all study intersections and freeway segments were analyzed for the weekday AM and PM Peak Hours. The AM Peak Hour is defined as 7:00AM and 9:00AM and the PM Peak Hour is defined as 4:00PM to 6:00PM. The peak hours represent the periods of greatest traffic congestion on a typical weekday.

Traffic conditions were evaluated under existing conditions, background conditions⁶⁹, existing plus project conditions, background plus project conditions, and cumulative conditions to determine if the level of service (LOS) of the local intersections in the project area would be adversely affected by project-generated traffic. The cumulative impact analysis is provided in Section 4.0 of this EIR. The existing traffic conditions were established based on traffic volumes from the City of San José 2014 CMP Annual Monitoring Report, previously completed traffic studies, and new manual turning-movement counts.

⁶⁹ Background conditions are existing plus approved but not yet constructed development.



TRANSIT FACILITIES

FIGURE 3.13-2

LOS is a qualitative description of operating conditions ranging from LOS A, or free-flowing conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The correlation between average delay and LOS is shown in Table 3.13-2.

Level of Service	Description	Average Control Delay per Vehicle⁷⁰
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	10.0 or less
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ⁷¹ ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.0 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	Greater than 80.0

The traffic study analyzed AM and PM Peak Hour traffic conditions for 40 signalized intersections in the vicinity of the project site. The study intersections are listed in Table 3.13-3, below, and the locations of the study intersections are shown on Figure 3.13-3.

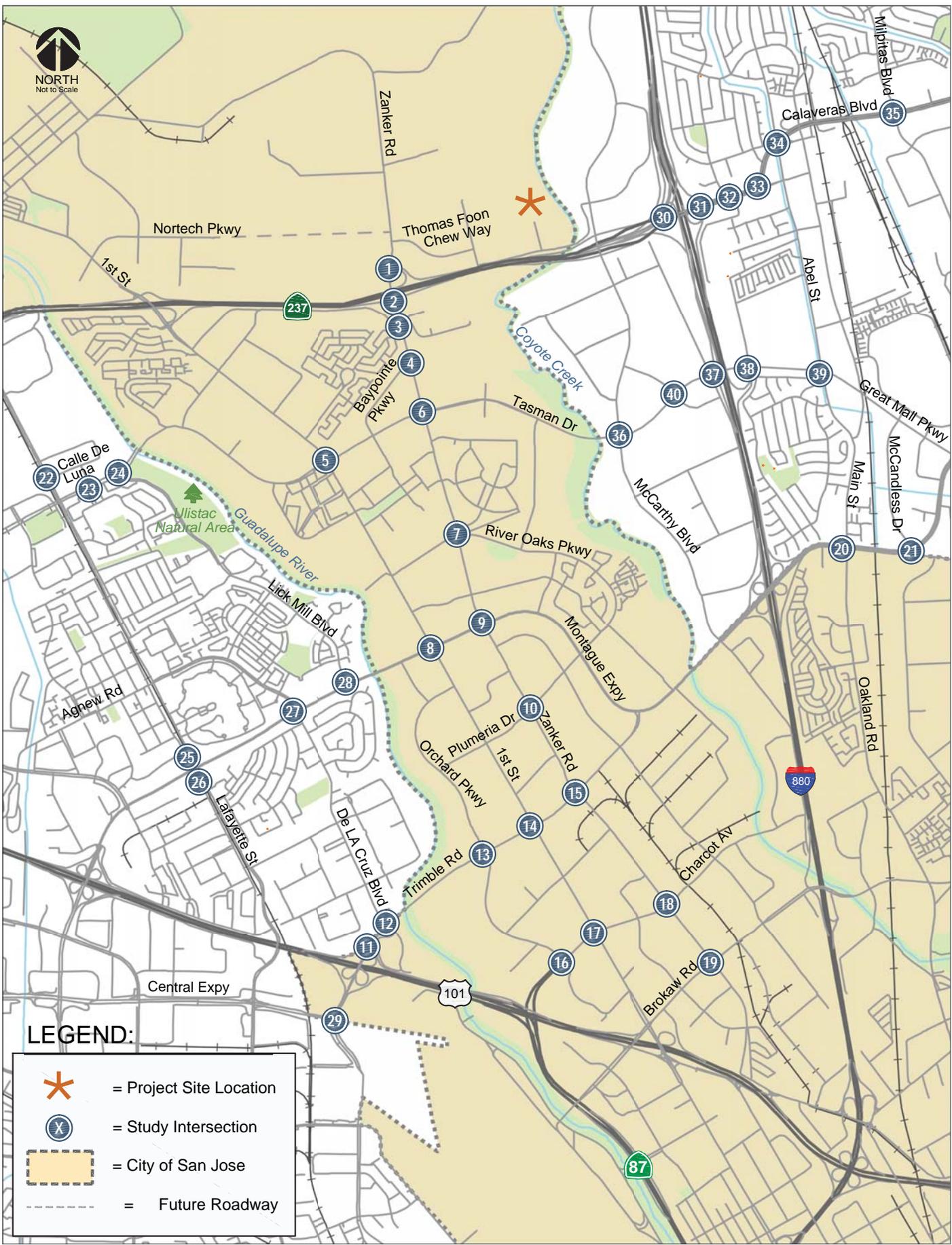
Based on the City of San José’s policies, an acceptable operating level of service is defined as LOS D or better at all City controlled intersections. For County of Santa Clara and CMP intersections, an acceptable level of service is LOS E. Because the project site is very near the City boundaries with Milpitas and Santa Clara, traffic trips associated with the project site would travel through Milpitas and Santa Clara intersections as well as San José intersections. For this reason, the analysis also took into account the acceptable LOS standard for the Cities of Milpitas and Santa Clara, which is equivalent to the LOS standard established by the City of San José.

Consistent with City Council Policy 5-3⁷², the City of San José LOS methodology is TRAFFIX, which is based on the 2000 *Highway Capacity Manual* method for signalized intersections.

⁷⁰ Measured in seconds.

⁷¹ Volume to capacity ratio.

⁷² City of San José Website. <http://www.sanjoseca.gov/DocumentCenter/Home/View/382>



LEGEND:

-  = Project Site Location
-  = Study Intersection
-  = City of San Jose
-  = Future Roadway

STUDY INTERSECTIONS

FIGURE 3.13-3

North San Jose Area Development Policy

The North San José Area Development Policy (NSJADP) establishes a special area within the City not subject to the City standard Level of Service (LOS) Policy. The Policy instead provides the necessary traffic impact analysis for the development of an additional 26.7 million square feet of industrial use, 1.7 million square feet of supporting “local serving” commercial use, 1 million square feet of regional commercial use, 1,000 hotel rooms and 32,000 residential units within the Policy area. The specific traffic impacts of this amount of new development have been analyzed and described in the traffic analysis and Environmental Impact Report (EIR) prepared for the Policy. The Policy also includes mitigation measures identified for these impacts and establishes a mechanism for the implementation of these mitigation measures. Any new development within the Policy area that falls within the parameters of the Policy should not typically require additional review for traffic impacts except that additional analysis may be necessary to address site operational issues.

A Traffic Impact Fee is assessed on all new industrial and residential development within the Policy area that are used to fund the mitigation measures needed to meet future traffic conditions resulting from implementation of the Policy as described in the traffic analysis and Environmental Impact Report (EIR).

In 2013, the City amended the Policy to allow projects outside of the NSJADP boundaries to mitigate their impacts at intersections within the NSJADP area by payment of the North San Jose Traffic Impact Fee (TIF) if resulting levels of service for intersections in the NSJADP is consistent with the impacts identified in the North San José Development Policies Update (NSJ) EIR. The proposed project site is outside the NSJADP boundary.

The traffic analysis was completed for both Option 1 (light industrial development) and Option 2 (data center and light industrial development). Traffic impacts are also identified for the data center only (no industrial development constructed) project, where appropriate.

3.13.1.4 *Existing Intersection Operations*

Analysis of the existing intersection operations concluded that the following five intersections currently operate at an unacceptable LOS during at least one peak hour. In some cases, an intersection meets the CMP threshold LOS but not the applicable City threshold. CMP intersections are indicated with asterisks (*) below.

City of San José Intersections:

- No. 8 – North First Street and Montague Expressway* (AM and PM Peak Hour)
- No. 9 – Zanker Road and Montage Expressway (AM Peak Hour)
- No. 20 – Oakland Road and Montague Expressway* (AM and PM Peak Hour)
- No. 21 – Trade Zone Boulevard and Montague Expressway (AM and PM Peak Hour)

City of Santa Clara Intersection:

- No. 29 – De La Cruz Boulevard and Central Expressway* (PM Peak Hour)

All other study intersections currently operate at an acceptable LOS. The results of the existing conditions analysis are summarized in Table 3.13-3. Intersections that do not operate at an acceptable LOS are highlighted in bold.

Table 3.13-3: Study Intersection Level of Service – Existing Conditions				
No.	Intersection	Peak Hour	Average Delay	LOS
1	Zanker Road and SR 237 (North) - CMP/San José	AM PM	11.1 11.2	B B
2	Zanker Road and SR 237 (South) CMP/San José	AM PM	21.8 12.5	C B
3	Zanker Road and Holger Way – San José	AM PM	24.3 29.4	C C
4	Zanker Road and Baypointe Parkway – San José	AM PM	13.2 15.1	B B
5	North First Street and Tasman Drive – San José	AM PM	33.4 37.8	C D
6	Zanker Road and Tasman Drive – San José	AM PM	35.8 38.2	D D
7	Zanker Road and River Oaks Parkway – San José	AM PM	18.3 18.7	B B
8	North First Street and Montague Expressway – CMP/San José	AM PM	87.1 72.9	F E
9	Zanker Road and Montague Expressway – CMP/San José	AM PM	60.7 51.3	E D
10	Zanker Road and Plumeria Drive – San José	AM PM	22.6 23.8	C C
11	Trimble Road and US 101 – San José	AM PM	19.7 12.1	B B
12	De La Cruz Boulevard and Trimble Road – CMP/San José	AM PM	33.8 48.7	C D
13	Orchard Parkway and Trimble Road – San José	AM PM	35.8 40.1	D D
14	North First Street and Trimble Road – CMP/San José	AM PM	42.3 41.1	D D
15	Zanker Road and Trimble Road – CMP/San José	AM PM	39.1 38.3	D D
16	Orchard Parkway and Guadalupe Parkway – San José	AM PM	24.1 32.8	C C
17	North First Street and Charcot Avenue – San José	AM PM	39.6 37.3	D D
18	Zanker Road and Charcot Avenue – San José	AM PM	33.5 38.0	C D
19	Zanker Road and Brokaw Road – CMP/San José	AM PM	37.0 40.9	D D
20	Old Oakland Road and Montague Expressway – CMP/San José	AM PM	89.3 84.8	F F
21	Trade Zone Boulevard and Montague Expressway – CMP/San José	AM PM	58.7 55.1	E E

22	Lafayette Street and Calle De Luna – Santa Clara	AM PM	14.8 18.8	B B
23	Called Del Sol and Tasman Drive – Santa Clara	AM PM	15.7 18.9	B B
24	Lick Mill Boulevard and Tasman Drive – Santa Clara	AM PM	35.1 27.7	D C
25	Lafayette Street and Montague Expressway (North) – Santa Clara	AM PM	30.6 23.7	C C
26	Lafayette Street and Montague Expressway (South) – Santa Clara	AM PM	15.1 12.5	B B
27	De La Cruz Boulevard and Montague Expressway – CMP/Santa Clara	AM PM	43.8 53.4	D D
28	Lick Mill Blvd and Montague Expressway – Santa Clara	AM PM	14.6 15.4	B B
29	De La Cruz Boulevard and Central Expressway – CMP/Santa Clara	AM PM	46.4 95.8	D F
30	I-880 SB and Calaveras Boulevard – Milpitas	AM PM	13.0 12.4	B B
31	I-880 NB and Calaveras Boulevard – Milpitas	AM PM	11.0 23.9	B C
32	Abbott Avenue and Calaveras Boulevard – Milpitas	AM PM	26.1 26.4	C C
33	Serra Way and Calaveras Boulevard – Milpitas	AM PM	16.3 22.8	B C
34	Abel Street and Calaveras Boulevard – CMP/Milpitas	AM PM	48.3 46.1	D D
35	Milpitas Boulevard and Calaveras Boulevard – CMP/Milpitas	AM PM	46.2 40.8	D D
36	McCarthy Boulevard and Tasman Drive – Milpitas	AM PM	32.4 31.4	C C
37	I-880 and Tasman Drive – Milpitas	AM PM	22.9 20.1	C C
38	I-880 and Great Mall Parkway – Milpitas	AM PM	41.0 29.0	D C
39	Abel Street and Great Mall Parkway – Milpitas	AM PM	29.1 24.0	C C
40	Alder Drive and Tasman Drive - Milpitas	AM PM	15.2 33.3	B C

3.13.1.5 *Background Intersection Operations*

Background traffic conditions represent conditions anticipated to exist after completion of the environmental review process but prior to operation of the proposed development. It takes into account planned transportation system improvements that will occur prior to implementation of the proposed project and background traffic volumes. Background peak-hour traffic volumes are calculated by adding estimated traffic from approved but not yet constructed development to the existing conditions (see Appendix K for a list of Background projects).

This traffic scenario represents a more congested traffic condition than the existing conditions scenario since it includes traffic from approved projects. The background conditions analysis is

consistent with City of San José policy for transportation analyses though it is not required under CEQA, as it is neither a project scenario nor cumulative analysis but represents conditions anticipated to exist at the time the project is built and operational.

Changes to the Roadway Network

This analysis assumes that the transportation network under background conditions would be the same as the existing transportation network.

Background Intersection Level of Service

The LOS of the study intersections was calculated under background conditions, which is defined as the conditions just prior to completion of the proposed project. The background scenario predicts a realistic traffic condition that would occur as approved development get built and occupied. Analysis of the background intersection operations concluded that the following 10 intersections would operate at an unacceptable LOS. CMP intersections are shown with asterisks (*).

City of San José Intersections:

- No. 8 – North First Street and Montague Expressway* (AM and PM Peak Hour)
- No. 9 – Zanker Road and Montage Expressway* (AM and PM Peak Hour)
- No. 12 – De La Cruz Boulevard and Trimble Road* (PM Peak Hour)
- No. 17 – North First Street and Charcot Avenue (AM Peak Hour)
- No. 18 – Zanker Road and Charcot Avenue (PM Peak Hour)
- No. 20 – Oakland Road and Montague Expressway* (AM and PM Peak Hour)
- No. 21 – Trade Zone Boulevard and Montague Expressway* (AM and PM Peak Hour)

City of Santa Clara Intersections:

- No. 27 – De La Cruz Boulevard and Montague Expressway* (AM and PM Peak Hour)
- No. 29 – De La Cruz Boulevard and Central Expressway* (PM Peak Hour)

City of Milpitas Intersection:

- No. 40 – Alder Drive and Tasman Drive (PM Peak Hour)

All other study intersections would operate at an acceptable LOS. The results of the background conditions analysis are summarized in Table 3.13-4 below.

Table 3.13-4: Background Intersection Levels of Service

No.	Intersection	Peak Hour	Existing		Background	
			Delay	LOS	Delay	LOS
1	Zanker Road and SR 237 (North) - CMP/San José	AM	11.1	B	11.2	B
		PM	11.2	B	13.8	B
2	Zanker Road and SR 237 (South) CMP/San José	AM	21.8	C	22.2	C
		PM	12.5	B	14.0	B
3	Zanker Road and Holger Way – San José	AM	24.3	C	26.7	C
		PM	29.4	C	30.5	C
4	Zanker Road and Baypointe Parkway – San José	AM	13.2	B	13.2	B
		PM	15.1	B	15.1	B
5	North First Street and Tasman Drive – San José	AM	33.4	C	35.3	D
		PM	37.8	D	41.8	D
6	Zanker Road and Tasman Drive – San José	AM	35.8	D	41.4	D
		PM	38.2	D	39.7	D
7	Zanker Road and River Oaks Parkway – San José	AM	18.3	B	18.9	B
		PM	18.7	B	18.2	B
8	North First Street and Montague Expressway – CMP/San José	AM	87.1	F	131.6	F
		PM	72.9	E	105.9	F
9	Zanker Road and Montague Expressway – CMP/San José	AM	60.7	E	66.6	E
		PM	51.3	D	70.7	E
10	Zanker Road and Plumeria Drive – San José	AM	22.6	C	25.2	C
		PM	23.8	C	26.1	C
11	Trimble Road and US 101 – San José	AM	19.7	B	28.1	C
		PM	12.1	B	15.5	B
12	De La Cruz Boulevard and Trimble Road – CMP/San José	AM	33.8	C	31.7	C
		PM	48.7	D	84.0	F
13	Orchard Parkway and Trimble Road – San José	AM	35.8	D	34.7	C
		PM	40.1	D	47.3	D
14	North First Street and Trimble Road – CMP/San José	AM	42.3	D	52.4	D
		PM	41.1	D	45.3	D
15	Zanker Road and Trimble Road – CMP/San José	AM	39.1	D	41.6	D
		PM	38.3	D	44.2	D
16	Orchard Parkway and Guadalupe Parkway – San José	AM	24.1	C	34.7	C
		PM	32.8	C	39.1	D
17	North First Street and Charcot Avenue – San José	AM	39.6	D	55.6	E
		PM	37.3	D	41.3	D
18	Zanker Road and Charcot Avenue – San José	AM	33.5	C	43.7	D
		PM	38.0	D	64.0	E
19	Zanker Road and Brokaw Road – CMP/San José	AM	37.0	D	48.0	D
		PM	40.9	D	47.3	D
20	Old Oakland Road and Montague Expressway – CMP/San José	AM	89.3	F	100.4	F
		PM	84.8	F	102.2	F
21	Trade Zone Boulevard and Montague Expressway – CMP/San José	AM	58.7	E	63.8	E
		PM	55.1	E	64.1	E
22	Lafayette Street and Calle De Luna – Santa Clara	AM	14.8	B	13.8	B
		PM	18.8	B	20.3	C
23	Called Del Sol and Tasman Drive – Santa Clara	AM	15.7	B	16.4	B
		PM	18.9	B	19.0	B

24	Lick Mill Boulevard and Tasman Drive – Santa Clara	AM PM	35.1 27.7	D C	34.5 28.1	C C
25	Lafayette Street and Montague Expressway (North) – Santa Clara	AM PM	30.6 23.7	C C	32.5 26.0	C C
26	Lafayette Street and Montague Expressway (South) – Santa Clara	AM PM	15.1 12.5	B B	12.6 12.5	B B
27	De La Cruz Boulevard and Montague Expressway – CMP/Santa Clara	AM PM	43.8 53.4	D D	91.7 92.7	F F
28	Lick Mill Blvd and Montague Expressway – Santa Clara	AM PM	14.6 15.4	B B	16.1 15.3	B B
29	De La Cruz Boulevard and Central Expressway – CMP/Santa Clara	AM PM	46.4 95.8	D F	75.1 114.0	E F
30	I-880 SB and Calaveras Boulevard – Milpitas	AM PM	13.0 12.4	B B	17.4 14.8	B B
31	I-880 NB and Calaveras Boulevard – Milpitas	AM PM	11.0 23.9	B C	14.4 25.7	B C
32	Abbott Avenue and Calaveras Boulevard – Milpitas	AM PM	26.1 26.4	C C	26.2 26.1	C C
33	Serra Way and Calaveras Boulevard – Milpitas	AM PM	16.3 22.8	B C	16.3 21.9	B C
34	Abel Street and Calaveras Boulevard – CMP/Milpitas	AM PM	48.3 46.1	D D	59.6 52.1	E D
35	Milpitas Boulevard and Calaveras Boulevard – CMP/Milpitas	AM PM	46.2 40.8	D D	62.1 43.4	E D
36	McCarthy Boulevard and Tasman Drive – Milpitas	AM PM	32.4 31.4	C C	37.6 40.7	D D
37	I-880 and Tasman Drive – Milpitas	AM PM	22.9 20.1	C C	26.1 22.9	C C
38	I-880 and Great Mall Parkway – Milpitas	AM PM	41.0 29.0	D C	49.3 31.0	D C
39	Abel Street and Great Mall Parkway – Milpitas	AM PM	29.1 24.0	C C	31.0 28.4	C C
40	Alder Drive and Tasman Drive - Milpitas	AM PM	15.2 33.3	B C	25.2 170.8	C F

3.13.1.6 Existing Freeway Operations

Methodology

As prescribed in the CMP guidelines, the level of service for freeway segments is estimated based on vehicle density as shown in Table 3.13-5 below.

Freeway segments were evaluated as required by the CMP technical guidelines. The level of service for freeway segments is estimated based on vehicle density. The CMP specifies that a capacity of 2,300 vehicles per hour per lane (vphpl) be used for mixed-flow lane segments that are three lanes or wider in one direction, and a capacity of 2,200 vphpl be used for mixed-flow lane segments that are two lanes wide in one direction. A capacity of 1,650 vphpl was used for high occupancy vehicle (HOV) lanes. The CMP defines an acceptable level of service for freeway segments as LOS E or better.

Level of Service	Description	Density (vehicles/mile/lane)
A	Average operating speeds at the free-flow speed generally prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	0-11
B	Speeds at the free-flow speed are generally maintained. The ability to maneuver within the traffic stream is only slightly restricted.	>11-18
C	Speeds at or near the free-flow speed of the freeway prevail. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more vigilance on the part of the driver.	>18-26
D	Speeds begin to decline slightly with increased flows at this level. Freedom to maneuver within the traffic stream is more noticeably limited.	>26-46
E	At this level, the freeway operates at or near capacity. Operations at this level are volatile, because there are virtually no usable gaps in the traffic stream, leaving little room to maneuver within the traffic stream.	>46-58
F	Vehicular flow breakdowns occur. Large queues form behind breakdown points.	>58

LOS for key freeway segments in the AM and PM Peak Hours was calculated based on the traffic volumes obtained from VTA's *2014 Monitoring and Conformance Report*. Freeways are state controlled and CMP-monitored facilities and, as a result, the minimal acceptable level of service is LOS E.

Existing LOS of Study Freeway Segments

Analysis of the existing freeway operations concluded that 12 of the 26 mixed flow study segments currently operate at an unacceptable LOS F during at least one peak hour. The results also show two directional HOV lane segments currently operate at an unacceptable LOS F during at least one peak hour. All other study freeway segments operate at an acceptable LOS under existing conditions. The existing operation of the study segments are summarized in Table 3.13-6 below.

Freeway	Segment	Direction	Peak Hour	LOS Mixed Lanes	LOS HOV Lanes
SR 237	US 101 and Mathilda Avenue	EB	AM PM	D F	---
		WB	AM PM	D D	---
SR 237	Mathilda Avenue and North Fair Oaks Avenue	EB	AM PM	D F	B D
		WB	AM PM	E F	---

Table 3.13-6: Study Freeway Segments Level of Service – Existing Conditions

Freeway	Segment	Direction	Peak Hour	LOS Mixed Lanes	LOS HOV Lanes
SR 237	North Fair Oaks Avenue and Lawrence Expressway	EB	AM PM	D F	B D
		WB	AM PM	E D	D C
SR 237	Lawrence Expressway and Great America Parkway	EB	AM PM	D F	B E
		WB	AM PM	D D	C B
SR 237	Great America Parkway and North First Street	EB	AM PM	D F	B E
		WB	AM PM	E D	D B
SR 237	North First Street and Zanker Road	EB	AM PM	D F	C E
		WB	AM PM	E E	D C
SR 237	Zanker Road and McCarthy Boulevard	EB	AM PM	D E	B D
		WB	AM PM	F F	E A
SR 237	McCarthy Boulevard and I-880	EB	AM PM	C F	A D
		WB	AM PM	F C	F A
I-880	US 101 and East Brokaw Road	NB	AM PM	D D	B A
		SB	AM PM	F F	D E
I-880	East Brokaw Road and Montague Expressway	NB	AM PM	D D	A C
		SB	AM PM	C F	A D
I-880	Montague Expressway and Great Mall Parkway	NB	AM PM	C D	B C
		SB	AM PM	D D	B C
I-880	Great Mall Parkway and SR 237	NB	AM PM	C D	C B
		SB	AM PM	E C	C B
I-880	SR 237 and Dixon Landing Road	NB	AM PM	C F	A E
		SB	AM PM	E D	F B

3.13.2 Transportation/Traffic Impacts

3.13.2.1 *Thresholds of Significance*

For the purposes of this EIR, a transportation/traffic impact is considered significant if the project would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access; or
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or otherwise decrease the performance of safety of such facilities.

3.13.2.2 *Impact Criteria*

City of San José – Local Signalized Intersections

Based on City of San José criteria, a project would cause a significant impact at a signalized intersection if the additional project traffic caused one of the following:

- The level of service at any local intersection to degrade from an acceptable LOS D or better under existing or background conditions to an unacceptable LOS E or F under existing plus project or background plus project conditions; or
- At any local intersection that is already an unacceptable LOS E or F under existing or background conditions, cause the critical-movement delay at the intersection to increase by four or more seconds and the demand-to-capacity ratio (V/C) to increase by .01 or more.

CMP and Santa Clara County Expressway Intersections

Based on CMP criteria, a project fails to meet the CMP or Santa Clara County Expressway intersection standard if the additional project traffic caused one of the following:

- Cause the level of service at any CMP/County intersection to degrade from an acceptable LOS E or better under existing or background conditions to an unacceptable LOS F under existing plus project or background plus project conditions; or

- At any CMP/County intersection that is already an unacceptable LOS F under existing or background conditions, cause the critical-movement delay at the intersection to increase by four or more seconds and the demand-to-capacity ratio (V/C) to increase by .01 or more.

Cities of Milpitas and Santa Clara Definition of Significant Intersection Impacts

The project is said to create a significant adverse impact on traffic conditions at a signalized intersection in the Cities of Milpitas and Santa Clara if for either peak hour:

- The level of service at the intersection degrades from an acceptable level (LOS D or better at all city-controlled intersections and LOS E or better at all expressway intersections) under background conditions to an unacceptable level (LOS E or F at city-controlled intersections and LOS F at expressway intersections) under project conditions, or
- The level of service at the intersection is an unacceptable level (LOS E or F at city-controlled intersections and LOS F at expressway intersections) under background conditions and the addition of project trips causes the average critical delay to increase by four (4) or more seconds *and* the volume-to-capacity ratio (V/C) to increase by one percent (.01) or more.

An exception to this rule applies when the addition of project traffic reduces the amount of average stopped delay for critical movements (i.e., the change in average stopped delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by .01 or more. A significant impact by City of Milpitas and Santa Clara standards is said to be satisfactory mitigated when measures are implemented that would restore intersection levels of operation to background conditions or better.

CMP – Freeway Segments

Based on CMP criteria, a project would cause a significant impact to a freeway segment if the additional project traffic caused one of the following:

- Cause the level of service on any freeway segment to degrade from an acceptable LOS E or better under existing or background conditions to an unacceptable LOS F under existing plus project or background plus project conditions; or
- Add more than one percent of the existing freeway capacity to any freeway segment operating at LOS F under existing or background conditions.

3.13.2.3 Consistency with Plans

As discussed below, the proposed project would have a significant impact on three San José and County Expressway intersections and 10 directional freeway segments. Mitigation has been identified for two of the intersections to reduce the impact to a less than significant level. The remaining intersection impact and the freeway impacts would be significant and unavoidable.

The project would place new jobs in proximity to existing transit, housing, and services, consistent with the General Plan. The impacts of the proposed new roadways would be primarily related to

biological resources and subsurface cultural resources, and are addressed in the relevant sections of this EIR. Bicycle facilities are currently provided throughout the project area and bicycle parking would be provided on-site. Therefore, the project is generally consistent with *Plan Bay Area*, the CMP, and General Plan Policies TR-1.1, TR-1.2, TR-1.4, TR-5.3, TR-8.4, TR-8.6, TR-8.9, TR-9.1, and CD-3.4, and Master Plan Policies *Vehicular Circulation Policy 3* and *Bicycle Policy 3*.

3.13.2.4 *Trip Generation Estimates*

Traffic trips generated by the proposed project were estimated using the recommended rates from the City of San José. A summary of the project trip generation estimates is shown in Table 3.13-7 below. It is possible that the data center component would be completed prior to buildout of the industrial uses in Option 2. If this is the case, the data center uses alone would generate no more than 40 peak hour trips.

Table 3.13-7: Project Trip Generation Estimates							
Land Use	Daily Trips	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
<i>Light Industrial Development Option</i>							
Light Industrial	8,364	972	132	1,104	140	1,024	1,164
<i>Data Center/Light Industrial Development Option</i>							
Light Industrial	5,074	589	80	670	85	621	706
Data Center	433	21	18	39	9	31	40
Total	5,507	610	99	709	94	652	746

3.13.2.5 *Existing Plus Project Intersection Operations*

The roadway network under existing plus project conditions would be the same as the existing roadway network, except for the following improvements planned as part of the proposed project:

The construction of up to three new two-lane public streets are proposed to provide a connection from Zanker Road to the project site. The planned roadways would provide direct access to the project site as well as adjacent undeveloped parcels along the new roadways.

- A two-lane Nortech Parkway would be extended east from a new three-way intersection at Zanker Road across lands held by the City of San José to the LECEF site, as shown on Figure 2.0-5. It is expected that the roadway right-of-way would be approximately 68 feet wide.
- A two-lane northern roadway would extend east from a new intersection with Zanker Road, approximately 2,500 feet north of the SR 237 westbound ramp intersection. The roadway would traverse lands of the City of San José. This roadway would be required for both project options, but would not be constructed until after the data center is constructed.

Existing Plus Project Level of Service Analysis

Based on the trip generation estimates for the two project option, the light industrial development option would generate approximately 40 percent more peak hour trips than the data center/light industrial development option. Therefore, the following analysis is based on the light industrial development option. Where relevant, impacts resulting from the data center/light industrial development option are also noted.

The LOS of the study intersections was calculated under project conditions by adding the new project trips from the proposed development to the existing conditions. Analysis of the existing plus project intersection operations concluded that the five intersections operating at an unacceptable LOS under existing conditions would continue to operate at an unacceptable LOS in one or more peak hours with the addition of project traffic. CMP intersections are denoted with asterisks (*) below.

City of San José Intersections:

- No. 8 – North First Street and Montague Expressway* (AM and PM Peak Hour)
- No. 9 – Zanker Road and Montage Expressway* (AM and PM Peak Hour)
- No. 20 – Oakland Road and Montague Expressway* (AM and PM Peak Hour)
- No. 21 – Trade Zone Boulevard and Montague Expressway* (AM and PM Peak Hour)

City of Santa Clara Intersections:

- No. 29 – De La Cruz Boulevard and Central Expressway* (PM Peak Hour)

All other study intersections would operate at an acceptable LOS. The results of the existing plus project conditions analysis are summarized in Table 3.13-8 below.

The Existing plus Project condition could potentially occur if all development planned as part of the project was constructed and occupied prior to other approved projects in the area. It is unlikely that this condition would occur since other approved projects expected to add traffic to the study area would likely be built and occupied prior to the proposed project.

CEQA Guidelines Section 15125(a) states that the existing environmental setting will normally constitute the baseline physical conditions against which the impacts of a project are to be evaluated. The courts have held that a Lead Agency has the discretion to use an alternative baseline, as long as the exercise of discretion is supported by substantial evidence. For the analysis of traffic impacts, the City of San José and City of Santa Clara use an alternative baseline – background conditions – which includes projected traffic from approved but not yet constructed or occupied projects in addition to existing conditions.

The purpose of identifying a background condition for calculating impacts is to ensure that all possible care is taken to identify the actual capacity of the roadways that will be available to accommodate any newly proposed development projects. This methodology also more accurately characterizes the real world conditions under which the newly proposed project would be implemented, should it be approved. For this reason and those stated above, the Cities of San José

and Santa Clara mitigate impacts of the Background plus Project condition and the following discussion of Existing plus Project conditions is for informational purposes only.

Table 3.13-8: Existing Plus Project Intersections Level of Service

No.	Intersection	Peak Hour	Existing		Existing Plus Project			
			Delay	LOS	Delay	LOS	Critical Delay	V/C
1	Zanker Road and SR 237 (North) - CMP/San José	AM	11.1	B	15.9	B	7.2	0.446
		PM	11.2	B	17.1	B	8.0	0.640
2	Zanker Road and SR 237 (South) CMP/San José	AM	21.8	C	22.6	C	1.6	0.111
		PM	12.5	B	16.5	B	7.6	0.342
3	Zanker Road and Holger Way – San José	AM	24.3	C	23.0	C	0.0	0.000
		PM	29.4	C	30.6	C	0.2	0.011
4	Zanker Road and Baypointe Parkway – San José	AM	13.2	B	12.4	B	-0.2	0.072
		PM	15.1	B	14.3	B	1.1	0.032
5	North First Street and Tasman Drive – San José	AM	33.4	C	33.5	C	0.0	0.001
		PM	37.8	D	38.9	D	2.1	0.034
6	Zanker Road and Tasman Drive – San José	AM	35.8	D	44.6	D	13.4	0.110
		PM	38.2	D	38.6	D	0.9	0.021
7	Zanker Road and River Oaks Parkway – San José	AM	18.3	B	17.1	B	-1.9	0.066
		PM	18.7	B	18.1	B	-1.2	0.070
8	North First Street and Montague Expressway – CMP/San José	AM	87.1	F	87.5	F	1.4	0.005
		PM	72.9	E	73.9	E	0.6	0.007
9	Zanker Road and Montague Expressway – CMP/San José	AM	60.7	E	64.3	E	5.4	0.069
		PM	51.3	D	62.5	E	20.1	0.070
10	Zanker Road and Plumeria Drive – San José	AM	22.6	C	21.6	C	-1.0	0.032
		PM	23.8	C	23.2	C	-0.7	0.033
11	Trimble Road and US 101 – San José	AM	19.7	B	19.8	B	0.3	0.008
		PM	12.1	B	12.2	B	0.1	0.014
12	De La Cruz Boulevard and Trimble Road – CMP/San José	AM	33.8	C	33.5	C	0.0	0.000
		PM	48.7	D	49.3	D	1.0	0.009
13	Orchard Parkway and Trimble Road – San José	AM	35.8	D	35.8	D	0.0	0.001
		PM	40.1	D	40.2	D	0.0	0.001
14	North First Street and Trimble Road – CMP/San José	AM	42.3	D	42.3	D	0.1	0.009
		PM	41.1	D	41.2	D	0.2	0.010
15	Zanker Road and Trimble Road – CMP/San José	AM	39.1	D	40.7	D	2.7	0.048
		PM	38.3	D	38.4	D	-0.2	0.016
16	Orchard Parkway and Guadalupe Parkway – San José	AM	24.1	C	24.0	C	0.0	0.001
		PM	32.8	C	32.8	C	0.1	0.009
17	North First Street and Charcot Avenue – San José	AM	39.6	D	39.7	D	0.3	0.010
		PM	37.3	D	37.3	D	0.1	0.015
18	Zanker Road and Charcot Avenue – San José	AM	33.5	C	33.9	C	0.6	0.021
		PM	38.0	D	38.2	D	0.2	0.011
19	Zanker Road and Brokaw Road – CMP/San José	AM	37.0	D	37.5	D	0.9	0.017
		PM	40.9	D	41.0	D	0.1	0.006
20	Old Oakland Road and Montague Expressway – CMP/San José	AM	89.3	F	90.9	F	2.9	0.006
		PM	84.8	F	86.1	F	28.2	0.321
21	Trade Zone Boulevard and Montague Expressway – CMP/San José	AM	58.7	E	59.4	E	1.0	0.006
		PM	55.1	E	55.7	E	1.2	0.006
22	Lafayette Street and Calle De Luna – Santa Clara	AM	14.8	B	14.7	B	0.0	0.014
		PM	18.8	B	19.5	B	0.7	0.013
23	Called Del Sol and Tasman Drive – Santa Clara	AM	15.7	B	17.1	B	1.3	0.023
		PM	18.9	B	19.0	B	0.2	0.004

Table 3.13-8: Existing Plus Project Intersections Level of Service

No.	Intersection	Peak Hour	Existing		Existing Plus Project			
			Delay	LOS	Delay	LOS	Critical Delay	V/C
24	Lick Mill Boulevard and Tasman Drive – Santa Clara	AM	35.1	D	35.3	D	0.2	0.001
		PM	27.7	C	27.4	C	0.0	0.002
25	Lafayette Street and Montague Expressway (North) – Santa Clara	AM	30.6	C	30.6	C	-0.1	0.003
		PM	23.7	C	24.4	C	0.9	0.006
26	Lafayette Street and Montague Expressway (South) – Santa Clara	AM	15.1	B	14.9	B	-0.2	0.003
		PM	12.5	B	12.4	B	-0.2	0.006
27	De La Cruz Boulevard and Montague Expressway – CMP/Santa Clara	AM	43.8	D	43.9	D	0.2	0.002
		PM	53.4	D	54.2	D	0.9	0.015
28	Lick Mill Blvd and Montague Expressway – Santa Clara	AM	14.6	B	14.3	B	-0.4	0.017
		PM	15.4	B	15.3	B	-0.5	0.018
29	De La Cruz Boulevard and Central Expressway – CMP/Santa Clara	AM	46.4	D	46.2	D	0.0	0.001
		PM	95.8	F	97.4	F	0.0	0.000
30	I-880 SB and Calaveras Boulevard – Milpitas	AM	13.0	B	12.3	B	-0.8	0.060
		PM	12.4	B	12.3	B	-0.1	0.013
31	I-880 NB and Calaveras Boulevard – Milpitas	AM	11.0	B	15.0	B	4.3	0.090
		PM	23.9	C	24.2	C	0.5	0.017
32	Abbott Avenue and Calaveras Boulevard – Milpitas	AM	26.1	C	26.2	C	0.1	0.013
		PM	26.4	C	26.3	C	0.0	0.002
33	Serra Way and Calaveras Boulevard – Milpitas	AM	16.3	B	16.3	B	0.1	0.013
		PM	22.8	C	22.7	C	-0.1	0.014
34	Abel Street and Calaveras Boulevard – CMP/Milpitas	AM	48.3	D	49.7	D	2.3	0.023
		PM	46.1	D	46.4	D	0.5	0.012
35	Milpitas Boulevard and Calaveras Boulevard – CMP/Milpitas	AM	46.2	D	48.5	D	3.5	0.018
		PM	40.8	D	40.9	D	0.2	0.006
36	McCarthy Boulevard and Tasman Drive – Milpitas	AM	32.4	C	32.6	C	0.2	0.014
		PM	31.4	C	30.3	C	-10.6	-0.004
37	I-880 and Tasman Drive – Milpitas	AM	22.9	C	23.0	C	0.2	0.008
		PM	20.1	C	20.0	C	0.0	0.008
38	I-880 and Great Mall Parkway – Milpitas	AM	41.0	D	41.4	D	0.2	0.008
		PM	29.0	C	28.9	C	-0.1	0.008
39	Abel Street and Great Mall Parkway – Milpitas	AM	29.1	C	29.7	C	0.9	0.017
		PM	24.0	C	24.1	C	0.0	0.006
40	Alder Drive and Tasman Drive - Milpitas	AM	15.2	B	15.3	B	0.2	0.008
		PM	33.3	C	33.7	C	0.5	0.008

*CMP Intersections

The following intersections would operate at an unacceptable LOS under existing plus project conditions. Nevertheless, the proposed project would not have a significant impact on these intersections as discussed below.

North First Street and Montague Expressway would continue to operate at LOS F in the AM Peak Hour and LOS E in the PM Peak Hour, but the project would not result in a significant increase in delay.

Trade Zone Boulevard and Montague Expressway would continue to operate at LOS E in the AM and PM Peak Hours, but the project would not result in a significant increase in delay.

De La Cruz Boulevard and Central Expressway would continue to operate at LOS F in the PM Peak Hour, but the project would not result in a significant increase in delay.

Implementation of the proposed project would have a less than significant impact at these intersections during the peak hours under existing plus project conditions. **(Less Than Significant Impact)**

Zanker Road and Montague Expressway would continue to operate at LOS E in the AM Peak Hour with a 5.4 second increase in critical delay and a 0.069 increase in V/C. In addition, the LOS would degrade from D to E in the PM Peak Hour. Under the data center/light industrial development option, the LOS would degrade from D to E in the PM Peak Hour.

Oakland Road and Montague Expressway would continue to operate at LOS F in both peak hours. In the PM Peak Hour, the project would result in a 28.2 second increase in critical delay and a 0.321 increase in V/C. Under the data center/light industrial development option, the intersection would also operate at LOS F in the PM Peak Hour with a 27.5 second increase in critical delay and a 0.319 increase in V/C.

Impact TRAN-1: Implementation of the proposed project would have a significant impact on the Zanker Road/Montague Expressway and Oakland Road/Montague Expressway intersections under existing plus project conditions. The City has determined that impacts related to this option do not require mitigation. **(Significant Impact)**

3.13.2.6 *Background Plus Project Intersection Operations*

The roadway network under background plus project conditions would be the same as the roadway network under existing plus project conditions.

Background Plus Project LOS Analysis

The LOS of the study intersections was calculated under Background plus Project conditions by adding the new project trips from the proposed development to the background conditions. Analysis of the Background plus Project intersection operations concluded that the following 10 intersections would continue to operate at an unacceptable LOS. CMP Intersections are denoted with asterisks (*) below.

City of San José Intersections:

- No. 8 – North First Street and Montague Expressway* (AM and PM Peak Hour)
- No. 9 – Zanker Road and Montage Expressway* (AM and PM Peak Hour)
- No. 12 – De La Cruz Boulevard and Trimble Road* (PM Peak Hour)
- No. 17 – North First Street and Charcot Avenue (AM Peak Hour)
- No. 18 – Zanker Road and Charcot Avenue (PM Peak Hour)

- No. 20 – Oakland Road and Montague Expressway* (AM and PM Peak Hour)
- No. 21 – Trade Zone Boulevard and Montague Expressway* (AM and PM Peak Hour)

City of Santa Clara Intersections:

- No. 27 – De La Cruz Boulevard and Montague Expressway* (AM and PM Peak Hour)
- No. 29 – De La Cruz Boulevard and Central Expressway* (PM Peak Hour)

City of Milpitas Intersection:

- No. 40 – Alder Drive and Tasman Drive (PM Peak Hour)

The Background plus Project scenario includes the construction of the roadways described in the project description, including the Nortech Parkway Extension, a new roadway approximately 1,500 feet north of the Nortech Parkway Extension, and a north/south roadway to link the two as shown on Figure 2.0-5. The roadways necessary for the construction of the data center would be constructed first; however, all roadways would be needed for full build-out of Options 1 and 2.

All other study intersections would operate at an acceptable LOS. Construction of the data center only (Phase 1 of Option 2) would not result in the impacts at the Background plus Project condition, as it would generate no more than 40 peak hour trips. The results of the background plus project analysis are summarized in Table 3.13-9 below.

No.	Intersection	Peak Hour	Background		Background Plus Project			
			Delay	LOS	Delay	LOS	Critical Delay	V/C
1	Zanker Road and SR 237 (North) - CMP/San José	AM	11.2	B	17.7	B	9.6	0.467
		PM	13.8	B	29.8	C	23.7	0.734
2	Zanker Road and SR 237 (South) CMP/San José	AM	22.2	C	23.1	C	1.9	0.111
		PM	14.0	B	21.2	C	12.5	0.342
3	Zanker Road and Holger Way – San José	AM	26.7	C	25.8	C	0.0	0.000
		PM	30.5	C	31.6	C	2.9	0.076
4	Zanker Road and Baypointe Parkway – San José	AM	13.2	B	12.4	B	-0.2	0.072
		PM	15.1	B	14.3	B	1.1	0.032
5	North First Street and Tasman Drive – San José	AM	35.3	D	35.3	D	0.1	0.001
		PM	41.8	D	43.4	D	2.5	0.034
6	Zanker Road and Tasman Drive – San José	AM	41.4	D	54.6	D	22.3	0.110
		PM	39.7	D	40.2	D	2.0	0.023
7	Zanker Road and River Oaks Parkway – San José	AM	18.9	B	17.9	B	-1.4	0.066
		PM	18.2	B	17.7	B	-0.7	0.070
8	North First Street and Montague Expressway – CMP/San José	AM	131.6	F	132.1	F	2.1	0.005
		PM	105.9	F	108.2	F	6.5	0.018
9	Zanker Road and Montague Expressway – CMP/San José	AM	66.6	E	74.7	E	13.5	0.069
		PM	70.7	E	90.7	F	33.0	0.070
10	Zanker Road and Plumeria Drive – San José	AM	25.2	C	24.5	C	-0.6	0.032
		PM	26.1	C	25.8	C	-0.3	0.033

Table 3.13-9: Background Plus Project Intersections Level of Service

No.	Intersection	Peak Hour	Background		Background Plus Project			
			Delay	LOS	Delay	LOS	Critical Delay	V/C
11	Trimble Road and US 101 – San José	AM	28.1	C	29.2	C	1.6	0.008
		PM	15.5	B	16.2	B	0.9	0.014
12	De La Cruz Boulevard and Trimble Road – CMP/San José	AM	31.7	C	31.6	C	0.0	0.000
		PM	84.0	F	86.7	F	3.7	0.009
13	Orchard Parkway and Trimble Road – San José	AM	34.7	C	34.6	C	0.0	0.000
		PM	47.3	D	47.4	D	0.0	0.000
14	North First Street and Trimble Road – CMP/San José	AM	52.4	D	53.0	D	0.8	0.009
		PM	45.3	D	45.7	D	0.5	0.010
15	Zanker Road and Trimble Road – CMP/San José	AM	41.6	D	43.5	D	3.2	0.048
		PM	44.2	D	44.8	D	0.8	0.016
16	Orchard Parkway and Guadalupe Parkway – San José	AM	34.7	C	34.9	C	0.4	0.009
		PM	39.1	D	39.5	D	0.6	0.009
17	North First Street and Charcot Avenue – San José	AM	55.6	E	57.0	E	2.3	0.010
		PM	41.3	D	41.6	D	0.4	0.009
18	Zanker Road and Charcot Avenue – San José	AM	43.7	D	45.0	D	1.9	0.021
		PM	64.0	E	66.0	E	3.2	0.011
19	Zanker Road and Brokaw Road – CMP/San José	AM	48.0	D	49.3	D	2.8	0.017
		PM	47.3	D	47.6	D	0.4	0.006
20	Old Oakland Road and Montague Expressway – CMP/San José	AM	100.4	F	102.4	F	2.8	0.006
		PM	102.2	F	104.3	F	3.1	0.006
21	Trade Zone Boulevard and Montague Expressway – CMP/San José	AM	63.8	E	64.7	E	1.2	0.006
		PM	64.1	E	65.0	E	1.8	0.006
22	Lafayette Street and Calle De Luna – Santa Clara	AM	13.8	B	13.8	B	0.0	0.014
		PM	20.3	C	20.9	C	0.5	0.013
23	Called Del Sol and Tasman Drive – Santa Clara	AM	16.4	B	17.6	B	1.1	0.022
		PM	19.0	B	19.2	B	0.2	0.004
24	Lick Mill Boulevard and Tasman Drive – Santa Clara	AM	34.5	C	34.6	C	0.2	0.001
		PM	28.1	C	27.9	C	0.0	0.002
25	Lafayette Street and Montague Expressway (North) – Santa Clara	AM	32.5	C	32.5	C	-0.1	0.003
		PM	26.0	C	26.6	C	0.7	0.006
26	Lafayette Street and Montague Expressway (South) – Santa Clara	AM	12.6	B	12.5	B	-0.1	0.003
		PM	12.5	B	12.5	B	-0.1	0.006
27	De La Cruz Boulevard and Montague Expressway – CMP/Santa Clara	AM	91.7	F	92.2	F	1.4	0.002
		PM	92.7	F	97.2	F	1.9	0.009
28	Lick Mill Blvd and Montague Expressway – Santa Clara	AM	16.1	B	15.8	B	-0.3	0.017
		PM	15.3	B	15.3	B	-0.2	0.018
29	De La Cruz Boulevard and Central Expressway – CMP/Santa Clara	AM	75.1	E	74.7	E	-0.1	0.001
		PM	114.0	F	115.5	F	0.0	0.000
30	I-880 SB and Calaveras Boulevard – Milpitas	AM	17.4	B	17.4	B	0.0	0.060
		PM	14.8	B	14.8	B	0.0	0.013
31	I-880 NB and Calaveras Boulevard – Milpitas	AM	14.4	B	18.7	B	4.9	0.092
		PM	25.7	C	26.3	C	0.9	0.017
32	Abbott Avenue and Calaveras Boulevard – Milpitas	AM	26.2	C	26.4	C	0.3	0.013
		PM	26.1	C	26.1	C	0.0	0.002

Table 3.13-9: Background Plus Project Intersections Level of Service								
No.	Intersection	Peak Hour	Background		Background Plus Project			
			Delay	LOS	Delay	LOS	Critical Delay	V/C
33	Serra Way and Calaveras Boulevard – Milpitas	AM	16.3	B	16.4	B	0.2	0.013
		PM	21.9	C	22.0	C	0.1	0.014
34	Abel Street and Calaveras Boulevard – CMP/Milpitas	AM	59.6	E	63.3	E	6.2	0.023
		PM	52.1	D	53.3	D	1.8	0.012
35	Milpitas Boulevard and Calaveras Boulevard – CMP/Milpitas	AM	62.1	E	66.1	E	6.2	0.018
		PM	43.4	D	43.6	D	0.4	0.006
36	McCarthy Boulevard and Tasman Drive – Milpitas	AM	37.6	D	37.9	D	0.4	0.014
		PM	40.7	D	40.9	D	0.1	0.001
37	I-880 and Tasman Drive – Milpitas	AM	26.1	C	26.4	C	0.6	0.008
		PM	22.9	C	22.9	C	0.0	0.000
38	I-880 and Great Mall Parkway – Milpitas	AM	49.3	D	50.0	D	0.9	0.008
		PM	31.0	C	31.0	C	0.0	0.008
39	Abel Street and Great Mall Parkway – Milpitas	AM	31.0	C	31.9	C	1.4	0.017
		PM	28.4	C	28.6	C	0.3	0.006
40	Alder Drive and Tasman Drive - Milpitas	AM	25.2	C	25.7	C	0.7	0.008
		PM	170.8	F	173.7	F	3.6	0.008

De La Cruz Boulevard and Trimble Road would continue to operate at LOS F in the PM Peak Hour, but the project would not result in a significant increase in critical delay and V/C.

North First Street and Charcot Avenue would continue to operate at LOS E in the AM Peak Hour, but the project would not result in a significant increase in critical delay and V/C.

Zanker Road and Charcot Avenue would continue to operate at LOS E in the PM Peak Hour, but the project would not result in a significant increase in critical delay and V/C.

Oakland Road and Montague Expressway would continue to operate at LOS F in the AM and PM Peak Hours, but the project would not result in a significant increase in critical delay and V/C.

Trade Zone Boulevard and Montague Expressway would continue to operate at LOS E in the AM and PM Peak Hours, but the project would not result in a significant increase in critical delay and V/C.

De La Cruz Boulevard and Montague Expressway would continue to operate at LOS F in the AM and PM Peak Hours, but the project would not result in a significant increase in critical delay and V/C.

De La Cruz Boulevard and Central Expressway would continue to operate at LOS F in the PM Peak Hour, but the project would not result in a significant increase in critical delay and V/C.

Alder Drive and Tasman Drive would continue to operate at LOS F in the PM Peak Hour, but the project would not result in a significant increase in critical delay and V/C.

Implementation of the proposed project would have a less than significant impact at these intersections during the peak hours under background plus project conditions. **(Less Than Significant Impact)**

North First Street and Montague Expressway would continue to operate at LOS F in the PM Peak Hour with a 6.5 second increase in critical delay and a 0.018 increase in V/C.

Under the data center/light industrial development option (Option 2), the intersection would also operate at LOS F in the PM Peak Hour with a 4.1 second increase in critical delay and a 0.011 increase in V/C.

Zanker Road and Montague Expressway would continue to operate at LOS E in the AM Peak Hour and LOS F in the PM Peak Hour. The project would result in a 13.5 second increase in critical delay and a 0.069 increase in V/C in the AM Peak Hour. In the PM Peak Hour, the project would result in a 33.0 second increase in critical delay and a 0.070 increase in V/C.

Under the data center/light industrial development option, the intersection would also operate at LOS E in the AM Peak Hour with a 6.8 second increase in critical delay and a 0.043 increase in V/C. In the PM Peak Hour, the intersection would operate at LOS F with a 20.3 second increase in critical delay and a 0.044 increase in V/C. Implementation of Phase 1 of Option 2 only (data center development) would not result in this impact.

Implementation of the proposed project would have a significant impact on the North First Street/Montague Expressway and Zanker Road/Montague Expressway intersections under background plus project conditions. These intersections are located within the North San José Area Development Policy (NSJADP) that establishes a special area within the City not subject to the City's standard Level of Service (LOS) Policy. As a condition of project approval for Option 1 and Phase 2 of Option 2, consistent with the NSJADP, the project applicant shall be required to pay the applicable impact fees toward the improvements as identified below.

North First Street/Montague Expressway: The intersection is part of the identified Montague Expressway improvements, including road widening, that are being funded by the North San José Area Development Policy (NSJADP) traffic impact fee.

Zanker Road and Montague Expressway: The intersection is part of the identified Montague Expressway improvements to be funded by NSJADP traffic impact fees. Improvements at this particular intersection also include the addition of a second northbound and southbound turn lane.

The payment of NSJADP fees would reduce the impacts at these two intersections to a less than significant level. These fees are not required for construction of Phase 1 of Option 2 (data center only). **(Less than Significant Impact)**

3.13.2.7 *Background Plus Project Freeway Segment Operations*

Freeway segments were analyzed during AM and PM Peak Hours to calculate the amount of project traffic projected to be added to the nearby freeways.

Analysis of the existing plus project freeway operations (Tables 9 and 10 of Appendix K) concluded that the proposed project would increase traffic volumes by more than one percent on the mixed-flow lanes of 13 of the 26 directional freeway segments and HOV lanes of three freeway segments (listed below) previously identified as operating at LOS F in at least one direction during at least one of the peak hours of traffic under existing conditions. Development of Phase 1 of Option 2 (data center only) would not result in impacts to any freeway segments.

Mixed-Flow Freeway Segments

1. Eastbound SR 237 between US 101 and Mathilda Avenue (PM Peak Hour)
2. Eastbound SR 237 between Mathilda Avenue and N. Fair Oaks Avenue (PM Peak Hour)
3. Eastbound SR 237 between N. Fair Oaks Avenue and Lawrence Expressway (PM Peak Hour)
4. Eastbound SR 237 between Lawrence Expwy. and Great America Parkway (PM Peak Hour)
5. Eastbound SR 237 between Great America Parkway and North First Street (PM Peak Hour)
6. Eastbound SR 237 between North First Street and Zanker Road (PM Peak Hour)
8. Eastbound SR 237 between McCarthy Boulevard and I-880 (PM Peak Hour)
13. Northbound I-880 between SR 237 and Dixon Landing Road (PM Peak Hour)
17. Southbound I-880 between Montague Expressway and E. Brokaw Road (PM Peak Hour)
18. Southbound I-880 between E. Brokaw Road and US 101(AM & PM Peak Hours)
19. Westbound SR 237 between I-880 and McCarthy Boulevard (AM Peak Hour)
20. Westbound SR 237 between McCarthy Boulevard and Zanker Road (AM & PM Peak Hours)
25. Westbound SR 237 between N. Fair Oaks Avenue and Mathilda Avenue (PM Peak Hour)

HOV Freeway Segments

13. Northbound I-880 between SR 237 and Dixon Landing Road (PM Peak Hour)
14. Southbound I-880 between Dixon Landing Road and SR 237 (AM Peak Hour)
19. Westbound SR 237 between I-880 and McCarthy Boulevard (AM Peak Hour)

Impact TRAN-2: Implementation of the proposed project would have a significant impact on the mixed-flow lanes of seven directional freeway segments and HOV lanes of three directional freeway segments. Phase 1 of Option 2 (data center construction only) would not result in this impact. **(Significant Impact)**

3.13.2.8 Pedestrian/Bicycle Facilities and Transit Operations

Pedestrian and Bicycle Facilities

Pedestrian Facilities

As previously noted, pedestrian facilities in the project area are limited, with no sidewalks on the roadways immediately adjacent to or in proximity to the project site. Pedestrian traffic from the project site could include future site occupants walking to/from the nearby commercial areas and bus stops on McCarthy Boulevard. Limited pedestrian traffic is expected on Zanker Road due to lack of services on that roadway; however, without adequate sidewalks, the proposed project could result in unsafe conditions for pedestrians on Zanker Road. The proposed project would include pedestrian improvements, including a sidewalk on the east side of Zanker Road.

Bicycle Facilities

While there are bicycle facilities surrounding the project site, they are discontinuous and do not provide direct links to nearby transit and services. The *San José Bike Plan 2020* and General Plan identify planned improvements to the bicycle network within the City and provide policies and goals that are intended to promote and encourage the use of multi-modal travel options and reduce the identified project impacts to the roadway system. The planned improvements to the bicycle network would provide the project site with improved connections to surrounding pedestrian/bike and transit facilities and a balanced transportation system as outlined in the General Plan goals and policies.

The *San José Bike Plan 2020* indicates that a variety of bicycle facilities are planned in the study area, some of which would benefit the project and adhere to the goals of the General Plan. Of the planned facilities, the following are relevant to the project.

Class I off-Street trails are planned for:

- Zanker Road, between SR 237 and Los Esteros Road
- Between Coyote Creek and Zanker Road, north of the project site.
- Along Coyote Creek from McCarthy Boulevard to Ranch Drive

Class II on-street bike lanes are planned for Los Esteros Road.

The proposed project would not result in unsafe conditions for bicyclists and would not preclude implementation of planned improvements. **(Less Than Significant Impact)**

Transit Operations

As previously noted, the project site is not directly served by any transit. The nearest transit stops are approximately one-half mile at the McCarthy Boulevard/Ranch Drive intersection and 1.5 miles at the Zanker Road/Tasman Drive intersection. There are no sidewalks or paths linking the project site with these transit stops.

It is estimated that only a minimal number of future employees would utilize transit due to long walking distances and lack of pedestrian facilities. The light industrial development option would increase delay to transit vehicles by less than 15 seconds per vehicle (see Table 16 of Appendix K). For the data center/light industrial development option, the transit delay would be less than 10 seconds vehicle. Thus, the proposed project would not alter existing transit facilities or conflict with the operation of existing or planned facilities. Therefore, the proposed project would have a less than significant impact on transit operations. **(Less Than Significant Impact)**

3.13.3 Planning Considerations – Operational Impacts

3.13.3.1 *Truck Traffic*

The light industrial development option (Option 1) would have the greatest number of new truck trips. Under this option, the project would include approximately 108 loading dock doors. Ultimately, the amount of new truck traffic generated by the project would be dependent on the operational characteristics of the facility such as duration of storage, hours of operation, and turnover

rates. Specific operational characteristics for the project are not, however, available at this time as the project has no identified tenant. Based on the ITE, truck trips account for one to 31 percent of total weekday trips for industrial land uses, with an average of 13 percent.

Using the ITE average, it is estimated that the proposed project would generate approximately 1,087 daily truck trips. It is presumed that the majority of peak truck activities would occur outside of the peak hour of adjacent street traffic. It should be noted that the estimated 1,087 truck trips are included in and are not in addition to the project trip estimates shown in Table 3.16-7.

It is expected that the majority of truck traffic generated by the project would originate from and utilize SR 237. The project truck routes would not include Los Esteros Road into Alviso. The additional truck traffic resulting from the proposed project would not cause significant impacts to traffic flow along Zanker Road, given the relatively low vehicular volume along the roadway. The additional truck traffic generated by the project would, however, further the need to improve Zanker Road to City of San José's standards.

Corner radii and aisle widths shown on the site plans in Appendix K would be sufficient to allow for the circulation of garbage trucks, smaller delivery trucks, and fire trucks. The design of the on-site drive aisles within the parking lot would be required to conform to the City of San José design guidelines.

3.13.3.2 *Signal Warrant Analysis*

A signal warrant evaluation was completed for each of the two new public street intersections with Zanker Road. Figures 19 and 20 of Appendix K show the gross project trips for each development option at each of the proposed roadways that would provide access to the project site.

The need for signalization of an unsignalized intersection is assessed based on the Peak Hour Volume Signal Warrant, (Warrant #3 – Part B) described in the *California Manual on Uniform Traffic Control Devices*, 2014 Edition. This method makes no evaluation of intersection level of service, but simply provides an indication whether vehicular peak hour traffic volumes are currently, or would be under project conditions, sufficient to justify installation of a traffic signal.

The result of the peak hour traffic signal warrant checks for traffic conditions at the two new public street intersections with Zanker Road indicate that peak hour signal warrants would be met under background plus project conditions when these roadways are constructed.

3.13.3.3 *Parking*

Analysis of parking capacity is not an environmental issue under CEQA, however, discussion of parking requirements is provided below for information disclosure.

The San José Municipal Code (Chapter 20.90.060) details the required parking ratios for all land uses. Light industrial land uses are required to provide one space per 350 square feet of floor area and data centers are required to provide one space per 250 square feet of floor area plus one space per 5,000 square feet of floor area for computer equipment space.

The light industrial development option would be required to provide 3,422 off-street spaces. Based on the site plan, 2,621 spaces are proposed, which is 801 spaces below the City requirement. The project would be required as a condition of project approval to meet the City's parking requirement or implement a transportation demand management (TDM) plan that would sufficiently reduce the total traffic trips to/from the site to warrant the reduction in parking.

The City requires one bicycle parking space per 5,000 square feet of light industrial floor area. For data centers, the bicycle parking requirement is one space per 5,000 square feet of office floor area plus one space per 50,000 square feet of floor space for computer equipment. For the light industrial development option (Option 1), the requirement would be up to 240 bicycle parking spaces. Option 2 would include up to 240 bicycle parking spaces with 22 included on the data center portion of the site. The data center includes approximately 103 parking spaces.

3.13.4 Mitigation and Avoidance Measures for Transportation Impacts

3.13.4.1 *Freeway Segment Impacts*

There are no feasible mitigation measures available to reduce project impacts on local freeway study segments to a less than significant level as it is beyond the capacity of any one project to acquire right-of-way and add lanes to a state freeway. Furthermore, no comprehensive project to increase freeway capacity on either SR 237 or I-880 has been developed by Caltrans or VTA, so there is no identified improvement projects in which to pay fair share fees. Transportation demand management measures, if implemented, would reduce these impacts but not to a less than significant level.

Therefore, the project's impacts to freeway segments would be significant and unavoidable. Phase 1 of Option 2 (data center only) would not result in this impact. **(Significant Unavoidable Impact)**

3.13.5 Conclusion

With payments into the Montague Expressway widening improvements that are being funded by the North San José Area Development Policy traffic impact fee, LOS impacts on Montague Expressway would be reduced to a less than significant level. **(Less Than Significant Impact)**

There are no feasible mitigation measures to reduce the identified freeway segments. **(Significant Unavoidable Impact)**

3.14 UTILITIES AND SERVICE SYSTEMS

The section below is partially based upon the Water Supply Assessment (WSA) prepared for the San José Municipal Water System (SJMWS) by *Schaaf & Wheeler* for the proposed project. The WSA is included as Appendix L.

3.14.1 Environmental Setting

3.14.1.1 *Regulatory Framework*

State and Regional Plans

Assembly Bill 341

Assembly Bill 341 (AB 341) builds upon AB 939, which required all municipalities to divert 25 percent of their solid waste from landfill disposal by January 1, 1995. AB 341 established a policy goal for California that not less than 75 percent of the waste generated in the state be source-reduced, recycled, or composted by the year 2020.

Senate Bill 610 & 221

California Senate Bill 610 (SB 610) and Senate Bill 221 (SB 221) require water retailers to demonstrate whether their water supplies are sufficient for certain proposed subdivisions and large development projects subject to CEQA. SB 610 includes the requirements for detailed water supply assessments (WSAs), and SB 221 includes the requirement for written verification of sufficient water supply based on substantial evidence. SB 610 requires that a WSA be prepared by the local water retailer and submitted within 90 days to the requesting agency. In compliance with these laws, a WSA has been completed for the project.

Local Land Use Plans and Regulations

Envision San José 2040 General Plan

The Envision San José 2040 General Plan includes infrastructure policies applicable to all development projects in San José. These policies and actions are designed to provide water supply, sanitary sewer, and storm drainage infrastructure facilities to meet future growth planned within the City and to assure high-quality service to existing and future residents while fulfilling regulatory requirements. The following policies are specific to utilities and service systems and are applicable to the proposed project.

Policy IN-3.1: Achieve minimum levels of service as follows:

- For sanitary sewers, achieve a minimum level of service “D” or better as described in the Sanitary Sewer Level of Service Policy and determined based on the guidelines provided in the Sewer Capacity Impact Analysis (SCIA) Guidelines.
- For storm drainage, to minimize flooding on public streets and to minimize the potential for property damage from stormwater, implement a 10-year return storm design standard

throughout the City, and in compliance with all local, state and federal regulatory requirements.

Policy IN-3.3: Meet the water supply, sanitary sewer and storm drainage level of service objectives through an orderly process of ensuring that, before development occurs, there is adequate capacity.

Policy IN-3.4: Maintain and implement the City's Sanitary Sewer Level of Service Policy and Sewer Capacity Impact Analysis (SCIA) Guidelines to:

- Prevent sanitary sewer overflows (SSOs) due to inadequate capacity so as to ensure that the City complies with all applicable requirements of the Federal Clean Water Act and State Water Board's General Waste Discharge Requirements for Sanitary Sewer Systems and National Pollutant Discharge Elimination System permit. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.
- Maintain reasonable excess capacity in order to protect sewers from increased rate of hydrogen sulfide corrosion and minimize odor and potential maintenance problems.
- Ensure adequate funding and timely completion of the most critically needed sewer capacity projects.
- Promote clear guidance, consistency and predictability to developers regarding the necessary sewer improvements to support development within the City.

Policy IN-3.9: Require developers to prepare drainage plans that define needed drainage improvements for proposed developments per City standards.

Policy IN-3.10: Incorporate appropriate stormwater treatment measures in development projects to achieve stormwater quality and quantity standards and objectives in compliance with the City's NPDES permit.

Policy MS-3.1: Require water-efficient landscaping, which conforms to the State's Model Water Efficient Landscape Ordinance, for all new commercial, institutional, industrial, and developer-installed residential development unless for recreation needs or other area functions.

Policy MS-3.2: Promote use of green building technology or techniques that can help to reduce the depletion of the City's potable water supply as building codes permit.

Policy MS-3.3: Promote the use of drought tolerant plants and landscaping materials for non-residential and residential uses.

Policy MS-19.1: Require new development to contribute to the cost-effectiveness expansion of the recycled water system in proportion to the extent that it receives benefit from the development of a fiscally and environmentally sustainable local water supply.

Alviso Master Plan

The *Alviso Master Plan* includes policies applicable to all development projects within the plan area. The following policies are specific to utilities and service systems and are applicable to the proposed project.

Storm Drainage Policy 1: All new development projects should be evaluated to determine the possible need for additional storm drainage facilities.

Water Supply Policy 2: To the extent feasible, new development should use the City's reclaimed water to irrigate their landscaping.

San José Municipal Code

The City's Municipal Code includes regulations associated with water conservation and water diversion. City regulations include a Green Building Ordinance (Chapter 17.84) to foster practices to minimize the use of water and other resources in the City of San José, Water Efficient Landscape Standards for New and Rehabilitated Landscaping (Chapter 15.10), and a Construction and Demolition Diversion Deposit Program that fosters recycling of construction and demolition materials (Chapter 9.10).

San José Zero Waste Strategic Plan/Green Vision

The Green Vision provides a comprehensive approach to achieve sustainability through new technology and innovation. The Zero Waste Strategic Plan outlines policies to help the City of San José foster a healthier community and achieve its Green Vision goals, including 75 percent diversion by 2013 and zero waste by 2022. The Green Vision also includes ambitious goals for economic growth, environmental sustainability, and an enhanced quality of life for San José residents and businesses.

Private Sector Green Building Policy

The City of San José's Green Building Policy (Policy 6-32) for private sector new construction encourages building owners, architects, developers, and contractors to incorporate meaningful sustainable building goals early in the building design process. This policy establishes baseline green building standards for private sector new construction and provides a framework for the implementation of these standards. It is also intended to enhance the public health, safety and welfare of San José residents, workers, and visitors by fostering practices in the design, construction, and maintenance of buildings that will minimize the use and waste of energy, water and other resources in the City of San José.

3.14.1.2 *Existing Conditions*

Water Service and Supply

The project site is currently served by well water. Potable water is provided in the project area by the San José Municipal Water System (SJMWS) and is a mix of wholesale water purchase from the San

Francisco Public Utilities Commission (SFPUC) with some backup supply available from locally produced groundwater.⁷³

The California Urban Water Management Planning Act requires urban water suppliers meeting certain criteria to prepare Urban Water Management Plans on a five-year, on-going basis. SJMWS adopted its 2015 UWMP in June 2016 which predicted system-wide industrial demand of 3,894 acre feet per year (AFY) in 2020, a 1,721 AFY increase over 2015.

Water recycling (also referred to as water reclamation) is the treatment and management of wastewater to produce water of a suitable quality for beneficial non-potable uses. Recycled water service is provided to the cities of Milpitas, Santa Clara, and San José by South Bay Water Recycling (SBWR) which is operated by the San José Santa Clara Regional Wastewater Facility (RWF). SBWR maintains over 100 miles of recycled water pipelines, and delivered an average of 10.6 (million gallons per day or MGD) to customers for non-drinking uses in 2012.⁷⁴ The nearest recycled water line is parallel to Zanker Road, west of the project site. This recycled water line serves the LECEF located west of the site.

Wastewater Treatment System

The RWF provides wastewater treatment for 110 million gallons/day (MGD) from 12 neighboring cities and sanitation districts. This includes the Alviso Community, in which the proposed project is located. The RWF is located north of the project site, on both sides of Zanker Road. Several large gravity sanitary sewer trunk lines are located in Zanker Road providing the final connection to the RWF from the surrounding tributary cities and sanitation districts.

There are no existing public sanitary sewer facilities on the project site or the surrounding undeveloped land. The LECEF uses a private on-site sewer pump station to pump its effluent into the trunk lines in Zanker Road. The connection from LECEF is made at an underground vault near the intersection of Thomas Foon Chew Way and Zanker Road. The force main from LECEF's pump station up to and including the underground vault is a privately owned and maintained system.

Given that the project site is minimally developed with two residences, a mobile home, and farm-related ancillary structures, the existing uses on-site utilize a septic system for the minimal amount of wastewater currently generated.

Stormwater Drainage System

The majority of the project site is currently pervious. The existing site grading slopes generally downhill towards the north-west. Stormwater runoff currently infiltrates the pervious surfaces of the site or drains via sheet flow to the northwest corner of the property.⁷⁵ The existing Coyote Creek levee along the eastern boundary of the site prevents any drainage directly into the creek.

⁷³ SJMWS, *Water Supply Assessment for the 237 Industrial Center Project*, February 2017 (Appendix L).

⁷⁴ City of San José, Environmental Services Department. *About SBWR*. N.d. Accessed August 21, 2015. Available at: <http://www.sanJoseca.gov/index.aspx?NID=1587>

⁷⁵ Schaaf & Wheeler. *Memo – Storm Outfall Impacts for Cilker Property*. June 8, 2016.

Stormwater from the adjacent 40-acre LECEF and PG&E site discharges into Coyote Creek via an existing forcemain that crosses the project site. The forcemain travels through the existing levee on the west side of the creek where it outfalls to the low flow channel.

Solid Waste

Given that the project site is minimally developed with two residences, a mobile home, and farm-related accessory structures, the site currently generates a nominal amount of solid waste for collection.

Natural Gas, Electricity, and Fiber Optics

There is an existing natural gas line located south and west of the project site. Electricity is provided to the project site by PG&E via overhead utility lines. There are no fiber optics lines (high-speed data transmission) located on-site or within the general project vicinity.

3.14.2 Utilities and Service Systems Impacts

3.14.2.1 *Thresholds of Significance*

For the purposes of this EIR, a utilities and service systems impact is considered significant if the project would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Require or result in the construction of new waste or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- 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;
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Comply with federal, state, and local statutes and regulations related to solid waste.

3.14.2.2 *Consistency with Plans*

The proposed project would be built in accordance with the City's Green Building Measures, including water efficient fixtures and landscaping, use of recycled water, and recycling of solid waste. The project would extend utilities onto the project site to provide adequate electrical, natural gas, fiber optics, water, and sanitary sewer services for the proposed project. A new outfall to Coyote Creek could also be installed for stormwater runoff if it determined that extending lines to the existing Oakmead Pump Station on the Guadalupe River is not possible. Therefore, the project would be consistent with General Plan Policies IN-3.1, IN-3.3, IN-3.4, IN-3.9, IN-3.10, MS-3.1, MS-

3.2, MS-3.3, and MS-19.1, and Alviso Master Plan Policies Storm Drainage Policy 1 and Water Supply Policy 2.

3.14.2.3 *Water Supply Impacts*

The Water Supply Analysis (WSA) analyzed the amount of water required for Option 2 of the project because it would require more water associated with the data center use. The data center would use recycled water to meet cooling demand; however, a contingency of nine days of potable water use per year is factored into the analysis should the recycled water system experience an interruption. The remaining 728,000 square feet of light industrial uses would use potable and recycled water supplied by SJMWS. Water mains would be extended to the project site and City held land within existing streets and new public streets proposed as part of the project. A summary of project water demands is provided in the table below, which assumes no interruptions in recycled water supply.

Table 3.14-1: Project Water Demands						
Site Use	Demand Calculation (gal/day)	Water Demand		% Recycled	Potable Demand (AFY)	Recycled Demand (AFY)
		gal/day	AFY			
Light Industrial	728,000 sq ft	131,040	146.8	20%	117.4	29.4
Data Center						
- cooling	50 MW	1,476,000	1,643.3	100%	0	1,643.3
- potable	Estimate	10,800	12.1	0%	12.1	0
TOTALS		1,608,840	1,802	93%	129.5	1,673

As described previously, recycled water would be supplied to the site by SJMWS. A recycled water main must be extended to the site in order to provide service for project operations.

The data center’s maximum daily water demand for cooling purposes is expected to be 1,467,000 gallons per day. This need would be met with recycled water. Total recycled water cooling demand for the data center would be 1,643 AFY under normal operating conditions. Emergency backup use of potable water for cooling for up to nine days per year would require 14.5 acre-feet per year (AFY).

The data center would also require an additional supply of potable water for non-cooling purposes (restrooms, administration areas, etc.) This is estimated to require 14 AFY of potable water. Combined with 14.5 AFY of potential emergency backup cooling demand, total potable water use for the data center is expected to be no more than 26.6 AFY.

The 728,000 square feet of light industrial uses would require approximately 146.8 AFY. If recycled water is used for landscape irrigation purposes, the projected potable water demand would be 117.4 AFY. Therefore, Option 2 of the proposed project would require 129.5 AFY of potable water and 1,673 AFY of recycled water.

Current and future water supplies for the SJMWS consist of imported water, local groundwater, and recycled water. According to their most recent UWMP, SJMWS in 2015 delivered 15,707 AFY of potable water system-wide. Between 2015 and 2040, demand is projected to gradually increase to 36,116 AFY as the region experiences continued development and growth in all sectors. Industrial demand for potable and raw water is expected to be 10,110 AFY by 2040.

With a projected recycled water demand of 1,643 AFY, plus 29.4 AFY for outdoor/landscaping use associated with the light industrial development, Option 2 would roughly double the amount of recycled water currently being used by industrial customers in SJMWS's service area (1,672.4 AFY). In their 2015 UWMP, SJMWS expects that system-wide use of recycled water will increase to 7,368 AFY by 2040.

SFPUC's wholesale potable water system is deemed highly reliable. SFPUC and its wholesale customers have adopted a Water Shortage Allocation Plan that allows for shortage reductions of up to 10% below normal year supplies for a single critical dry year (or the first year of a multi-year drought), and up to 22% for subsequent multiple dry years. Water use by SJMWS customers during the most recent drought (2013-2015) decreased by 17%. Industrial water usage was reduced by approximately 6%.

The projected potable water demand for Option 2 (129.5 AFY) represents approximately 2.6% increase of the 5,041 AFY currently contracted to SJMWS for delivery by SFPUC during normal water years. SJMWS has the ability to meet increased demand in a variety of ways, such as purchasing additional water from SFPUC when available, relying more heavily on local groundwater sources, or encouraging conservation and recycle water use among its existing customers to reduce existing potable water demands.

The potable demands of Option 2 fall easily within growth forecasts for industrial water use put forth in SJMWS's 2015 UWMP. Industrial water demand in all SJMWS service areas is projected to increase by 7,937 AFY between 2015 and 2040. Therefore, the 129.5 AFY needed for the project represents less than 2% of this forecasted growth.

The proposed project includes the acquisition of property for a future well site, as a public facility, to be located on property owned by the City. The Developer would work with the City to determine a pro rata fair share contribution towards this facility. While the project is not installing the well, it is believed that the location to be chosen would take into account adjacent land uses. Construction impacts from well installation would be minimal and pump operation would comply with SJMWS's UWMP.

For the reasons described above, implementation of the proposed project will not have a significant impact on existing and future potable or recycled water supplies. **(Less Than Significant Impact)**

3.14.2.4 Sanitary Sewer/Wastewater Impacts

The project site currently generates a nominal amount of wastewater from two residences and a mobile home on-site. Based on the utility capacity analysis prepared for the project, Option 2 would generate a wastewater discharge/blowdown peak daily volume of 488,000 GPD at a peak instantaneous rate of 410 GPM when potable water is used as a primary source.⁷⁶ When recycled water is used (at least 356 days per year), Option 2 would generate a wastewater discharge/blowdown peak daily volume of 206,000 GPD, at an instantaneous rate of 400 GPM.

⁷⁶ Ibid.

The project proposes to connect to the 84-inch sewer trunk main in Zanker Road via a proposed new regional public lift station located near the future Zanker Road/Nortech Parkway intersection.

The proposed public sanitary sewer pump station to serve the project site and future development on the east and west sides of Zanker Road (refer to Figure 2.0-4) is expected to provide a capacity of approximately seven (7) MGD and would occupy a land area of approximately 5,000 square feet. The pump station facility improvements would likely include holding tanks, sumps, redundant submersible pumps, a control building, and generators for backup power. The backup generators are anticipated to be sized at 0.5 megawatts. The public sanitary sewer pump station may connect to the underground vault system owned and operated by the LECEF, or a new connection to the gravity sewer trunk lines in Zanker Road would need to be constructed.

The project would construct gravity sanitary sewer lines that would run from the project property to the holding tanks/sumps at the new public sanitary sewer pump station. The gravity sewer lines would follow the alignment of the new public streets that would be built as part of the project's roadway infrastructure improvements.

As stated above, the City currently has approximately 38.8 MGD of excess treatment capacity at the RWF. This system has adequate capacity to accommodate the projected discharge requirements based on discussions with the City of San José.⁷⁷ In addition, the project is consistent with the General Plan and was accounted for in the planned growth of the City. Therefore, implementation of the proposed project would have a less than significant impact on the existing wastewater facilities. **(Less Than Significant Impact)**

3.14.2.5 Storm Drainage Impacts

The project proposes to develop approximately 64.5 acres of land with impervious surfaces including buildings and roadways. As described previously, the site currently drains via sheet flow to the northwest corner of the property, not to Coyote Creek. The proposed stormwater drainage system will be designed to accommodate approximately 121 cubic feet per second (cfs) of stormwater from the site, proposed roadways, and City held lands east of Zanker Road.

Two scenarios have been developed for the conveyance of stormwater from the 10-year rainfall event; an outfall to Coyote Creek or connection to the existing Oakmead Pump Station on the Guadalupe River. The outfall scenario would discharge flows via a forcemain into a new gravity outfall pipe at the main channel of Coyote Creek. The new outfall, if required, would be located approximately 1,800 feet downstream of the Highway 237 bridge crossing, adjacent to the existing private LECEF outfall. Stormwater flows in excess of the 10-year event would continue to sheet flow from the site to the northwest. The biological and hydrologic impacts and regulatory permit requirements of constructing the outfall are described in Section 3.3 *Biological Resources* and Section 3.9 *Hydrology and Water Quality* of this EIR.

The new outfall (if required) could discharge runoff to Coyote Creek at a rate of 28 cubic feet per second (cfs) during 10-year and 100-year storm events. Based on a discharge of 28 cfs, a 0.78 acre detention vault is proposed in the northeast corner of the site. Water in the vault during 10-year and

⁷⁷ SJC02 Utility Capacity Analysis. September 13, 2016.

100-year events would reach depths of two feet and eight feet, respectively. The vault would store 1.6 acre-feet of water during a 10-year storm and 6.0 acre-feet during a 100-year storm. It would take the 28 cfs pump 0.7 hours to drain the 10-year event and 2.6 hours to drain the 100-year event. As described in *Section 3.9 Hydrology and Water Quality*, the proposed project would be required to adhere to the Municipal Regional Stormwater NPDES permit for stormwater treatment on-site to prevent the discharge of pollutants into Coyote Creek.

Another scenario for stormwater drainage would be to connect via new and upgraded stormdrain lines to the Oakmead Pump Station located on the Guadalupe River, approximately two miles southwest of the project site. This scenario would extend new lines adjacent to the existing potable water line across lands held by the City of San José to Baytech Parkway, west of the site. The City has determined that the existing Oakmead Pump Station has capacity to accommodate stormwater flows from the proposed project and the City-held lands east of Zanker Road.

The project would be required at the implementation stage to submit a design/analysis which minimizes the rate of 10-year stormwater flows to the Oakmead Pump Station to the greatest extent possible (i.e., using a restrictor device or installing a weir for metering the flow). Analysis should also include an evaluation of the existing storm sewer system to determine if downstream storm sewer capacity upgrades are necessary.

The construction of the potential stormwater outfall or connections to the Oakmead Pump Station is included in the overall construction activities for the proposed project. As discussed in the relevant sections of this EIR, permit conditions included in the project would reduce construction impacts to a less than significant level. **(Less Than Significant Impact)**

3.14.2.6 *Solid Waste Impacts*

The proposed project would increase the total solid waste generated by the project site compared to existing conditions. The General Plan FPEIR concluded that the increase in solid waste generated by full build out under the General Plan would not cause the City to exceed the capacity of existing landfills that serve the City. Future increases in solid waste generation from development allowed under the General Plan would be avoided with ongoing implementation of the City's Zero Waste Strategic Plan. This plan, in combination with existing regulations and programs, would ensure that full build out of the General Plan would not result in significant impacts from the provision of landfill capacity to accommodate the City's increased service population.

The proposed project is consistent with the development assumptions in the General Plan. Therefore, redevelopment of the project site would have a less than significant impact on the solid waste disposal capacity. **(Less Than Significant Impact)**

3.14.3 Conclusion

For the reasons described above, implementation of the proposed project would have a less than significant impact on utilities and service systems. **(Less Than Significant Impact)**

SECTION 4.0 CUMULATIVE IMPACTS

4.1 CUMULATIVE ANALYSIS

Cumulative impacts, as defined by CEQA, refer to two or more individual effects, which when combined, compound or increase other environmental impacts. Cumulative impacts may result from individually minor, but collectively significant effects taking place over a period of time. CEQA Guideline Section 15130 states that an EIR should discuss cumulative impacts “when the project’s incremental effect is cumulatively considerable.” The discussion does not need to be in as great detail as is necessary for project impacts, but is to be “guided by the standards of practicality and reasonableness.” The purpose of the cumulative analysis is to allow decision makers to better understand the impacts that might result from approval of past, present, and reasonably foreseeable future projects, in conjunction with the proposed project addressed in this EIR.

The CEQA Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence. To accomplish these two objectives, the analysis should include either a list of past, present, and probable future projects or a summary of projections from an adopted general plan or similar document. The analysis must then determine whether the project’s contribution to any cumulatively significant impact is cumulatively considerable, as defined by CEQA Guideline Section 15065(a)(3).

The cumulative discussion for each environmental issue addresses two aspects of cumulative impacts: 1) would the effects of all of the pending development listed result in a cumulatively significant impact on the resources in question? And, if that cumulative impact is likely to be significant, 2) would the contributions to that impact from the proposed project make a cumulatively considerable contribution to those cumulative impacts?

The following projects in the project vicinity are evaluated in the cumulative analysis.

- North San José Phase II
- America Center Office Development
- Top Golf
- City Place
- Great America Master Plan
- Bixby Project
- MCA Project

The effects of past projects are typically on the ground and reflected in the existing conditions, especially as relates to traffic, air quality, and noise.

4.1.1 Cumulative Transportation Impacts

Traffic volumes under cumulative conditions were estimated by adding the trips from proposed but not yet approved (pending) development projects within the City of San José to background condition traffic volumes. Cumulative plus project conditions are the cumulative no project condition plus project generated traffic.

Significance Thresholds – City of San José

As with existing plus project and background plus project, in the City of San José the proposed project would have a significant cumulative LOS impact if it would:

- cause the level of service at any local intersection to degrade from an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under cumulative conditions;
- cause the level of service at any CMP/County intersection or freeway segment to degrade from an acceptable LOS E or better under background conditions to an unacceptable LOS F under cumulative conditions; or
- for any local intersection that is already an unacceptable LOS E or F under background conditions, cause the critical-movement delay at the intersection to increase by four or more seconds and the volume-to-capacity ratio (V/C) to increase by one percent (0.01) or more⁷⁸; or

A single project's contribution to a cumulative intersection impact is deemed considerable in the City of San José if the project traffic contributes 25 percent or more to the increase in total traffic volume from background traffic conditions to cumulative traffic conditions. A significant cumulative impact is deemed mitigated to a less than significant level by the City of San José if the measures implemented would restore the intersection LOS to background conditions or better at non-protected intersections.

Significance Thresholds – City of Santa Clara

The project is said to create a significant adverse impact on traffic conditions at a signalized intersection in Santa Clara if for either peak hour:

- The level of service at the intersection degrades from an acceptable level (LOS D or better at all city-controlled intersections and LOS E or better at all expressway intersections) under cumulative no project conditions to an unacceptable level (LOS E or F at city-controlled intersections and LOS F at expressway intersections) under cumulative conditions, or
- The level of service at the intersection is an unacceptable level (LOS E or F at city-controlled intersections and LOS F at expressway intersections) under cumulative no project conditions and the addition of project trips causes the average critical delay to increase by four (4) or more seconds *and* the volume-to-capacity ratio (V/C) to increase by one percent or more. The same exception applies as noted for San José.

A significant impact by the City of Santa Clara's standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to an acceptable level or no worse than cumulative no project conditions.

⁷⁸ An exception to this threshold applies when the addition of project traffic reduces the amount of average stopped delay for critical movements (i.e., the critical movement is negative). In this case, the threshold of significance is an increase in the critical V/C of 0.01 or more.

4.1.1.1 *Changes to the Roadway Network*

This analysis assumes that the transportation network under cumulative plus project conditions would be the same as the transportation network under background conditions.

4.1.1.2 *Cumulative Intersection Level of Service Impacts*

The results of the cumulative plus project conditions analysis are summarized in Table 4.0-1 below.

Table 4.0-1: Cumulative Conditions Intersection Level of Service

No.	Intersection	Peak Hour	Background		Cumulative No Project		Cumulative Plus Project – Light Industrial Development Option					Cumulative Plus Project – Data Center/Light Industrial Development Option				
			Delay	LOS	Delay	LOS	Delay	LOS	Critical Delay	V/C	% ⁷⁹	Delay	LOS	Critical Delay	V/C	%
1	Zanker Road and SR 237 (North) - CMP/San José	AM	11.2	B	12.2	B	24.0	C	18.8	0.595	---	15.9	B	7.5	0.417	---
		PM	13.8	B	15.1	B	56.4	E	59.4	0.854	72	22.6	C	14.8	0.658	---
2	Zanker Road and SR 237 (South) CMP/San José	AM	22.2	C	22.7	C	24.2	C	3.3	0.165	---	23.7	C	2.7	0.129	---
		PM	14.0	B	15.5	B	36.1	D	36.0	0.466	---	20.8	C	11.4	0.342	---
3	Zanker Road and Holger Way – San José	AM	26.7	C	27.4	C	26.4	C	3.1	0.028	---	26.7	C	3.0	0.026	---
		PM	30.5	C	30.9	C	32.1	C	3.8	0.121	---	31.6	C	1.0	0.051	---
4	Zanker Road and Baypointe Parkway – San José	AM	13.2	B	13.1	B	12.4	B	-0.2	0.079	---	12.6	B	-0.2	0.052	---
		PM	15.1	B	14.7	B	14.0	B	0.8	0.042	---	14.1	B	-0.3	0.017	---
5	North First Street and Tasman Drive – San José	AM	35.3	D	44.5	D	44.4	D	13.2	0.215	---	44.5	D	13.2	0.215	---
		PM	41.8	D	48.9	D	51.9	D	12.9	0.178	---	50.7	D	11.0	0.165	---
6	Zanker Road and Tasman Drive – San José	AM	41.4	D	47.0	D	64.8	E	41.5	0.173	41	57.3	E	28.5	0.133	31
		PM	39.7	D	41.6	D	42.3	D	5.4	0.133	---	42.0	D	4.9	0.123	---
7	Zanker Road and River Oaks Parkway – San José	AM	18.9	B	19.6	B	18.9	B	0.4	0.134	---	19.2	B	0.7	0.109	---
		PM	18.2	B	18.1	B	17.8	B	0.0	0.146	---	17.8	B	0.1	0.121	---
8	North First Street and Montague Expressway – CMP/San José	AM	131.6	F	169.2	F	169.6	F	67.2	0.156	8	169.6	F	66.6	0.155	6
		PM	105.9	F	145.6	F	149.0	F	70.7	0.175	10	147.7	F	67.9	0.169	7
9	Zanker Road and Montague Expressway – CMP/San José	AM	66.6	E	81.5	F	95.0	F	38.9	0.155	17	89.6	F	31.7	0.139	12
		PM	70.7	E	97.4	F	120.1	F	86.6	0.262	19	111.4	F	73.1	0.237	13
10	Zanker Road and Plumeria Drive – San José	AM	25.2	C	27.5	C	27.1	C	3.2	0.143	---	27.2	C	3.3	0.131	---
		PM	26.1	C	28.6	C	28.6	C	4.6	0.154	---	28.6	C	4.5	0.142	---
11	Trimble Road and US 101 – San José	AM	28.1	C	40.1	D	42.5	D	16.8	0.067	---	41.6	D	15.3	0.062	---
		PM	15.5	B	24.3	C	26.6	C	15.0	0.103	---	25.7	C	13.7	0.097	---
12	De La Cruz Boulevard and Trimble Road – CMP/San José	AM	31.7	C	41.0	D	40.8	D	21.2	0.149	---	40.9	D	21.2	0.149	---
		PM	84.0	F	105.9	F	108.7	F	38.9	0.096	6	107.7	F	37.4	0.093	4
13	Orchard Parkway and Trimble Road – San José	AM	34.7	C	35.8	D	35.7	D	1.4	0.016	---	35.7	D	1.4	0.016	---
		PM	47.3	D	52.8	D	53.0	D	0.9	0.053	---	52.9	D	0.9	0.053	---
14	North First Street and Trimble Road – CMP/San José	AM	52.4	D	65.6	E	67.2	E	24.3	0.139	9	66.7	E	23.5	0.136	6
		PM	45.3	D	54.0	D	55.1	E	13.0	0.148	8	54.7	D	12.5	0.144	5
15	Zanker Road and Trimble Road – CMP/San José	AM	41.6	D	44.8	D	47.2	D	7.6	0.148	---	46.2	D	6.1	0.130	---
		PM	44.2	D	55.3	E	57.4	E	20.9	0.163	12	56.6	E	19.6	0.157	8
16	Orchard Parkway and Guadalupe Parkway – San José	AM	34.7	C	40.9	D	41.6	D	10.1	0.108	---	41.3	D	9.6	0.105	---
		PM	39.1	D	43.6	D	44.4	D	8.3	0.091	---	44.1	D	7.8	0.088	---

⁷⁹ The % represents the total percentage of the projects contribution to the cumulative delay.

Table 4.0-1: Cumulative Conditions Intersection Level of Service

No.	Intersection	Peak Hour	Background		Cumulative No Project		Cumulative Plus Project – Light Industrial Development Option					Cumulative Plus Project – Data Center/Light Industrial Development Option				
			Delay	LOS	Delay	LOS	Delay	LOS	Critical Delay	V/C	% ⁷⁹	Delay	LOS	Critical Delay	V/C	%
17	North First Street and Charcot Avenue – San José	AM	55.6	E	86.7	F	89.1	F	52.9	0.162	7	88.2	F	51.4	0.158	4
		PM	41.3	D	47.1	D	47.6	D	8.3	0.137	---	47.4	D	8.1	0.134	---
18	Zanker Road and Charcot Avenue – San José	AM	43.7	D	61.8	E	65.9	E	34.7	0.198	8	64.2	E	32.1	0.190	6
		PM	64.0	E	103.0	F	105.6	F	69.2	0.188	7	104.6	F	67.6	0.184	5
19	Zanker Road and Brokaw Road – CMP/San José	AM	48.0	D	70.8	E	73.6	E	56.3	0.205	5	72.7	E	54.2	0.199	3
		PM	47.3	D	59.6	E	60.4	E	22.3	0.161	4	60.1	E	21.8	0.160	3
20	Old Oakland Road and Montague Expressway – CMP/San José	AM	100.4	F	110.6	F	112.8	F	19.0	0.384	8	111.9	F	17.7	0.379	5
		PM	102.2	F	116.1	F	118.3	F	25.2	0.070	7	117.5	F	24.1	0.068	5
21	Trade Zone Boulevard and Montague Expressway – CMP/San José	AM	63.8	E	66.1	E	67.0	E	5.4	0.049	8	66.6	E	4.8	0.047	5
		PM	64.1	E	72.6	E	73.5	E	22.0	0.063	8	73.2	E	21.5	0.061	5
22	Lafayette Street and Calle De Luna – Santa Clara	AM	13.8	B	17.4	B	18.1	B	0.8	0.014	---	17.9	B	0.5	0.009	---
		PM	20.3	C	19.4	B	20.2	C	0.8	0.013	---	19.9	B	0.5	0.008	---
23	Called Del Sol and Tasman Drive – Santa Clara	AM	16.4	B	15.9	B	17.0	B	1.1	0.022	---	16.5	B	0.7	0.012	---
		PM	19.0	B	19.0	B	19.2	B	0.2	0.004	---	19.2	B	0.1	0.002	---
24	Lick Mill Boulevard and Tasman Drive – Santa Clara	AM	34.5	C	40.1	D	40.1	D	0.0	0.001	---	40.1	D	0.0	0.001	---
		PM	28.1	C	64.4	E	64.5	E	0.4	0.002	---	64.5	E	0.3	0.001	---
25	Lafayette Street and Montague Expressway (North) – Santa Clara	AM	32.5	C	46.9	D	47.0	D	0.2	0.003	---	47.0	D	0.1	0.002	---
		PM	26.0	C	26.6	C	27.1	C	0.7	0.006	---	26.9	C	0.5	0.004	---
26	Lafayette Street and Montague Expressway (South) – Santa Clara	AM	12.6	B	13.2	B	13.1	B	-0.1	0.003	---	13.1	B	0.0	0.002	---
		PM	12.5	B	10.9	B	10.9	B	0.0	0.006	---	10.9	B	0.0	0.004	---
27	De La Cruz Boulevard and Montague Expressway – CMP/Santa Clara	AM	91.7	F	174.8	F	177.9	F	1.2	0.002	---	176.8	F	0.9	0.001	---
		PM	92.7	F	154.0	F	158.9	F	2.7	0.009	---	157.1	F	1.7	0.006	---
28	Lick Mill Blvd and Montague Expressway – Santa Clara	AM	16.1	B	19.6	B	19.4	B	-0.4	0.017	---	19.5	B	-0.2	0.011	---
		PM	15.3	B	25.2	C	25.5	C	0.1	0.018	---	25.4	C	0.1	0.011	---
29	De La Cruz Boulevard and Central Expressway – CMP/Santa Clara	AM	75.1	E	91.6	F	91.1	F	-0.1	0.001	---	91.2	F	-0.1	0.001	---
		PM	114.0	F	136.8	F	138.6	F	0.0	0.000	---	137.9	F	0.0	0.000	---
30	I-880 SB and Calaveras Boulevard – Milpitas	AM	17.4	B	17.4	B	17.3	B	0.1	0.060	---	17.3	B	0.0	0.038	---
		PM	14.8	B	14.8	B	14.8	B	0.1	0.013	---	14.8	B	0.0	0.008	---
31	I-880 NB and Calaveras Boulevard – Milpitas	AM	14.4	B	14.4	B	18.8	B	5.0	0.092	---	17.0	B	3.0	0.057	---
		PM	25.7	C	25.9	C	26.6	C	1.0	0.017	---	26.3	C	0.6	0.011	---
32	Abbott Avenue and Calaveras Boulevard – Milpitas	AM	26.2	C	26.2	C	26.4	C	0.3	0.013	---	26.3	C	0.2	0.008	---
		PM	26.1	C	26.1	C	26.1	C	0.0	0.002	---	26.1	C	0.0	0.001	---
33	Serra Way and Calaveras Boulevard – Milpitas	AM	16.3	B	16.3	B	16.4	B	0.2	0.013	---	16.4	B	0.1	0.008	---
		PM	21.9	C	21.9	C	22.0	C	0.2	0.014	---	22.0	C	0.1	0.009	---
34	Abel Street and Calaveras Boulevard – CMP/Milpitas	AM	59.6	E	62.7	E	67.0	E	7.0	0.023	---	65.3	E	4.3	0.014	---
		PM	52.1	D	55.3	E	56.9	E	2.5	0.012	---	56.3	E	1.6	0.008	---

Table 4.0-1: Cumulative Conditions Intersection Level of Service

No.	Intersection	Peak Hour	Background		Cumulative No Project		Cumulative Plus Project – Light Industrial Development Option					Cumulative Plus Project – Data Center/Light Industrial Development Option				
			Delay	LOS	Delay	LOS	Delay	LOS	Critical Delay	V/C	% ⁷⁹	Delay	LOS	Critical Delay	V/C	%
35	Milpitas Boulevard and Calaveras Boulevard – CMP/Milpitas	AM	62.1	E	69.7	E	74.2	E	6.9	0.018	---	72.4	E	4.2	0.011	---
		PM	43.4	D	44.6	D	44.8	D	0.4	0.006	---	44.8	D	0.3	0.004	---
36	McCarthy Boulevard and Tasman Drive – Milpitas	AM	37.6	D	49.7	D	50.8	D	1.7	0.014	---	50.4	D	1.0	0.009	---
		PM	40.7	D	48.1	D	48.5	D	0.2	0.001	---	48.3	D	0.1	0.001	---
37	I-880 and Tasman Drive – Milpitas	AM	26.1	C	27.0	C	27.4	C	0.7	0.008	---	27.2	C	0.4	0.005	---
		PM	22.9	C	26.9	C	26.9	C	0.0	0.000	---	26.9	C	0.0	0.000	---
38	I-880 and Great Mall Parkway – Milpitas	AM	49.3	D	53.3	D	54.3	D	1.3	0.008	---	53.9	D	0.8	0.005	---
		PM	31.0	C	32.6	C	32.7	C	0.0	0.008	---	32.7	C	0.0	0.005	---
39	Abel Street and Great Mall Parkway – Milpitas	AM	31.0	C	31.0	C	31.9	C	1.4	0.017	---	31.5	C	0.8	0.010	---
		PM	28.4	C	28.8	C	29.0	C	0.3	0.006	---	29.0	C	0.2	0.004	---
40	Alder Drive and Tasman Drive - Milpitas	AM	25.2	C	26.5	C	27.1	C	0.8	0.008	---	26.9	C	0.5	0.005	---
		PM	170.8	F	178.7	F	181.6	F	3.6	0.008	---	180.5	F	2.3	0.005	---

Of the impacted intersections, the project would contribute more than 25 percent of the increased delay at the following City of San José intersections under the light industrial development option (Option 1):

Zanker Road and SR 237 (North) – PM Peak Hour: The intersection would degrade from LOS B to LOS E in the PM Peak Hour under cumulative plus project conditions with a 59.4 second increase in critical delay and a 0.854 increase in V/C. The project would contribute 72 percent of the increase in traffic volume in the PM Peak Hour under cumulative conditions.

Zanker Road and Tasman Drive – AM Peak Hour: The intersection would degrade from LOS D to LOS E in the AM Peak Hour under cumulative plus project conditions with a 41.5 second increase in critical delay and a 0.173 increase in V/C. The project would contribute for 41 percent of the increase in traffic volume under cumulative conditions.

The data center/light industrial development option (Option 2) would contribute more than 25 percent of the increased delay at the following San José intersection:

Zanker Road and Tasman Drive – AM Peak Hour: The intersection would degrade from LOS D to LOS E in the AM Peak Hour under cumulative plus project conditions with a 28.5 second increase in critical delay and a 0.133 increase in V/C. The project would contribute for 31 percent of the increase in traffic volume under cumulative conditions. The development of the data center component of Option 2 alone would not result in a cumulative impact at this intersection.

The project would not have a cumulatively considerable impact on any City of Santa Clara or City of Milpitas intersections.

Implementation the proposed project either project option would result in a cumulatively consideration contribution to the Zanker Road/Tasman Drive intersection impacts. This intersection was identified as an impacted intersection in the *North San José Development Policy FEIR*.

The Zanker Road/Tasman Drive intersection was identified as an impacted intersection in the North San José Development Policy FEIR. The widening of Zanker Road was identified as the necessary improvement to be funded by the North San José Development Policy Traffic Impact Fee. All identified improvements on Zanker Road have, however, already been implemented. As such, there are no additional improvements.

Impact TRAN(C)-1: The proposed project would have a cumulatively considerable contribution to two intersections. The data center alone would not result in these impacts.
(Significant Impact)

4.1.1.3 *Mitigation Measures for Cumulative Transportation Impacts*

The following mitigation measure identifies roadway improvements that could reduce the identified intersection impact. The feasibility of the mitigation measures are addressed below.

MM TRAN(C)-1.1: The LOS at the Zanker Road/SR 237(N) intersection would be improved over background conditions with the addition of a second southbound through

lane. This improvement would reduce the average delay to LOS B in the PM Peak Hour.

With implementation of the identified mitigation measure, the cumulative traffic impact to the Zanker Road/SR 237(N) intersection would be reduced to less than significant. Impacts at the Zanker Road/Tasman Drive intersection remain significant unavoidable as identified in the NSJADP EIR. **(Less Than Significant with Mitigation)**

4.1.2 Cumulative Air Quality Impacts

The project would result in a temporary TAC emissions impact resulting from construction of the proposed development. The impact would be temporary and would not impact sensitive receptors. Furthermore, operation of the proposed project would not result in significant impacts from criteria pollutant emissions or TACs. As a result, the projects contribution to a cumulatively significant air quality impact would not be considerable. **(Less Than Significant Cumulative Impact)**

4.1.3 Cumulative Noise Impacts

4.1.3.1 *Traffic Noise*

As discussed in Section 3.11 Noise, traffic trips associated with the proposed project would not increase ambient noise levels in the project area or near sensitive receptors. The proposed project, combined with other pending and approved projects in the immediate area would not increase ambient noise levels over existing conditions. **(Less Than Significant Cumulative Impact)**

4.1.3.2 *Construction Noise*

At the time the EIR Notice of Preparation was released, the only pending project was improvements to the RWF located north of the site. While construction of the RWF project could overlap with construction of the proposed project, there are no sensitive receptors in the area that would be affected. Permit conditions would be implemented to reduce construction noise. As a result, construction of the proposed project is not anticipated to result in a significant cumulative construction noise impact. **(Less Than Significant Cumulative Impact)**

4.1.4 Cumulative Biological Resources Impacts

4.1.4.1 *Construction Related Impacts*

The analysis identified impacts to migratory birds and removal of trees as a result of project construction. These impacts are, however, temporary and would be reduced to a less than significant level with implementation of the proposed mitigation measures. Because of the temporary nature of these impacts and the fact that the impacts will be mitigated, there would be no long term cumulative effect. **(Less Than Significant Cumulative Impact)**

4.1.4.2 *Burrowing Owls*

Implementation of the proposed project could result in the loss of individual owls and land identified under the SCVHP as owl habitat. Impacts to both individual owls and the habitat would be mitigated through the SCVHP, including removal of owls from the site prior to construction and fees for

replacement habitat. Because the project is required to comply with the SCVHP, which addresses countywide impacts to special status habitats and wildlife, the projects impact on Burrowing Owls and owl habitat would not be cumulatively considerable. **(Less Than Significant Cumulative Impact)**

4.1.4.3 *Sensitive Habitats*

Installation of the potential outfall into Coyote Creek would impact existing riparian vegetation within the creek channel. Mitigation measures have been identified to minimize the impacted area and replace lost vegetation. While the replacement vegetation would not immediately provide the same habitat value as existing vegetation, it will fully replace what is lost over time. As no other projects are proposed in the immediate area that would impact riparian vegetation on this segment of Coyote Creek, the impact to the riparian habitat would not be cumulatively considerable. **(Less Than Significant Cumulative Impact)**

4.1.4.4 *Loss of Important Farmlands*

The City of San José's General Plan FPEIR identifies the loss of important farmlands as a significant unavoidable impact due to development in the City. The proposed project would result in the loss of approximately 64.5 acres of these lands. However, the project is consistent with the General Plan land use designation for the site and its development was included in the analysis and conclusions of the General Plan analysis. The cumulative impact identified in the General Plan FPEIR remains significant and unavoidable. **(Significant Unavoidable Cumulative Impact)**

4.1.5 Other Cumulative Impacts

Based on the analysis in this EIR, the proposed project would have no impact on forestry resources and mineral resources, and a less than significant impact on aesthetics, cultural resources, energy, geology and soils, hydrology and water quality, and land use (including population and housing). The degree to which the proposed project would add to existing or probable future impacts on existing land uses or the aforementioned resources would be negligible.

4.1.5.1 *Hazardous Materials*

Hazardous materials contamination is typically a localized issue. The proposed project has identified specific mitigation measures to address residual soil contamination on-site, as well as asbestos and lead-based paint from older structures on-site. The proposed development would not pose a risk from the use or storage of hazardous materials. Future redevelopment within the project area and intensification of growth throughout the City of San José could expose existing soil and/or groundwater contamination which would need to be remediated.

The most likely impact to nearby sensitive receptors and construction workers would be exposure during removal and off-haul of contaminants. As there are no pending projects within the immediate project area, it is improbable that the remediation of multiple project sites within a limited geographical area would occur at the same time. Truck routes would be established by the City to avoid residential and other sensitive areas and remediation activities would be required to comply with all applicable regulations. Therefore, redevelopment within the project area would not result in

a cumulatively significant hazardous materials impact. (**Less Than Significant Cumulative Impact**)

4.1.5.2 *Utilities and Public Services*

The project's use of energy, water, the sanitary sewer system, and landfills, as well as police and fire protection services and local community services (schools, parks, libraries, etc.) was accounted for in General Plan as part of the planned growth of the City. When applicable, the General Plan identified the need for increased services and infrastructure to support the planned growth of the City. The project, by itself, will have a less than significant impact on these resources and services. The proposed project, combined with future redevelopment within north San José and intensification of growth throughout the City of San José, would significantly increase the use/need for these resources and services, but would not result in a significant cumulative impact. As a result, the project's contribution to the increased use of in any of these resource areas would not be considerable. (**Less Than Significant Cumulative Impact**)

4.1.5.3 *Greenhouse Gas Emissions*

The proposed development is consistent with the General Plan and would have a less than significant GHG emissions impact for development through 2020. Beyond 2020, implementation of the project would not result in any new or greater GHG emission impacts than were previously identified in the Envision San José 2040 FSPEIR. Due to the nature of GHG emissions, a significant project level impact is equivalent to a significant cumulative impact. (**Significant Unavoidable Impact**)

4.1.6 **Conclusion**

Implementation of the proposed project would result in a cumulatively considerable impact to the Zanker Road/SR 237(N) intersection. Mitigation has been identified to reduce this impact to a less than significant level. (**Less Than Significant Cumulative Impact with Mitigation**)

Implementation of the proposed project would result in a cumulatively considerable impact to the Zanker Road/Tasman Drive intersection. No mitigation has been identified to reduce this impact to a less than significant level. (**Significant Unavoidable Cumulative Impact**)

Implementation of the proposed project would contribute towards the cumulative loss of Important Farmlands in the City of San José. This impact was identified in the San José General Plan FPEIR. (**Significant Unavoidable Cumulative Impact**)

The proposed project would not have a cumulatively considerable impact on aesthetics, air quality, biological resources, cultural resources, energy, geology and soils (including mineral resources), greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use (including forestry, and population and housing), noise, public services (including recreation), or utilities. (**Less Than Significant Cumulative Impact**)

SECTION 5.0 GROWTH-INDUCING IMPACTS

For the purposes of this project, a growth inducing impact is considered significant if the project would:

- Cumulatively exceed official regional or local population projections;
- Directly induce substantial growth or concentration of population. The determination of significance shall consider the following factors: the degree to which the project would cause growth (i.e., new housing or employment generators) or accelerate development in an undeveloped area that exceeds planned levels in local land use plans; or
- Indirectly induce substantial growth or concentration of population (i.e., introduction of an unplanned infrastructure project or expansion of a critical public facility [road or sewer line] necessitated by new development, either of which could result in the potential for new development not accounted for in local general plans).

The project proposes development on currently fallow farm land in the northern portion of the City of San José. The site is surrounded by vacant lands and some existing industrial development. The vacant lands, including those held by the City, and the project site have, however, been slated for development for many years. The development and extension of utilities to these properties was described in the Envision San José 2040 General Plan, the Alviso Master Plan, and the RWF Plant Master Plan. The impacts of such development were identified in the respective EIRs for these projects. Development of under the proposed rezoning would require expansion of utilities to the site, which would help facilitate development of the adjacent vacant parcels. Expansion of utilities to serve the site would not, however, facilitate growth beyond the immediate project area.

Development under the proposed rezoning would place new light industrial, and possibly a data center, in the middle of a low density development area. The proposed project would be compatible with the surrounding land uses and would not pressure adjacent properties to redevelop with new or different land uses, in a manner inconsistent with the existing General Plan.

Development under the proposed project would result in a net increase in jobs Citywide. There is currently an abundance of housing within the City of San José compared to the number of jobs within the City. The increase in jobs will incrementally decrease the overall jobs/housing imbalance within the City.

While the project would develop currently vacant land, it is part of planned growth of San José and, as a result, the project would not have a significant growth inducing impact.

SECTION 6.0 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA and the CEQA Guidelines require that an EIR address “significant irreversible environmental changes which would be involved in the proposed project, should it be implemented.” [§15126(c)]

If the proposed project is implemented, future development on the site would involve the use of non-renewable resources both during construction phases and future operations/use of the site. Construction would include the use of building materials, including materials such as petroleum-based products and metals that cannot reasonably be re-created. Construction also involves significant consumption of energy, usually petroleum-based fuels that deplete supplies of non-renewable resources. Upon completion of new construction on-site, occupants will use non-renewable fuels to heat and light the buildings. The proposed project will also result in the increased consumption of water. Water consumption on the project site is currently low because the farmland is currently fallow and there is no active irrigation of the site.

The City of San José encourages the use of building materials that include recycled materials and makes information available on those building materials to developers. New buildings will be built to current codes, which require insulation and design to minimize wasteful energy consumption. The proposed development would be constructed consistent with the City’s Green Building Policy and would, as a result, use less energy for heat and light and less water than standard design buildings. The site provides an expansion of job opportunities that are more reasonably proximate to existing housing and transportation networks in Santa Clara, San José, and Cupertino than housing farther away in the south county and other counties to the north. The proposed project will, therefore, facilitate a more efficient use of resources over the life time of the project.

SECTION 7.0 SIGNIFICANT AND UNAVOIDABLE IMPACTS

A significant unavoidable impact is an impact that cannot be mitigated to a less than significant level if the project is implemented as it is proposed. The following significant unavoidable impacts have been identified as resulting from the proposed project:

4. Implementation of the proposed project would result in the development of 64.5 acres of land designated as Prime Farmland. Same significant unavoidable impact identified in the Envision San José Final Supplemental PEIR.
5. Implementation of the data center/light industrial development option would result in the development of new land uses after the year 2020, resulting in unmitigated GHG emissions impacts. Same significant unavoidable impact identified in the Envision San José Final Supplemental PEIR.
6. Implementation of the light industrial uses would have a significant impact on the mixed flow lanes of seven directional freeway segments and HOV lanes of three directional freeway segments.
7. Implementation of the project would have a cumulatively considerable contribution to the Zanker Road/Tasman Drive intersection. Same significant unavoidable impact identified in the North San José Development Policy FEIR.

All other significant impacts of the proposed project would be reduced to a less than significant level with the implementation of mitigation measures identified in this EIR

SECTION 8.0 ALTERNATIVES

8.1 OVERVIEW

The California Environmental Quality Act (CEQA) requires that an EIR identify and evaluate alternatives to a project as it is proposed. Two key provisions from the CEQA Guidelines pertaining to the discussion of alternatives are included below:

Section 15126.6(a). Consideration and Discussion of Alternatives to the Proposed Project. An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

Section 15126.6(b). Purpose. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or be more costly.

Other elements of the Guidelines discuss that alternatives should include enough information to allow a meaningful evaluation and comparison with the proposed project. The CEQA Guidelines state that if an alternative would cause one or more additional impacts, compared to the proposed project, the discussion should identify the additional impact, but in less detail than the significant effects of the proposed project.

The three critical factors to consider in selecting and evaluating alternatives are: (1) the significant impacts from the proposed project that could be reduced or avoided by an alternative, (2) consistency with the project's objectives, and (3) the feasibility of the alternatives available. Each of these factors is discussed below.

8.1.1 Significant Impacts from the Project

The project would result in the following significant unavoidable impacts:

Transportation: Contribution to traffic congestion on SR 237 and I-880. (Impact TRAN-3)

Loss of Prime Farmland: The conversion of Prime Farmland to a non-agricultural use. Same significant unavoidable impact identified in the Envision San José Final Supplemental PEIR. Impact (AGR-1)

Greenhouse Gases: Contribution to the previously identified greenhouse gas emissions impacts identified in the Envision San José Final Supplemental PEIR. (Impact GHG-1)

Alternatives may also be considered if they would further reduce impacts that are already less than significant because the project is proposing mitigation. The project would result in potentially significant impacts in the following areas, but includes mitigation measures that would reduce the impacts to less than significant levels:

Transportation: Traffic congestion at intersections of North First Street/Montague Expressway and Zanker Road/Montague Expressway. (Impacts TRAN-1 and TRAN-2)

Air Quality: Increase in NO_x levels from emergency generator testing/maintenance. (Impact AQ-1)

Biological Resources: Potential damage during construction to trees planned for preservation, potential impacts to tree-nesting raptors and western burrowing owls, and impacts to riparian habitat. (Impacts BIO-1, BIO-2, BIO-3, and BIO-4)

Hazards and Hazardous Materials: Potential exposure of construction workers and nearby sensitive receptors to soil and dust contaminated with residual agricultural pesticides, lead, and arsenic. (Impact HAZ-1)

8.1.2 Objectives of the Project

While CEQA does not require that alternatives be capable of meeting all of the project objectives, their ability to meet most of the objectives is considered relevant to their consideration. The stated objectives of the project proponent are to:

1. Support the community values outlined in the Envision San José 2040 General Plan, including, among others, the Innovative Economy goals by providing key infrastructure improvements driving today's businesses, and Quality Education and Services by significantly increasing property tax revenue to local agencies.
2. Support the implementation of the Alviso Master Plan vision for the project site as well as the "Focused Growth" Major Strategy from the Envision San José 2040 Plan, including a focus on economic growth, fiscal sustainability, and environmental sustainability.
3. Allow for the construction and operations of a data center of approximately 440,000 square feet that will house computer servers, supporting equipment, and associated office uses in an environmentally controlled structure with redundant subsystems systems (cooling, power, network links, storage, fire suppression, etc.). The data center shall be located near a reliable large power source and emergency response access, and be located such that it can be protected, to the maximum extent feasible, from security threats, natural disasters, and similar events.

4. Provide operational electric power to the proposed data center via an electric substation, and provide other utility infrastructure to serve the project (as well as other planned growth in the vicinity consistent with the City's infrastructure planning and partnership objectives), including water, storm drainage, sanitary sewer, electric, natural gas, and telecommunications, as well as new roadway infrastructure.
5. Support San José's stated job creation objectives by allowing for the construction of up to 1.2 million square feet of new light industrial uses that are compatible with nearby land uses, which would then further stimulate economic activity and employment generation.
6. Develop a light industrial campus that is well-designed per industry standards and properly integrates the planned uses and related improvements including, among others, parking, loading docks, vehicle access, and bicycle and pedestrian connections.
7. Develop a light industrial campus that is well-designed per industry standards and properly integrates light industrial uses, data center uses, parking, loading docks, vehicle access, and bicycle and pedestrian connections.
8. Incorporate, as feasible, environmentally sustainable features into the project, such as appropriate bird-friendly building design components, and the creation of an environmental buffer zone along Coyote Creek consistent with the City's Riparian Corridor Policy setback of 100 feet.
9. Meet the growing demand for light industrial uses, which may include a data center to support the region's growing businesses and work force population in support of Envision San José 2040 General Plan's Major Strategy #4, which calls for development supporting San José's growth as a center of innovation.
10. Construct new on- and off-site infrastructure improvements, including water, storm water, sanitary sewer, electric, natural gas, and telecom facilities to allow the proposed development as well as the implementation of the San José-Santa Clara Regional Wastewater Facility Master Plan which created economic development areas west of the project site. (Separate environmental review was completed for the Master Plan by the City of San José in late 2013.)

8.1.3 Feasibility of Alternatives

CEQA, the CEQA Guidelines, and case law on the subject have found that feasibility can be based on a wide range of factors and influences. CEQA's general definition of feasibility is "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." Among the factors that may be taken into account in considering the feasibility of an alternative are "...site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries,...and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site..." [Section 15126.6(f)(1)].

8.1.4 **Selection of Alternatives**

Consideration of a “No Project” alternative is mandatory. The purpose of including a No Project alternative is to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project.

In addition to the “No Project” alternative, the Guidelines advise that the range of alternatives discussed in the EIR “shall be limited to those that would avoid or substantially lessen any of the significant effects of the project [Section 15126.6(f)].

8.1.5 **Alternatives Considered but Not Selected for Analysis**

8.1.5.1 ***Location Alternative***

CEQA encourages consideration of an alternative site when impacts of the project might be avoided or substantially lessened. Only locations that would avoid or substantially lessen any of the impacts of the project and meet most of the project objectives need to be considered for inclusion in the EIR. The proposed project is light industrial development on a vacant site. Heavy industrial uses are located to the west of the site, as shown on Figure 2.0-3.

An alternative location is not discussed in this analysis because the project applicant does not own other properties that could be used as alternative sites. In addition, impacts to traffic congestion on SR 237 and I-880, which is one of the project’s significant and unavoidable impacts, would likely occur at any alternative location in the vicinity of the site. Similarly, greenhouse gas impacts would occur as a result of the project wherever it is proposed in the City. The project site is designated as Prime Farmland, as are other properties in the northernmost portions of San José that are large enough to accommodate the project. The project site is located in an area of other heavy industrial uses and is of sufficient size to accommodate the proposed project. It is also located away from sensitive receptors and is flat topographically.

Therefore, an alternative location would be unlikely to reduce the three significant and unavoidable impacts of the project to a less than significant level. The site is located away from sensitive receptors which could be affected by loading dock and traffic noise generated on the site.

Topographically flat properties in excess of 64 acres are not common in San José. Therefore, a location alternative is infeasible and was not evaluated further.

8.2 **PROJECT ALTERNATIVES**

The alternatives discussed in the following sub-sections include a No Project - No Development Alternative, a No Project - Existing Zoning Alternative, a Reduced Scale - Data Center Only Alternative, a Reduced Scale - Light Industrial Only Development Alternative, and a Reduced Scale - Data Center/Light Industrial Development Alternative.

8.2.1 **No Project - No Development Alternative**

The CEQA Guidelines stipulate that an EIR specifically include a “No Project” alternative. The purpose of including a No Project alternative is to allow decision-makers to compare the impacts of approving the project with the impacts of not approving the project. The Guidelines specifically

advise that the No Project alternative is “what would be reasonably expected to occur in the foreseeable future if the project is not approved, based on current plans and consistent with available infrastructure and community services.” [Section 15126.6(e)(2)] The Guidelines emphasize that an EIR should take a practical approach, and not “...create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment [Section 15126.6(e)(3)(B)].” Since the approximately 64.5-acre project site is currently vacant with minimal development, including two residences, a mobile home, and farm-related accessory structures, the No Project - No Development Alternative would be the continued use of the site in this manner. The project site is, however, currently designated *Light Industrial* in the City’s General Plan.

8.2.1.1 *Comparison of Environmental Impacts*

The No Project - No Development Alternative would avoid the proposed project’s environmental impacts. The No Project - No Development Alternative would avoid conversion of Prime Farmland to non-agricultural uses. In addition, traffic and GHG emissions would not be generated in excess of what is currently generated by the low-intensity uses on-site. Since no demolition or construction would take place on the project site, no new environmental impacts would occur.

8.2.1.2 *Feasibility of the No Project - No Development Alternative*

Implementation of the No Project - No Development Alternative would occur if the proposed project is not approved, which is feasible. However, the existing development on-site is inconsistent with the General Plan land use designation of the site. The project site is designated for development in the City’s General Plan as well as the Alviso Master Plan. It is expected that the site will eventually be developed with light industrial uses at some point in the future.

8.2.1.3 *Relationship to Project Objectives*

The No Project - No Development Alternative would not meet any of the project objectives.

8.2.2 No Project – Existing Zoning Alternative

The No Project - Existing Plans Redevelopment Alternative assumes that the proposed project is not approved, but that another future project is built consistent with existing plans and policies. According to the Alviso Master Plan and the General Plan, the site has a land use designation of *LI – Light Industrial*, which allows for a maximum FAR of 1.5 (1-3 stories).

The project site was originally part of the USDataport project which included the LECEF, as well as up to approximately 2.3 million square feet of data center communication facility uses in warehouse-style buildings on the original 174-acre site. Building heights of up to 100 feet are allowed by the existing *A(PD)* zoning. The existing *A(PD)* zoning designation of the site could be implemented; however, it is expected rezoning would be required due to the fact that some of the previously approved development has been constructed, thus requiring a new site plan to take into account building locations, access, and site circulation. However, it can be reasonably expected that in the foreseeable future, based on the current General Plan and zoning designations on the site, a light industrial development would ultimately be constructed on-site.

This alternative assumes development on the project site similar to the currently proposed project, which is consistent with the General Plan designation for the site. The uses, however, would primarily be data center related. The proposed conforming zoning of *Light Industrial* is consistent with the General Plan; however, a Special Use Permit (SUP) is required for the currently proposed data center.

8.2.2.1 Comparison of Environmental Impacts

Transportation

Development on the site consistent with the existing *A(PD)* zoning, which are data center related, would increase traffic at local intersections and on freeways; however, because the uses would be mostly data center related, they would be less than the proposed project. The traffic report prepared for the USDataport project is no longer current, however, trip generation for the USDataport project was significantly less than that of the proposed project (both Option 1 and Option 2). Thus, this Alternative would generate less traffic and the significant unavoidable impacts at freeway segments and impacts at the intersections on Montague Expressway would not occur.

Prime Farmland

The No Project - Existing Zoning Alternative would result in the same significant unavoidable impacts related to the loss of Prime Farmland as the currently proposed project and as described in the Envision San José 2040 General Plan FPEIR.

Greenhouse Gas Emissions

The existing zoning of the site allows the construction of light industrial uses, primarily data center related. It was estimated at the time of the preparation of the USDataport EIR that approximately 89 emergency back-up generators would be required. Therefore, the proposed project, which includes 24 emergency back-up generators would generate less greenhouse gas emissions when compared to the project allowed under the current *A(PD)* zoning. Greenhouse gas emissions impacts would be significant unavoidable with either the proposed project or the No Project – Existing Zoning Alternative.

Air Quality

As with the currently proposed project, the No Project - Existing Zoning Alternative would have significant NO_x impacts. Mitigation measures would be implemented similar to those required of Option 2, and significant unavoidable impacts would not be anticipated.

Biological Resources

This Alternative would result in comparable impacts to trees, riparian habitat (if the outfall to Coyote Creek is constructed), burrowing owls, and tree-nesting birds and raptors. Mitigation measures requiring pre-construction surveys during nesting season as well as tree protection measures would be incorporated to reduce significant impacts. Participation in the Santa Clara Valley Habitat Conservation Plan, including the implementation of required conditions, would reduce impacts to a

less than significant level.

Hazards and Hazardous Materials

The No Project - Existing Zoning Alternative would result in soil disturbance, thereby resulting in potential hazardous materials impacts related to agricultural pesticides. Mitigation would still be required similar to the proposed project.

8.2.2.2 *Feasibility of the No Project - Existing Zoning Alternative*

Implementation of this Alternative would be feasible in terms of consistency with the existing land use designations for the site, the goals of the City of San José for this region, and with the surrounding land uses. However, it is expected that rezoning would be required due to the fact that some of the previously proposed development was already constructed and new access points, building locations, and circulation plans may be required.

8.2.2.3 *Relationship to Project Objectives*

The No Project - Existing Zoning Alternative would meet most of the project objectives, including constructing a data center. However, rezoning to accommodate the currently configured site and additional infrastructure or different infrastructure components could be required.

8.2.3 *Reduced Scale - Data Center Only Alternative*

The Reduced Scale - Data Center Only Alternative would result in the development of a data center on the northern portion of the 64.5-acre site without any additional light industrial uses. Under Option 2, the project proposes a 436,880 square foot data center with a PG&E substation on approximately 26.5 acres of the site. Under the Reduced Scale Data Center Only Alternative, the size of the data center is not anticipated to be larger than what is proposed and some of the roadways and the extension of utilities to the site would still be required. It is assumed that the laydown area (approximately 10 acres) would be utilized for approximately 10 years and ultimately left in its current state.

8.2.3.1 *Comparison of Environmental Impacts*

Transportation

Development of the site with the Reduced Scale - Data Center Only Alternative would generate no more than 433 daily traffic trips, with 39 trips in the AM Peak Hour and 40 trips in the PM Peak Hour (refer to Table 3.13-7). Because this Alternative would generate no more than 40 peak hour trips, construction of the data center would not result in any significant freeway segments and/or intersection impacts.

Prime Farmland

Similar to the proposed project, development of a Reduced Scale - Data Center Only project would result in the conversion of Prime Farmland to a non-agricultural use. This Alternative would result in

a significant and unavoidable impact as stated in the General Plan EIR. However, if the remainder of the site (ultimately 38 acres) is left in its current state, this portion of the site would remain as Important Farmland until another use is proposed.

Greenhouse Gas Emissions

Because the data center is proposed to be constructed and operational by 2020 and vehicle trips related to this Alternative are relatively small, the greenhouse gas emission impacts would be less than significant. In addition, this Alternative is consistent with the San José General Plan and with the City of San José GHG Reduction Strategy; therefore, a significant unavoidable impact would not occur.

Air Quality

As with the currently-proposed project, the Reduced Scale - Data Center Only Alternative would have significant NO_x impacts to sensitive receptors related to the testing of emergency generators. Mitigation measures would be implemented similar to those required of Option 2, and significant impacts would not be anticipated.

Biological Resources

This Alternative would result in fewer impacts to biological resources, as less land would be affected. However, the construction of a 26.5-acre data center and use of approximately 10 acres as a laydown area for equipment staging for up to 10 years could disturb wildlife species and adversely affect trees to be preserved, the construction of the outfall may still be required. Mitigation measures requiring pre-construction surveys during nesting season as well as tree protection measures would be required to reduce significant impacts.

Hazards and Hazardous Materials

The Reduced Scale - Data Center Only Alternative would result in soil disturbance, thereby resulting in potential hazardous materials impacts related to agricultural pesticides, although the amount of land affected would be less. Mitigation would still be required similar to the proposed project.

8.2.3.2 *Feasibility of the Reduced Scale – Data Center Only Alternative*

Implementation of this Alternative would be feasible in terms of the goals of the City of San José and the vision of the Alviso Master Plan for this region.

8.2.2.3 *Relationship to Project Objectives*

This Alternative would meet most of the objectives, with the exception of those related to job creation and economic growth. The provision of additional light industrial uses on the remainder of the site (ultimately 38 acres) would enhance the economic potential of the site by increasing property taxes, economic activity, and employment generation. The development of the entire site is consistent with General Plan policies related to Innovative Economy as well as the Alviso Master Plan and RWF Plant Master Plan.

8.2.3 Reduced Scale - Light Industrial Only Alternative

In an effort to avoid or reduce significant impacts resulting from the proposed project, this alternative evaluates a Reduced Scale - Light Industrial Only Alternative. To reduce traffic impacts to a less than significant level at the intersections of North First Street/Montague Expressway and Zanker Road/Montague Expressway and impacts to freeways, Option 1 of the project (1.2 million square feet of light industrial uses) would need to be reduced by 90 percent.⁸⁰ This equates to approximately 120,000 square feet of light industrial uses on the 64.5 acre site. To reduce freeway impacts only, the project would need to be reduced by 85 percent or approximately 180,000 square feet. At one story in height, that would be approximately 2.75 and 4.1 acres of light industrial development, respectively.

8.2.3.1 *Comparison of Environmental Impacts*

Transportation

Under Option 1 (1.2 million square feet of light industrial development), the proposed project would result in an unacceptable LOS at the Zanker Road/Montague Expressway and Oakland Road/Montague Expressway intersections during at least one peak hour. Significant unavoidable impacts to freeway segments on SR 237 and I-880 would also occur.

Reducing the project to 120,000 square feet of light industrial development would avoid both intersection and freeway impacts. A light industrial project of no more than 180,000 square feet would avoid significant unavoidable impacts to the local freeway segments.

Prime Farmland

The Reduced Scale - Light Industrial Only Alternative would result in the conversion of up to 4.1 acres of Prime Farmland to a non-agricultural use, when compared to 64.5 acres that would be converted with the proposed project. While significantly less land would be converted, there would still be a loss of Prime Farmland, which would be a significant unavoidable impact. This impact was previously identified in the General Plan FPEIR.

Greenhouse Gas Emissions

Development under this Alternative (up to approximately 4.1 acres of light industrial development) would be consistent with the City's General Plan and would not result in greater GHG emissions impacts than those evaluated for the site in the General Plan FPEIR. This Alternative would be constructed by 2020 and would conform to the City's GHG Reduction Strategy; therefore GHG emissions impacts would be less than significant. This Alternative would avoid a significant unavoidable impact associated with the currently proposed project.

Air Quality

The primary emissions from this Alternative would be from traffic (employees and vendor delivery trips) associated with daily operations. If the light industrial development was reduced to the levels

⁸⁰ Personal communication, Robert Del Rio, Hexagon Transportation Consultants, May 15, 2017.

described above under transportation impacts, significant air quality impacts would not be anticipated.

Biological Resources

This Alternative would result in some impacts to trees to be preserved on-site and tree-nesting birds and raptors. Impacts to burrowing owls would be significantly reduced as less land area would be affected. The outfall to Coyote Creek may or may not be required with such a reduced footprint of development. Percolation on-site may be sufficient to accommodate stormwater on-site. Mitigation measures requiring pre-construction surveys during the nesting season as well as tree protection measures would be incorporated to reduce significant impacts. Conditions of the SCVHP would still be required; however, at a significantly reduced level. Impacts would remain less than significant with the implementation of identified mitigation measures.

Hazards and Hazardous Materials

The Reduced Scale - Light Industrial Only Alternative would result in less soil disturbance, thereby resulting in a reduced potential for hazardous materials impacts related to agricultural pesticides. Mitigation would still be required similar to the proposed project.

8.2.3.2 *Feasibility of the Reduced Development-Light Industrial Alternative*

Because this Alternative would need to be reduced by approximately 85 – 90 percent to avoid both traffic and freeway impacts, it would be physically feasible, but economically infeasible to implement this Alternative. The extension of utilities to the site would still be required, which would be cost prohibitive given the size of the Alternative.

8.2.3.3 *Relationship to Project Objectives*

This Alternative would not meet most of the objectives of the proposed project. A data center would not be constructed and the amount of light industrial space provided would not achieve the economic strategies of the General Plan. The Reduced Development - Light Industrial Only Alternative would only provide up to approximately 180,000 square feet of light industrial space and would not be able to accommodate as many new jobs, compared to full project implementation. The project area would remain underutilized and would not meet project objectives to the extent of the entire proposed development.

8.2.4 Reduced Development – Data Center and Reduced Light Industrial Development Alternative

In an effort to avoid or reduce significant impacts resulting from the proposed project, a reduced scale alternative that includes the proposed 436,880 square foot data center and less light industrial development was evaluated. As with the Reduced Scale – Light Industrial Development Only Alternative, the amount of light industrial development would have to be significantly reduced to avoid traffic impacts to freeways and at the intersections of North First Street/Montague Expressway and Zanker Road/Montague Expressway. It has been determined that the light industrial portion of Option 2 of the project (data center and light industrial uses) would need to be reduced by 85 percent

to avoid intersection and freeway impacts and 80 percent to avoid only the freeway impacts.⁸¹ This equates to approximately 109,200 square feet (85 percent reduction) or 145,600 square feet (80 percent reduction) of light industrial uses square on approximately 38 acres of the 64.5 acre site. At one story in height, that would be approximately 2.5 and 3.34 acres of light industrial development, respectively.

8.2.4.1 Comparison of Environmental Impacts

Transportation

Under Option 2 of the proposed project, (a 436,880 square foot data center and 728,000 square feet of light industrial development), the proposed project would result in an unacceptable LOS at the Zanker Road/Montague Expressway and Oakland Road/Montague Expressway intersections during at least one peak hour. Significant unavoidable impacts to freeway segments on SR 237 and I-880 would also occur.

Reducing the project to a 436,880 square foot data center and 109,200 square feet of light industrial development would avoid both intersection and freeway impacts. A light industrial project of no more than 145,600 square feet would avoid significant unavoidable impacts to the local freeway segments.

Prime Farmland

The Reduced Scale – Data Center and Light Industrial Alternative would result in the conversion of up to 29.84 (26.5 acres for the data center and 3.34 acres for the light industrial uses) of Prime Farmland to a non-agricultural use, when compared to 64.5 acres that would be converted with the proposed project. While significantly less land would be converted, there would still be a loss of Prime Farmland, which would be a significant unavoidable impact. This impact was previously identified in the General Plan FPEIR.

Greenhouse Gas Emissions

Development under this Alternative (up to approximately 29.84 acres of data center and light industrial development) would be consistent with the City's General Plan and would not result in greater GHG emissions impacts than those evaluated for the site in the General Plan FPEIR. As with Option 2 of the proposed project, it is anticipated that the data center portion of the project would be constructed by 2020 and would conform to the City's GHG Reduction Strategy; however, the light industrial portion may not be. Therefore, GHG emissions impacts would continue to be significant unavoidable and this Alternative would not avoid a significant unavoidable impact associated with the currently proposed project.

Air Quality

The primary emissions from this Alternative would be from traffic (employees and vendor delivery trips) associated with daily operations. If the light industrial development was reduced to the levels described above under transportation impacts, significant air quality impacts would not be

⁸¹ Personal communication, Robert Del Rio, Hexagon Transportation Consultants, May 24, 2017.

anticipated.

Biological Resources

This Alternative would result in some impacts to trees to be preserved on-site and tree-nesting birds and raptors. Impacts to burrowing owls would be reduced as less land area would be affected. The outfall to Coyote Creek may or may not be required with such a reduced footprint of development. Percolation on-site may be sufficient to accommodate stormwater on-site. Mitigation measures requiring pre-construction surveys during the nesting season as well as tree protection measures would be incorporated to reduce significant impacts. Conditions of the SCVHP would still be required; however, at a reduced level. Impacts would remain less than significant with the implementation of identified mitigation measures.

Hazards and Hazardous Materials

The Reduced Scale - Light Industrial Alternative would result in less soil disturbance, thereby resulting in a reduced potential for hazardous materials impacts related to agricultural pesticides. Mitigation would still be required similar to the proposed project.

8.2.3.2 *Feasibility of the Reduced Development - Data Center and Light Industrial Alternative*

This Alternative would reduce the light industrial portion of the project by approximately 80 - 85 percent to avoid both traffic and freeway impacts; however, the data center, at its proposed size would be constructed. Therefore, this Alternative would be feasible in terms of the goals of the City of San José and the vision of the Alviso Master Plan for this region.

8.2.2.3 *Relationship to Project Objectives*

This Alternative would meet most of the objectives, with the exception of those related to job creation and economic growth. Reducing the amount of light industrial development would reduce the economic potential of the site including property tax revenues, economic activity, and employment generation. The Reduced Development-Light Industrial Alternative would only provide up to approximately 145,600 square feet of light industrial space and would not be able to accommodate as many new jobs, compared to full project implementation. The project area would remain underutilized and would not meet project objectives to the extent of the entire proposed development.

SECTION 9.0 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines state that an EIR shall identify an environmentally superior alternative. Table 9.0-1 outlines a summary of the project alternatives. Based on the table below, the environmentally superior alternative to the proposed project is the No Project Alternative because all of the component’s significant environmental impacts would be avoided. However, Section 15126.6(e)(2) states that “if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.”

Table 9.0-1: Project Alternatives Summary Table						
Impact	Proposed Project	No Project - No Development	No Project –Existing Zoning	Reduced Scale - Data Center Only	Reduced Scale - Light Industrial	Reduced Scale-Data Center & Reduced Light Industrial
TRAN-1: Zanker Road/Montague Expressway and Oakland Road/Montague Expressway intersections under existing plus project conditions	SU	NI	LTS	LTS	LTS	LTS
TRAN-2: North First Street/Montague Expressway and Zanker Road/Montague Expressway intersections under background plus project conditions	LTSM	NI	LTS	LTS	LTS	LTS
TRAN-3: Impacts to Freeway Segments of SR 237 and I-880	SU	NI	SU	LTS	LTS	LTS
AGR-1: Loss of land designated as Prime Farmland	SU	NI	SU	SU	SU	SU
GHG-1: Same significant unavoidable impact identified in the Envision San José 2040 Supplemental FPEIR	SU	NI	SU	LTS	LTS	SU
AQ-1: Significant impact related to the production of NOx during generator testing	LTSM	NI	LTSM	LTSM	LTS	LTSM
BIO-1: Impacts to nesting migratory birds and other protected bird species	LTSM	NI	LTSM	LTSM	LTSM	LTSM
BIO-2: Mortality of burrowing owls test	LTSM	NI	LTS	LTSM	LTSM	LTSM
BIO-3: Permanent impacts to riparian vegetation and seasonal wetlands	LTSM	NI	LTSM	LTSM	LTSM	LTSM

BIO-4: Damage to trees	LTSM	NI	LTSM	LTSM	LTSM	LTSM
HAZ-1: Release of pesticides and expose construction workers to residual agricultural soil contamination	LTSM	NI	LTSM	LTSM	LTSM	LTSM
NI – No Impact LTS – Less Than Significant Impact LTSM – Less Than Significant Impact with Mitigation SU – Significant and Unavoidable						

As seen above, none of the other project alternatives would avoid all significant environmental impacts. Any development on land would result in a significant and unavoidable impact to the loss of land designated as Prime Farmland. In addition, any construction on-site would result in soil disturbance, thereby resulting in potential hazardous materials impacts related to agricultural pesticides. Development that would affect trees to be retained would be required to conform to the City’s Tree Ordinance and implement mitigation measures to avoid impacts to nesting raptors and migratory birds. Impacts to burrowing owls and riparian habitat would also occur.

The Reduced Scale - Data Center Only and Reduced Scale - Light Industrial Only Development Alternatives would generate significantly fewer traffic trips compared to both project options and impacts to freeways and intersections would not occur. Both Alternatives would likely be developed and operational prior to 2020 and, therefore, would result in a less than significant impact related to GHG emissions. As seen in Table 3.2-5: Operational Emissions for the Project, the Data Center would not result in ROG, PM_{2.5}, and PM₁₀ emissions above established BAAQMD thresholds; however, the operation and maintenance of the data center generators would produce NO_x emissions over the established thresholds. If the size of the light industrial development was reduced, the light industrial development would not result in ROG, NO_x, PM_{2.5}, and PM₁₀ emissions above established BAAQMD thresholds. As a result, the Reduced Scale – Light Industrial Development Only Alternative would be the environmentally superior alternative to the proposed project.

SECTION 10.0 REFERENCES

- ABAG. *Plan Bay Area*. Table 2.1-5. Accessed April 18, 2016.
- Association of Bay Area Governments. *Tsunami Inundation Emergency Planning Map for the San Francisco Bay Region*. <<http://quake.abag.ca.gov/tsunamis>>. Accessed November 17, 2016.
- California Building Standards Commission. 2015 Triennial Code Adoption Cycle. Accessed December 7, 2016. <http://www.bsc.ca.gov/>.
- California Department of Transportation. *California Scenic Highway Mapping System*. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/ Accessed December 8, 2016.
- California Natural Resources Agency. *Santa Clara County Important Farmlands 2012*. Accessed November 17, 2016. <<ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/sc112.pdf>>
- California State Board of Equalization. Taxable Gasoline, Diesel Fuel, Jet Fuel Ten Year Reports. Accessed December 7, 2016. <http://www.boe.ca.gov/sptaxprog/spftrpts.htm>.
- California State Water Quality Control Board. Impaired Water Bodies. Accessed November 17, 2016. http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml?wbid=CA_R2055004019990218133956.
- Cardno ATC. *Phase I Environmental Site Assessment of Agricultural Land Adjacent to 800 Thomas Foon Chew Way*. March 20, 2015.
- CEC. *Electricity and Natural Gas Demand Forecast*. Accessed December 7, 2016. http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN206501_20151103T100153_Draft_Staff_Report_2015_Natural_Gas_Outlook.pdf.
- CEC. Building Energy Efficiency Program. 2013. Accessed December 7, 2016. <http://www.energy.ca.gov/title24/>.
- CEC. *California Energy Demand 2016-2026, Revised Electricity Forecast*. Accessed December 7, 2016. http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN207439_20160115T152221_California_Energy_Demand_20162026_Revised_Electricity_Forecast.pdf.
- CEC. California Energy Demand Updated Forecast 2015-2015. Accessed December 7, 2016. <http://www.energy.ca.gov/2014publications/CEC-200-2014-009/CEC-200-2014-009-SD.pdf>.
- CEC. *Electricity and Natural Gas Demand Forecast*. Accessed December 8, 2016. http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN206501_20151103T100153_Draft_Staff_Report_2015_Natural_Gas_Outlook.pdf.
- CEC. Energy Almanac. Total Electricity System Power. Accessed December 7, 2016. http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html.

- CEC. Energy Consumption Data Management System. Electricity Consumption by County. Accessed December 7, 2016. <http://ecdms.energy.ca.gov/elecbycounty.aspx>.
- CEC. Natural Gas Consumption by County. Santa Clara County 2015 Data. Accessed December 7, 2016. <http://ecdms.energy.ca.gov/gasbycounty.aspx>.
- CEC. Natural Gas Supply by Region. Accessed December 7, 2016. http://www.energyalmanac.ca.gov/naturalgas/natural_gas_supply.html.
- City of San José. *Alviso Master Plan: A Specific Plan for the Alviso Community*. December 1998.
- City of San José. *Envision San José 2040 General Plan*. November 2011.
- City of San José. *Envision San José 2040 General Plan Final Program EIR*.
- City of San José. *Riparian Corridor Policy Study*. May 1994.
- City of San José Council Policy. *Post-Construction Hydromodification Management*. <https://www.sanJoseca.gov/DocumentCenter/View/3916> Accessed November 30, 2016.
- Department of Energy. *Energy Independence & Security Act of 2007*. Accessed December 7, 2016. <http://www.afdc.energy.gov/laws/eisa>.
- Diesel Service & Supply. *Diesel Fuel Consumption Chart*. Accessed December 7, 2016. http://www.dieselserviceandsupply.com/Diesel_Fuel_Consumption.aspx.
- EIA. *California Energy Consumption by End-Use Sector, 2014*. Accessed December 7, 2016. http://www.eia.gov/beta/state/seds/data.cfm?incfile=/state/seds/sep_sum/html/sum_btu_1.html&sid=CA.
- EIA. *California Energy Consumption Estimates 2014*. Accessed December 7, 2016. <http://www.eia.gov/state/?sid=CA#tabs-2>.
- EIA. *California State Profile and Energy Sources*. Accessed December 7, 2016. <https://www.eia.gov/state/analysis.cfm?sid=CA>.
- EIA. *Frequently Asked Questions*. Accessed December 7, 2016. <https://www.eia.gov/tools/faqs/faq.cfm?id=23&t=10>.
- EIA. *Natural Gas Conversion Calculator*. Accessed December 7, 2016. https://www.eia.gov/kids/energy.cfm?page=about_energy_conversion_calculator-basics#natgascalc.
- EIA. *Natural Gas Summary*. Accessed December 7, 2016. http://www.eia.gov/dnav/ng/ng_sum_lsum_dcu_SCA_a.htm.
- EIA. *Short-Term Energy and Fuels Outlook*. Accessed December 7, 2016. http://www.eia.gov/forecasts/steo/report/us_oil.cfm.

- EPA. Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Accessed December 7, 2016.
http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/national_transportation_statistics/html/table_04_23.html.
- Federal Emergency Management Agency. *Flood Insurance Rate Map. Map Number 06085C0066J*. February 19, 2014.
- Illingworth & Rodkin. *237 Industrial Center San José, California Air Quality Assessment*. November 16, 2016.
- National Highway Traffic Safety Administration. *Obama Administration Finalizes Historic 54.5 mpg Fuel Efficiency Standards*. Accessed December 7, 2016.
<http://www.nhtsa.gov/About+NHTSA/Press+Releases/2012/Obama+Administration+Finalizes+Historic+54.5+mpg+Fuel+Efficiency+Standards>.
- One Bay Area. *Future Place Type for Priority Development Areas in Santa Clara County*. Accessed May 10, 2017. <<http://www.sanjoseca.gov/DocumentCenter/View/735>>.
- PG&E. Delivering Low-emission Energy. Accessed October 31, 2016.
https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page.
- PG&E. Exploring Clean Energy Solutions. Accessed December 7, 2016.
https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page.
- Public Law 110–140—December 19, 2007. Energy Independence & Security Act of 2007. Page 1449. Accessed December 7, 2016. <http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf>.
- Santa Clara County. Santa Clara County Geologic Hazard Zones, Map 3.
<https://www.sccgov.org/sites/dpd/DocsForms/Documents/GEO_GeohazardATLAS.pdf>
Accessed May 19, 2017.
- Santa Clara County Parks. *Countywide Trails Master Plan*. Accessed March 15, 2017.
<<https://www.sccgov.org/sites/parks/PlansProjects/Pages/countywide-trails-mstr-pln.aspx>>.
- Santa Clara Valley Urban Runoff Pollution Prevention Program. http://www.scvurppp-w2k.com/hmp_maps.htm Accessed November 11, 2016.
- Santa Clara Valley Water District. *Anderson Dam and Reservoir 2009 Flood Inundation Maps. 2009*. <http://www.valleywater.org/Services/AndersonDamAndReservoir.aspx> Accessed November 17, 2016.
- Santa Clara Valley Water District. *Lexington Reservoir 2009 Flood Inundation Maps. 2009*. <http://www.valleywater.org/Services/LexingtonReservoirAndLenihanDam.aspx> Accessed November 17, 2016.

State of California Department of Finance. *Census 2010*. 2010.

<http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1&prodType=table> Accessed December 8, 2016.

United States Environmental Protection Agency. *California 303(d) Listed Waters*.

http://iaspub.epa.gov/tmdl_waters10/attains_impaired_waters.impaired_waters_list?p_state=CA&p_cycle=2012 Accessed December 8, 2016.

Personal Communication:

Del Rio, Robert. Hexagon Transportation Consultants. Personal Communication. May 24, 2017.

SECTION 11.0 LEAD AGENCY AND CONSULTANTS

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